

ANNUAL REPORT 2015

TUBERCULOSIS & CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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PREFACE

Tuberculosis (TB) remains a major global health problem in 2015. It caused 1.8 million TB deaths and was one of the top ten causes of death worldwide, ranking above HIV/AIDS as the leading cause of death from an infectious disease. There were 10.4 million new TB cases of which 1.2 million were among HIV-positive people. There were an estimated 480 000 new cases of multidrug-resistant TB (MDR-TB) and an additional 100 000 people with rifampicin-resistant TB (RR-TB). While the target set within the United Nations Millennium Development Goals (MDGs) to reverse the incidence of TB by 2015 was successfully achieved for about a decade, the rate of decline remained only at 1.5% from 2014 to 2015. TB prevalence and mortality fell by 42% and 47% respectively between 1990 and 2015, falling slightly short of the Stop TB Partnership's additional global targets to halve TB prevalence and death rates by 2015.

The Sustainable Development Goals (SDGs) and the End TB Strategy superseded the MDGS and the Stop TB Strategy respectively in 2015. The SDGs were adopted by the United Nations in September 2015 and cover the period 2016-2030. SDG3 is to "Ensure healthy lives and promote well-being for all at all ages". It includes 13 targets, of which target 3.3 is to end the epidemics of TB among other diseases by 2030. The End TB Strategy, endorsed by WHO's member states at the 2014 World Health Assembly, spans a 20-year timeframe (2016-2035) and calls for a 90% reduction in TB deaths and an 80% reduction in TB incidence by 2030, and a 95% reduction in TB deaths and an 90% reduction in TB incidence by 2035, compared with 2015. The overall goal is to "End the global TB epidemic", with a global TB incidence falling below 10 new cases per 100 000 population per year.

To achieve the targets and milestones, the End TB Strategy has four underlying principles and three pillars as follows.

The four underlying principles of the End TB Strategy

- 1) Government stewardship and accountability, with monitoring and evaluation;
- 2) A strong coalition with civil society organizations and communities;
- 3) Protection and promotion of human rights, ethics and equity; and
- 4) Adaptation of the strategy and targets at country level, with global collaboration.

The three pillars of the End TB Strategy

- 1) Integrated, patient-centred TB care and prevention
 - a) Early diagnosis of TB including universal drug-susceptibility testing; and systematic screening of contacts and high-risk groups,

- b) Treatment of all people with TB including drug-resistant TB; and patient support,
- c) Collaborative TB/HIV activities; and management of comorbidities,
- d) Preventive treatment of persons at high risk; and vaccination against TB;
- 2) Bold policies and supportive systems
 - a) Political commitment with adequate resources for TB care and prevention,
 - b) Engagement of communities, civil society organizations, and public and private care providers,
 - c) Universal health coverage policy, and regulatory frameworks for case notification, vital registration, quality and rational use of medicines, and infection control,
 - d) Social protection, poverty alleviation and actions on other determinants of TB;
- 3) Intensified research and innovation
 - a) Discovery, development and rapid uptake of new tools, interventions and strategies;
 - b) Research to optimize implementation and impact, and promote innovations.

The proposed milestones and targets underscore an ambitious attempt to rapidly accelerate the progress in TB control beyond 2015. Reaching the milestones for reductions in cases and deaths set for 2020 and 2025 requires the annual decline in the global TB incidence rate to accelerate from 1.5% per year in 2015 to 4-5% per year by 2020, and then to 10% per year by 2025. This is possible only if all those with TB disease can access high-quality anti-TB treatment. Timely and efficient scaling up of all the components of care as listed under the first pillar of integrated, patient-centred care and prevention on a population scale would be required, coupled with bold policies and supportive systems to overcome the resources gap and field hurdles for large-scale implementation projects as listed under the second pillar. After 2025, an unprecedented acceleration in the rate at which TB incidence falls globally is required if the 2030 and 2035 targets are to be reached. Such an acceleration will depend on a technological breakthrough e.g. a post-exposure vaccine or a short, efficacious and safe treatment for latent TB infection (LTBI).

In Hong Kong, the notification rate of TB decreased from a peak of 697.2 per 100 000 in 1952 to 60.5 per 100 000 in 2015, thanks to the successful implementation of passive case-finding and directly observed treatment, short course (DOTS), which effectively control TB transmission right at source. However, the TB notification rate declined slowly after a rapid downward trend, as was the case in some other countries or regions in the Western Pacific Region with intermediate TB burden. The annual decline in crude TB rates was 3.8% per year from 1998 to 2015. The ageing population and the relatively high TB incidence in older people was likely one of the major underlying reasons. In 2015, 40.2% of the TB patients were aged 65 or above, whereas the proportion of persons aged 65 or above in the general population was 15.3%. Population ageing has likely been partially cancelling out

the progress made in TB control in Hong Kong. Tackling the challenge of an ageing population appears to be a key step in further reducing the local TB rates. Screening and treatment of latent TB infection in the elderly, however, is hampered by the limitations of the existing diagnostic and treatment tools in this age group. As smoking and chronic medical disorders such as diabetes mellitus have been reported to be associated with TB and these conditions are relatively common among the elderly, tobacco control measures and enhanced measures to manage co-morbidities may complement DOTS in the control of TB in Hong Kong.

The rates of MDR-TB and extensively drug-resistant TB (XDR-TB) in Hong Kong have been rather low during the past decade. Of all the culture-confirmed TB cases in Hong Kong, only about 1% were MDR-TB and only about 10% of the latter were XDR-TB, likely due to the successful use of DOTS. Despite the low and rather static MDR-TB and XDR-TB rates, there is no room for complacency given the evolving drug resistance pattern in our neighboring areas, the frequent population movement and possible cross border transfer of drug resistance, and an apparent increase in drug resistance extent in some of the MDR-TB and XDR-TB cases. Continued and enhanced surveillance of the trend of drug resistance rates as well as the level of drug resistance among the bacillary resistance cases is necessary. To effectively address the issue of drug resistant TB in Hong Kong, rapid genotypic drug susceptibility tests for rifampicin, isoniazid, fluoroquinolone and second-line injectables are increasingly utilized to better inform the initial choice of drugs for timely initiation of effective TB treatment, pending complementary information from culture-based drug susceptibility testing methods. To this end, close collaboration between clinical microbiologists and clinicians has been maintained.

In Hong Kong, linezolid, a repurposed agent recommended for treatment of MDR-TB by WHO, has been used in combination with other effective (or likely effective) second line drugs in treating fluoroquinolone-resistant MDR-TB and XDR-TB. Delamanid, a novel drug, which is a nitroimidazopyran that works by inhibiting mycolic acid biosynthesis, has also been used in treating those MDR-TB and XDR-TB cases where a regimen containing the minimum number of effective TB drugs cannot be formulated from other groups of anti-TB drugs. Another novel drug, bedaquiline, which is a diarylquinoline that acts on mycobacteria by depleting intracellular adenosine triphosphate (ATP) through inhibition of the mycobacteria ATP synthase, will soon be added to the armamentarium for the treatment of fluoroquinolone-resistant MDR-TB and XDR-TB patients. While these repurposed or new drugs are effective drugs, bringing new hope to the treatment of MDR-TB and XDR-TB cases, the use of these drugs are associated with potentially serious adverse events (bone marrow suppression and peripheral neuropathy in the case of linezolid and cardiotoxicity manifested as prolonged QT interval for delamanid and

bedaquiline). Judicious use of these drugs under close monitoring is mandatory, and modification of either the dose or dosing interval of essential drugs may be required to allow their continuation in the formulated regimen. To enhance seamless management of patients with difficult-to-treat MDR-TB and XDR-TB between Department of Health (DH) and Hospital Authority (HA), biweekly case conferences with the chest units of both Grantham Hospital and Kowloon Hospital, the two designated hospital units under HA for these diseases have been arranged. Liaison with other HA hospitals have also been stepped up.

To prevent nosocomial transmission of TB and its secondary spread within our community, the Tuberculosis and Chest Service (TB&CS) has been working closely with Task Force on Infection Control under HA in establishing guideline on control of transmission of TB in the healthcare settings. Other public health measures to contain the spread of TB within our community have also been enhanced, including stepping up of local enforcement in use of medical surveillance/examination notices and isolation orders in collaboration with HA hospitals as well as cross-jurisdiction notification of drug-resistant and other TB cases of potential public health concern.

TBC&S has been actively collaborating with overseas health authorities in conducting TB researches for the development and evaluation of new TB regimens. In addition to our engagement in the Tuberculosis Trial Consortium (TBTC) study 33, which compared self-administered therapy against directly observed therapy among patients undergoing treatment with the twelve weekly doses of isoniazid and rifapentine for latent TB infection and which had been completed, preparation was under way for rolling out of another study, the TBTC study 31, a randomized, open-label, controlled phase 3 clinical trial of rifapentine-containing treatment shortening regimens for pulmonary tuberculosis in early 2016.

To echo WHO's endeavour to promote TB awareness and to commemorate the World TB Day, as well as to mobilize support from the community and other stakeholders in the fight against TB, an opening ceremony cum health exhibition was jointly held by the Hong Kong Tuberculosis, Chest and Heart Diseases Association, DH and HA at Marina Square, Ap Lei Chau, from 21 to 22 March 2015. A range of other publicity measures including relaunch of the Announcement for Public Interest (API) on prevention of TB as well as an hour LIVE RTHK radio programme to promote TB awareness were also conducted. It is hoped that with all these activities, health care workers, the public and all other stakeholders will join the drive to roll out WHO's End TB Strategy needed to end the TB epidemic.

To update staff members of the TB&CS on recent advances in diagnostics and

treatment modalities related to TB and other respiratory diseases, arrangement was made for the staff to attend various local and international conferences on TB and lung health. The knowledge acquired in these conferences also helped senior staff members to formulate TB control policies locally. Members of TB&CS also contributed actively to the body of scientific literature, with a number of scientific papers published in collaboration with investigators from other sectors in 2015.

During the year, there were a total of 82 487 attendees in TB&CS as compared to 83 613 in 2014, and the total attendance was 672 579 in comparison with 696 296 in 2014. Among the 82 487 patients, 19 374 patients were new attendants. The diagnoses among new patients included active pulmonary tuberculosis (10.7%), active tuberculosis of other forms (4.2%), inactive tuberculosis (2.9%), bronchitis not specified as acute or chronic (8.3%), acute respiratory infection (0.1%), malignant neoplasm of trachea and bronchus (1.3%), bronchiectasis (1.7%), asthma (0.4%) and emphysema (0.1%). Among all the attendance, 2 631 hospital admissions were arranged.

Part 1: Tuberculosis

The number of tuberculosis notifications in 2015 was 4 418, making a notification rate of 60.5 per 100 000 population. The corresponding figures in 2014 were 4 705 and 65.0 per 100 000 population respectively.

The number of tuberculosis deaths was 169 in 2015 as compared with 187 in 2014. The corresponding tuberculosis mortality rates were 2.3 and 2.6 per 100 000 population in 2015 and 2014.

Tuberculosis stayed outside the top ten causes of death in 2015. Tuberculosis deaths accounted for 0.4% of the total registered deaths in Hong Kong. The average age of tuberculosis deaths was 75.6.

In 2015, over 98% 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 at 0.7% in 2015. On the other hand, unlinked anonymous screening (UAS) was no longer considered necessary and surveillance of HIV among TB patients mainly depends on voluntary HIV testing.

Part 2: Pneumoconiosis

The Pneumoconiosis (Compensation) Ordinance (the Ordinance) was first introduced in 1980 for compensation of workers who acquired pneumoconiosis as a result of occupational exposure to silica and asbestos dusts with the date of diagnosis on or after 1 January 1981. This compensation scheme is funded by a levy which is imposed in respect of construction and quarry operations in Hong Kong. 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. On the other hand, eligible patients having pneumoconiosis with the date of diagnosis before the enactment of this ordinance who were alive as at 31 December 1980 are eligible for a government funded ex-gratia compensation scheme. The Ordinance was amended in 1993 to replace the lump sum payment with monthly payment payable to patients until their death. 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 joined the revised scheme in 1993 or afterwards, irrespective of whether there was additional degree of incapacity over previous lump-sum compensation. The 1996 amendment also allowed the Pneumoconiosis Medical Board (the Board) to take other tests into consideration in adjusting the degree of incapacity as determined by FVC test by a maximum of 5%. The ex-gratia payment scheme for pre-1981 pneumoconiotics was also reviewed. On top of a flat-rate of monthly payment, additional payments were introduced for those in need of constant care, oxygen and medical appliances. In 2008, the Pneumoconiosis (Compensation) Ordinance was amended to cover compensation for mesothelioma patients when it became the Pneumoconiosis and Mesothelioma (Compensation) Ordinance.

A new set of reference values for spirometry were published for the local population in 2006. A calibration study was subsequently performed in the Pneumoconiosis Clinic, comparing the new reference values with those published in 1982 among normal construction and quarry workers as well as silicosis patients. The new set of reference values was shown to reflect the lung function status of normal heavy manual workers better than the older set. Because of such finding, the new set of reference values was adopted for compensation assessment since 2009.

The Pneumoconiosis Clinic continued to provide a full range of outpatient services to

patients with suspected or confirmed pneumoconiosis and mesothelioma. 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 5 222 in 2015 compared with 5 726 in 2014. In 2015, 157 cases with suspected pneumoconiosis or mesothelioma were examined by the Board under the Ordinance, and 69 new cases (including 56 cases of silicosis and 13 cases of mesothelioma) were confirmed by the Board. Up to the end of 2015, a total of 4 897 patients had been confirmed by the Board as having pneumoconiosis and/or mesothelioma under the Ordinance with the date of diagnosis on or after 1 January 1981.

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Part 1

TUBERCULOSIS

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APPENDIX 1

**TB Notifications & Death Rate of Tuberculosis (All Forms)
1947 - 2015**

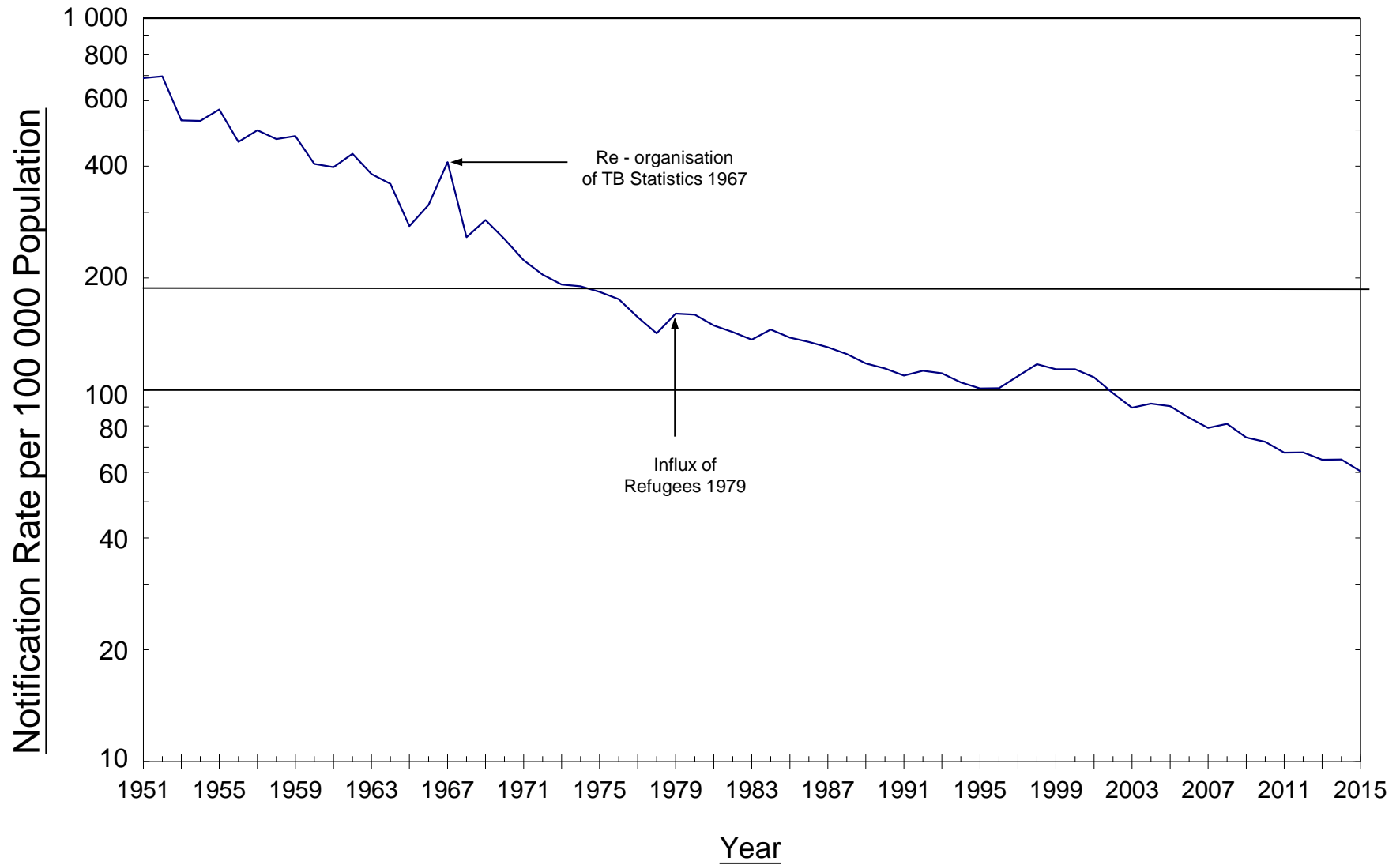
Year	TB Notifications		Notification Rate per 100 000 Pop	TB Deaths	Death Rate per 100 000 Pop	Ratio (Notifications/ Deaths)	Deaths ----- Notifications x 100%
1947	4 855		277.4	1 861	106.3	2.61	38.33
1948	6 279		348.8	1 961	108.9	3.20	31.23
1949	7 510		404.4	2 611	140.6	2.88	34.77
1950	9 067		405.3	3 263	145.9	2.78	35.99
1951	13 886		689.0	4 190	207.9	3.31	30.17
1952	14 821		697.2	3 573	168.1	4.15	24.11
1953	11 900		530.7	2 939	131.1	4.05	24.70
1954	12 508		528.9	2 876	121.6	4.35	22.99
1955	14 148		568.1	2 810	112.8	5.03	19.86
1956	12 155		464.9	2 629	100.6	4.62	21.63
1957	13 665		499.4	2 675	97.8	5.11	19.58
1958	13 485		472.5	2 302	80.7	5.86	17.07
1959	14 302		482.0	2 178	73.4	6.57	15.23
1960	12 425		405.5	2 085	68.0	5.96	16.78
1961	12 584		397.2	1 907	60.2	6.60	15.15
1962	14 263		431.5	1 881	56.9	7.58	13.19
1963	13 031		380.9	1 762	51.5	7.40	13.52
1964	12 557		358.3	1 441	41.1	8.71	11.48
1965	9 927		275.9	1 278	35.5	7.77	12.87
1966	11 427		314.8	1 515	41.7	7.54	13.26
1967	15 253		409.7	1 493	40.1	10.22	9.79
1968	9 792		257.5	1 483	39.0	6.60	15.15
1969	11 072		286.5	1 470	38.0	7.53	13.28
1970	10 077		254.5	1 436	36.3	7.02	14.25
1971	9 028		223.2	1 250	30.9	7.22	13.85
1972	8 420		204.2	1 312	31.8	6.42	15.58
1973	8 152		192.2	1 154	27.2	7.06	14.16
1974	8 320		190.0	974	22.2	8.54	11.71
1975	8 192		183.6	646	14.5	12.68	7.89
1976	7 928		175.5	568	12.6	13.96	7.16
1977	7 191		156.9	532	11.6	13.52	7.40
1978	6 623		141.9	420	9.0	15.77	6.34
1979	7 907	(498) *	160.4	523	10.6	15.12	6.61
1980	8 065	(712)	159.3	551	10.9	14.64	6.83
1981	7 729	(254)	149.1	489	9.4	15.81	6.33
1982	7 527	(112)	143.0	454	8.6	16.58	6.03
1983	7 301	(73)	136.6	446	8.3	16.37	6.11
1984	7 843	(69)	145.3	420	7.8	18.67	5.36
1985	7 545	(59)	138.3	409	7.5	18.45	5.42
1986	7 432	(46)	134.5	407	7.4	18.26	5.48
1987	7 269	(41)	130.3	405	7.3	17.95	5.57
1988	7 021	(121)	124.8	388	6.9	18.10	5.53
1989	6 704	(226)	117.9	403	7.1	16.64	6.01
1990	6 510	(288)	114.1	382	6.7	17.04	5.87
1991	6 283	(281)	109.2	409	7.1	15.36	6.51
1992	6 534	(309)	112.6	410	7.1	15.94	6.27
1993	6 537	(264)	110.8	396	6.7	16.51	6.06
1994	6 319	(230)	104.7	409	6.8	15.45	6.47
1995	6 212	(175)	100.9	418	6.8	14.86	6.73
1996	6 501	(88)	101.0	292	4.5	22.26	4.49
1997	7 072	(34)	109.0	252	3.9	28.06	3.56
1998	7 673	(7)	117.3	270	4.1	28.42	3.52
1999	7 512	(5)	113.7	312	4.7	24.08	4.15
2000	7 578	(7)	113.7	299	4.5	25.34	3.95
2001	7 262	(0)	108.2	311	4.6	23.35	4.28
2002	6 602	(0)	97.9	267	4.0	24.73	4.04
2003	6 024	(0)	89.5	275	4.1	21.91	4.57
2004	6 226	(0)	91.8	286	4.2	21.77	4.59
2005	6 160	(0)	90.4	271	4.0	22.73	4.40
2006	5 766	(0)	84.1	294	4.3	19.61	5.10
2007	5 463	(0)	79.0	231	3.3	23.65	4.23
2008	5 635	(0)	81.0	229	3.3	24.61	4.06
2009	5 193	(0)	74.5	204	2.9	25.46	3.93
2010	5 093	(0)	72.5	191	2.7	26.66	3.75
2011	4 794	(0)	67.8	187	2.6	25.64	3.90
2012	4 858	(0)	67.9	199	2.8	24.41	4.10
2013	4 664	(0)	64.9	178	2.5	26.20	3.82
2014	4 705	(0)	65.0	187	2.6	25.16	3.97
2015	4 418	(0)	60.5	169	2.3	26.14	3.83

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

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

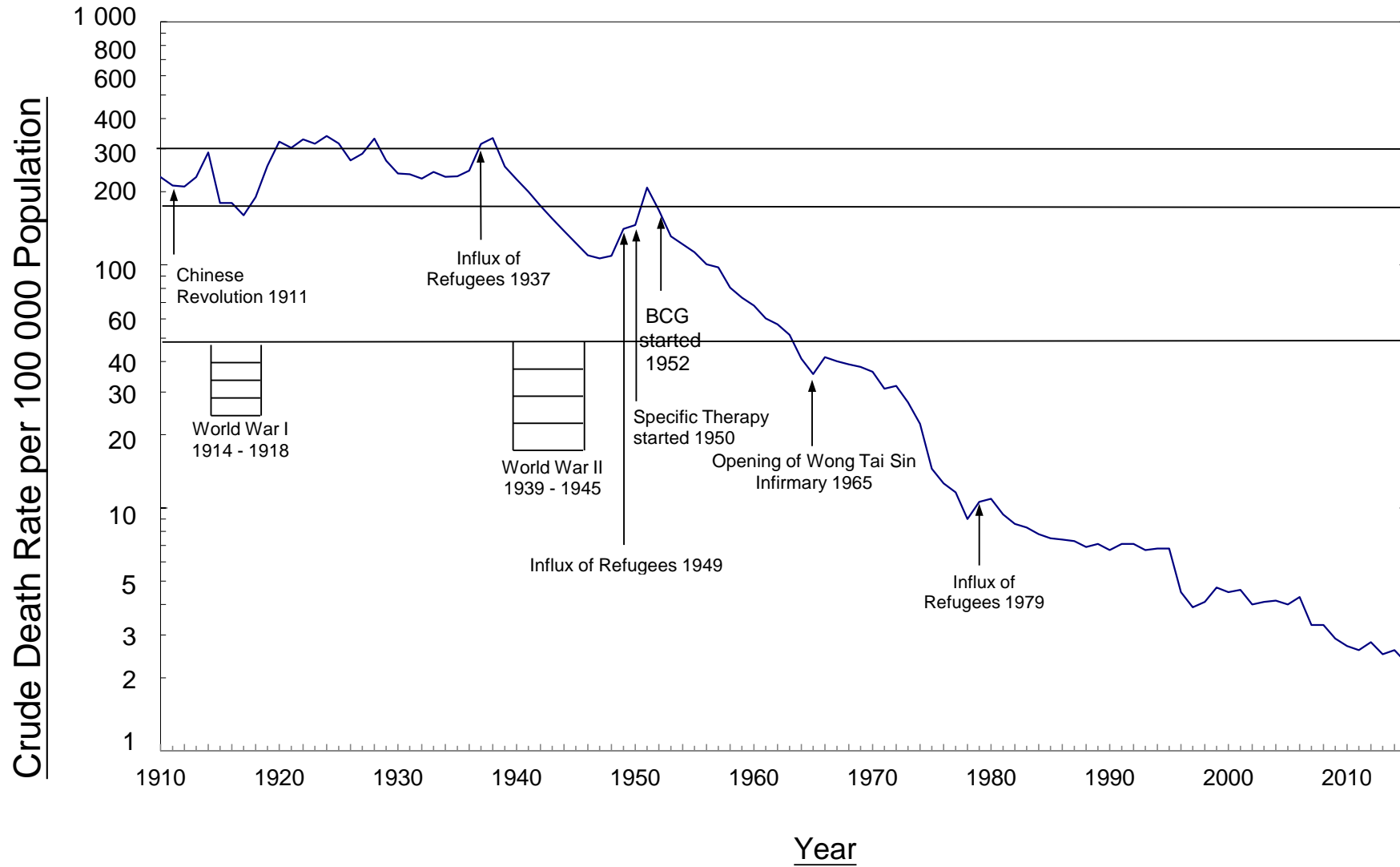
APPENDIX 2

TB Notification Rate (All Forms) 1951-2015



APPENDIX 3

Crude Death Rate due to Tuberculosis (All Forms) 1910-2015



APPENDIX 4 (a)**Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2015**

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100 000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	2	1	3	2.04	1.47	1.77
1	0	1	1			
2	0	0	0			
3	0	0	0			
4	1	0	1			
5 - 9	3	1	4	2.07	0.74	1.43
10 - 14	9	9	18	6.61	6.94	6.77
15 - 19	60	40	100	32.28	22.86	27.71
20 - 24	101	76	177	45.52	33.63	39.52
25 - 29	106	119	225	46.88	41.33	43.77
30 - 34	70	166	236	29.93	47.67	40.54
35 - 39	93	129	222	41.26	38.26	39.46
40 - 44	121	140	261	50.61	41.13	45.04
45 - 49	120	104	224	48.72	31.90	39.14
50 - 54	225	111	336	74.09	31.53	51.24
55 - 59	308	122	430	102.36	39.39	70.42
60 - 64	312	93	405	133.05	38.72	85.32
65 - 69	261	96	357	144.76	52.43	98.24
70 - 74	225	62	287	203.62	59.85	134.05
75 - 79	250	77	327	246.06	71.10	155.79
80 - 84	257	92	349	347.30	99.24	209.36
85 & over	302	153	455	550.09	141.27	278.80
Total	2 826	1 592	4 418	83.93	40.42	60.47

Appendix 4 (b)

Pulmonary TB Notifications by Age & Sex 2015**

Age Group	Pulmonary TB			Bacteriologically *			Smear		
	M	F	T	M	F	T	M	F	T
Under 1	2	1	3	1	0	1	1	0	1
1	0	1	1	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5 - 9	0	0	0	0	0	0	0	0	0
10 - 14	6	7	13	5	6	11	3	5	8
15 - 19	51	31	82	33	22	55	16	16	32
20 - 24	86	54	140	58	32	90	31	20	51
25 - 29	78	70	148	50	42	92	22	31	53
30 - 34	47	108	155	29	79	108	20	53	73
35 - 39	73	73	146	53	55	108	30	27	57
40 - 44	84	76	160	58	48	106	38	35	73
45 - 49	88	66	154	72	49	121	46	35	81
50 - 54	177	60	237	127	39	166	90	19	109
55 - 59	250	67	317	188	53	241	104	32	136
60 - 64	254	49	303	199	35	234	108	16	124
65 - 69	204	54	258	157	36	193	70	21	91
70 - 74	188	35	223	158	23	181	77	9	86
75 - 79	201	53	254	160	41	201	74	21	95
80 - 84	206	64	270	176	53	229	83	25	108
85 & over	234	114	348	203	97	300	73	28	101
Total	2 229	983	3 212	1 727	710	2 437	886	393	1 279

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

Appendix 4(c)

Rate of Pulmonary TB Notifications by Age & Sex 2015**

(Rate per 100 000 Population)

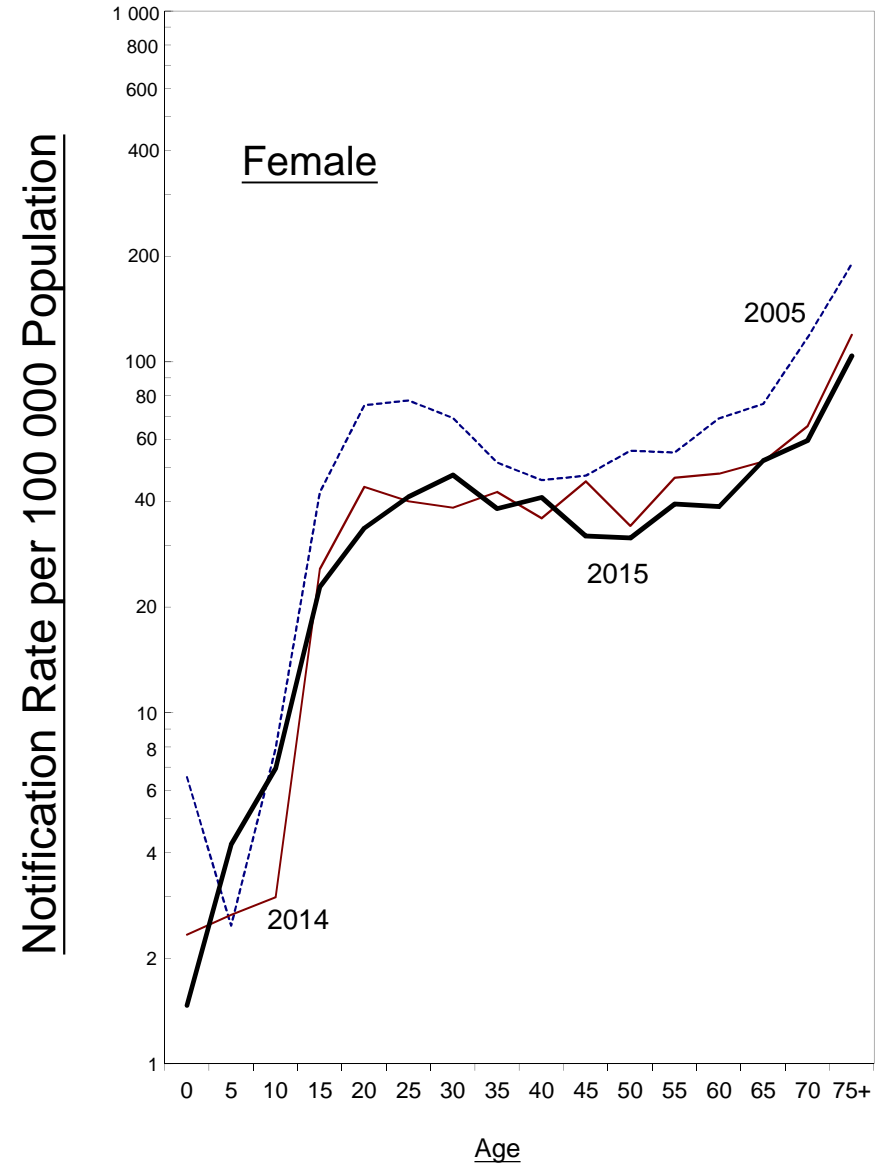
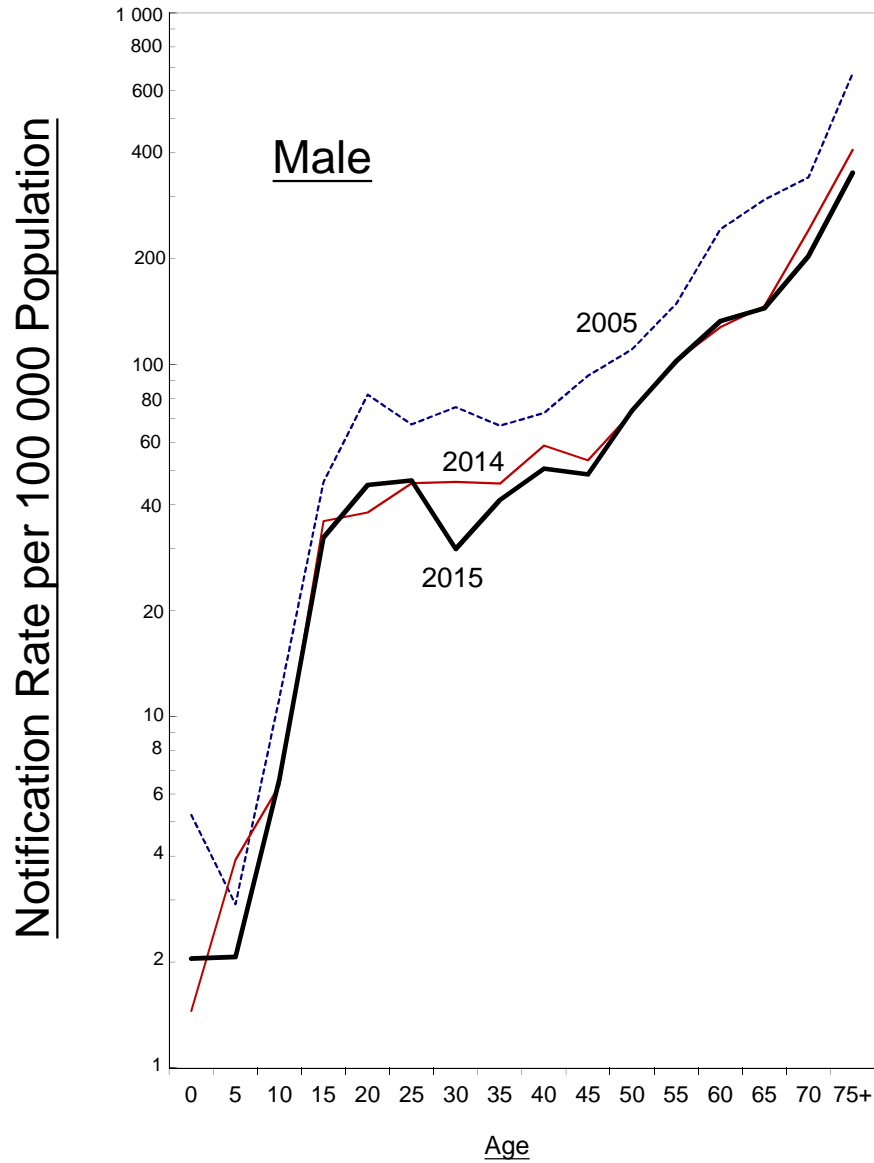
Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
0 - 4	1.4	1.5	1.4	0.7	0.0	0.4	0.7	0.0	0.4
5 - 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 - 14	4.4	5.4	4.9	3.7	4.6	4.1	2.2	3.9	3.0
15 - 19	27.4	17.7	22.7	17.8	12.6	15.2	8.6	9.1	8.9
20 - 24	38.8	23.9	31.3	26.1	14.2	20.1	14.0	8.8	11.4
25 - 29	34.5	24.3	28.8	22.1	14.6	17.9	9.7	10.8	10.3
30 - 34	20.1	31.0	26.6	12.4	22.7	18.6	8.6	15.2	12.5
35 - 39	32.4	21.6	26.0	23.5	16.3	19.2	13.3	8.0	10.1
40 - 44	35.1	22.3	27.6	24.3	14.1	18.3	15.9	10.3	12.6
45 - 49	35.7	20.2	26.9	29.2	15.0	21.1	18.7	10.7	14.2
50 - 54	58.3	17.0	36.1	41.8	11.1	25.3	29.6	5.4	16.6
55 - 59	83.1	21.6	51.9	62.5	17.1	39.5	34.6	10.3	22.3
60 - 64	108.3	20.4	63.8	84.9	14.6	49.3	46.1	6.7	26.1
65 - 69	113.1	29.5	71.0	87.1	19.7	53.1	38.8	11.5	25.0
70 - 74	170.1	33.8	104.2	143.0	22.2	84.5	69.7	8.7	40.2
75 - 79	197.8	48.9	121.0	157.5	37.9	95.8	72.8	19.4	45.3
80 - 84	278.4	69.0	162.0	237.8	57.2	137.4	112.2	27.0	64.8
85 & over	426.2	105.3	213.2	369.8	89.6	183.8	133.0	25.9	61.9
Total	66.2	25.0	44.0	51.3	18.0	33.4	26.3	10.0	17.5

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

APPENDIX 5

TB Notification Rate by Age & Sex 2005, 2014 & 2015



Appendix 6

Notifications of Tuberculosis by Type by Age & Sex 2015

Age Group	Pulmonary only #			Miliary			Meninges/CNS			Bones & Joints			Others		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Under 1	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5-9	1	0	1	2	0	2	0	0	0	0	0	0	1	1	2
10-14	7	7	14	0	0	0	0	0	0	0	0	0	4	2	6
15-19	55	32	87	1	0	1	0	0	0	1	0	1	8	9	17
20-24	92	57	149	0	0	0	1	0	1	2	1	3	15	21	36
25-29	81	75	156	1	0	1	4	0	4	0	1	1	25	52	77
30-34	48	115	163	0	1	1	0	3	3	0	4	4	24	51	75
35-39	73	77	150	0	0	0	1	3	4	2	1	3	17	52	69
40-44	91	78	169	0	1	1	1	2	3	1	2	3	36	63	99
45-49	93	69	162	0	0	0	2	1	3	2	0	2	28	37	65
50-54	188	63	251	0	2	2	3	1	4	4	0	4	41	50	91
55-59	257	71	328	0	0	0	1	3	4	2	4	6	55	49	104
60-64	264	51	315	2	2	4	1	1	2	3	2	5	53	42	95
65-69	209	56	265	2	2	4	1	2	3	5	4	9	53	35	88
70-74	194	38	232	0	1	1	1	1	2	1	1	2	36	25	61
75-79	206	54	260	0	1	1	1	0	1	1	5	6	48	18	66
80-84	214	68	282	2	0	2	2	1	3	1	0	1	46	28	74
85 & over	249	117	366	1	0	1	1	0	1	3	2	5	63	38	101
Total*	2 324	1 030	3 354	11	10	21	20	18	38	28	27	55	554	573	1 127 **

* The total add up to greater than the notification number of 4418 for 2015 as some cases have multiple sites.

** Including

TB lymph node	383
TB urogenital system	54
TB peritonitis, intestines, mesenteric, appendicitis	118
TB pleuritis, pleural effusion	384
TB laryngitis	7
TB skin	59
Unspecified	60

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

Pulmonary TB only, without extrapulmonary site involvement

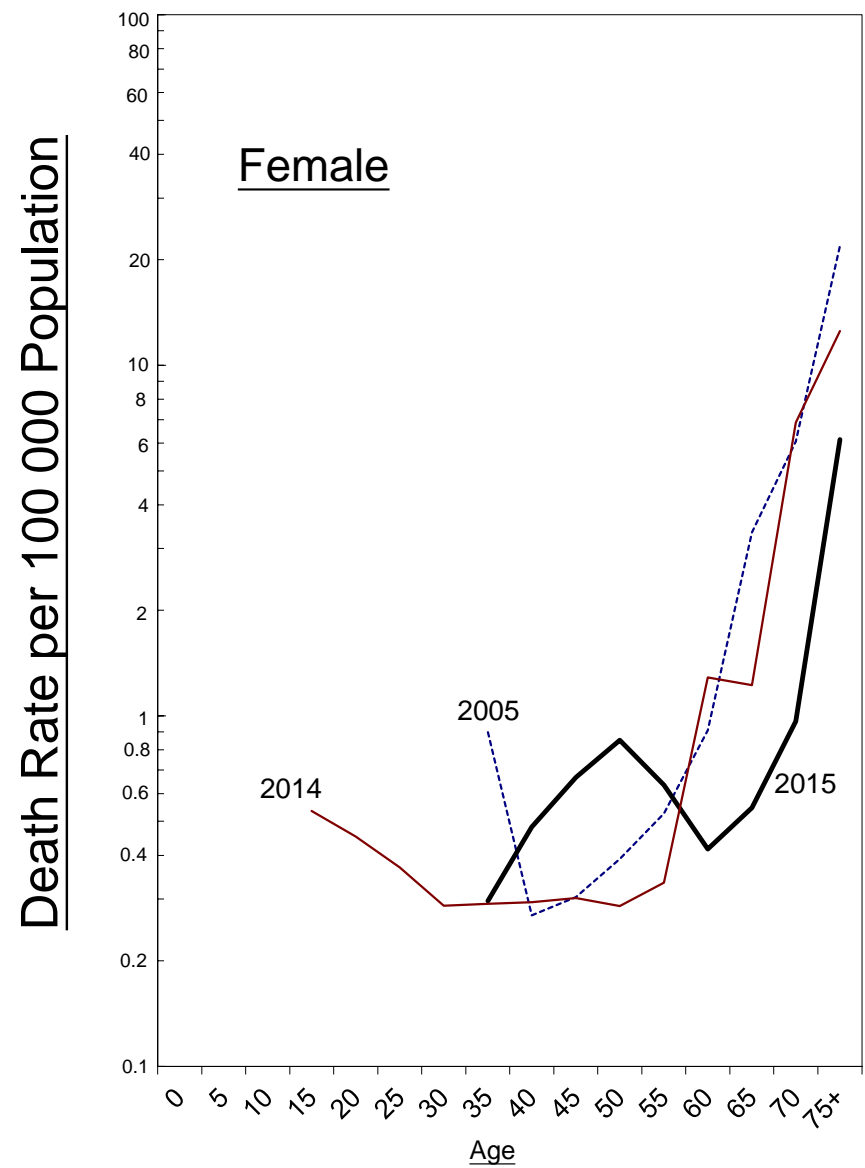
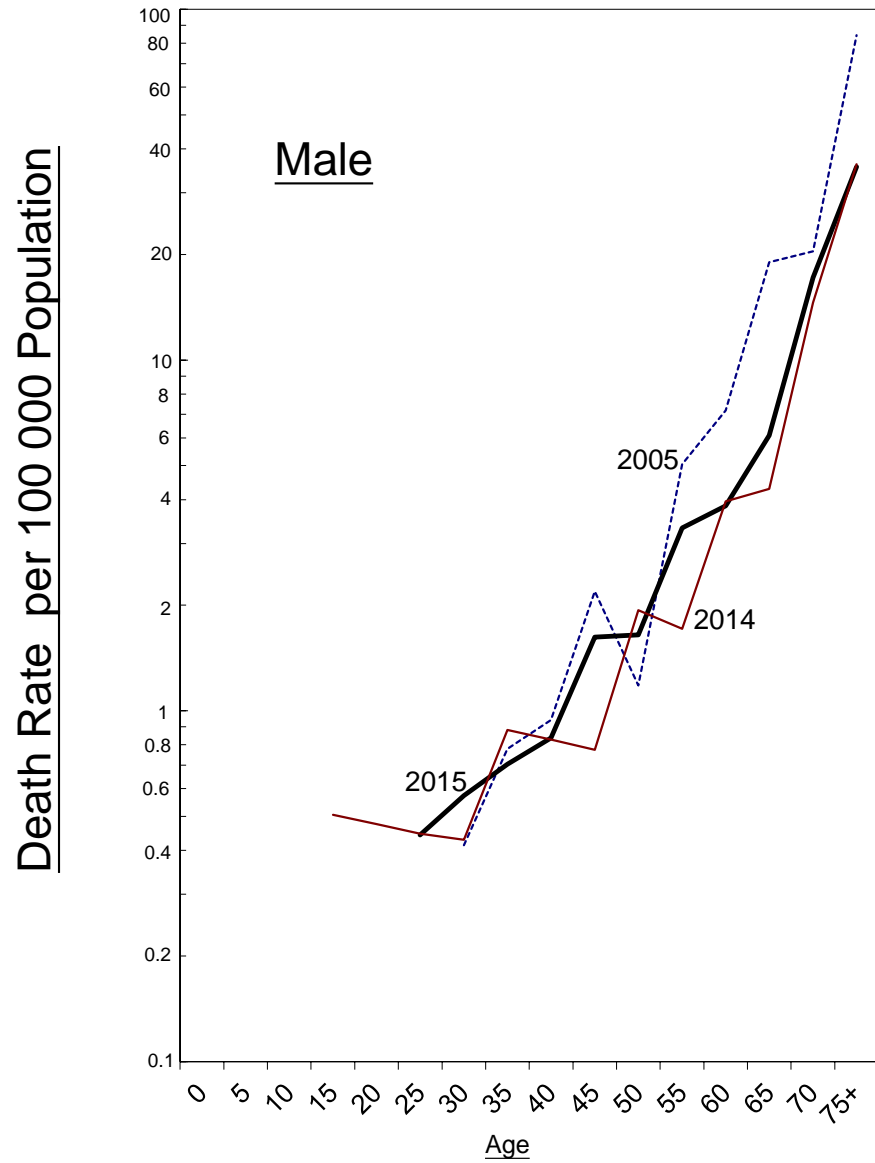
APPENDIX 7

TB Death (All Forms) & Death Rate by Age & Sex 2015

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	0	1	0.44	0.00	0.19
30-34	0	0	0	0.00	0.00	0.00
35-39	0	1	1	0.00	0.30	0.18
40-44	2	0	2	0.84	0.00	0.35
45-49	4	0	4	1.62	0.00	0.70
50-54	5	3	8	1.65	0.85	1.22
55-59	10	0	10	3.32	0.00	1.64
60-64	9	1	10	3.84	0.42	2.11
65-69	11	1	12	6.10	0.55	3.30
70-74	19	1	20	17.19	0.97	9.34
75-79	17	4	21	16.73	3.69	10.00
80-84	17	0	17	22.97	0.00	10.20
85 & over	48	15	63	87.43	13.85	38.60
Total	143	26	169	4.25	0.66	2.31

APPENDIX 8

TB Mortality Rate by Age & Sex 2005, 2014 & 2015



Appendix 9

TB Deaths by Type by Age & Sex 2015

Age Group	Pulmonary			Miliary			Meninges			Bones & Joints			Others		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Under 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
40-44	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
45-49	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
50-54	4	2	6	0	1	1	1	0	1	0	0	0	0	0	0
55-59	8	0	8	1	0	1	0	0	0	0	0	0	1	0	1
60-64	8	1	9	0	0	0	0	0	0	0	0	0	1	0	1
65-69	8	0	8	1	0	1	0	0	0	0	0	0	2	1	3
70-74	16	0	16	1	0	1	1	0	1	0	0	0	1	1	2
75-79	16	4	20	1	0	1	0	0	0	0	0	0	0	0	0
80-84	16	0	16	0	0	0	1	0	1	0	0	0	0	0	0
85 & over	45	14	59	2	0	2	1	0	1	0	0	0	0	1	1
Total	127	21	148	6	1	7	5	1	6	0	0	0	5	3	8 *

* Breakdown of Deaths from other forms of TB:-

Tuberculosis of intestines, peritoneum and mesenteric glands

Number

5

Tuberculosis of other specified organ

1

Sequelae of respiratory and unspecified tuberculosis

2

Total

8

Appendix 10

Tuberculosis Mortality 1950 - 2015

Year	% of TB Death below 5 years	% of TB Death below 1 year	Infant Mort. Rate from TB per 1 000 Registered Live Births	% of TB Deaths among Total Registered Deaths	Average Age of TB Death
1950	38.34	9.81	5.28	17.7	24.0
1951	34.22	7.73	4.73	20.0	25.0
1952	34.28	7.05	3.50	18.4	25.0
1953	36.27	9.02	3.51	16.1	26.0
1954	31.26	8.17	2.82	14.9	29.0
1955	28.51	8.61	2.67	14.7	31.0
1956	25.22	7.34	1.99	13.6	32.0
1957	21.20	5.76	1.57	13.8	36.0
1958	19.64	7.04	1.52	11.2	36.5
1959	18.92	5.56	1.16	10.8	37.0
1960	10.55	2.21	0.42	10.9	43.0
1961	11.48	2.62	0.46	10.2	43.0
1962	5.74	1.44	0.24	9.3	46.0
1963	5.51	1.08	0.16	8.9	47.0
1964	4.09	0.90	0.12	8.0	48.0
1965	3.36	0.70	0.09	7.3	49.0
1966	2.71	0.73	0.12	8.1	53.0
1967	2.01	0.33	0.06	7.6	54.5
1968	1.15	0.20	0.04	7.7	56.5
1969	0.95	0.27	0.05	7.8	56.0
1970	0.63	0.00	0.00	6.9	57.5
1971	0.64	0.08	0.01	6.2	57.5
1972	0.30	0.15	0.02	6.2	59.0
1973	0.35	0.09	0.01	5.4	58.0
1974	0.82	0.21	0.02	4.4	58.5
1975	1.39	0.31	0.03	3.0	58.5
1976	0.70	0.00	0.00	2.4	59.5
1977	0.38	0.00	0.00	2.3	61.0
1978	0.48	0.24	0.01	1.8	61.0
1979	0.96	0.19	0.01	2.0	61.0
1980	0.73	0.18	0.01	2.1	62.0
1981	0.41	0.00	0.00	2.0	63.0
1982	0.22	0.00	0.00	1.8	63.0
1983	0.45	0.00	0.00	1.7	63.0
1984	0.24	0.24	0.01	1.6	64.5
1985	0.00	0.00	0.00	1.6	65.5
1986	0.00	0.00	0.00	1.6	68.0
1987	0.00	0.00	0.00	1.5	68.5
1988	0.52	0.26	0.01	1.4	69.0
1989	0.25	0.25	0.01	1.4	69.0
1990	0.52	0.52	0.03	1.3	69.0
1991	0.00	0.00	0.00	1.4	69.0
1992	0.00	0.00	0.00	1.3	68.0
1993	0.25	0.25	0.01	1.3	69.0
1994	0.00	0.00	0.00	1.4	71.0
1995	0.00	0.00	0.00	1.4	71.1
1996	0.00	0.00	0.00	0.9	70.6
1997	0.00	0.00	0.00	0.8	72.1
1998	0.37	0.00	0.00	0.8	72.6
1999	0.00	0.00	0.00	0.9	72.9
2000	0.00	0.00	0.00	0.9	73.4
2001	0.00	0.00	0.00	0.9	74.3
2002	0.00	0.00	0.00	0.8	74.0
2003	0.36	0.00	0.00	0.8	72.3
2004	0.00	0.00	0.00	0.8	73.4
2005	0.00	0.00	0.00	0.7	74.3
2006	0.00	0.00	0.00	0.8	73.5
2007	0.00	0.00	0.00	0.6	74.2
2008	0.00	0.00	0.00	0.6	74.5
2009	0.00	0.00	0.00	0.5	73.7
2010	0.00	0.00	0.00	0.4	73.1
2011	0.00	0.00	0.00	0.4	77.3 *
2012	0.00	0.00	0.00	0.5	75.9
2013	0.00	0.00	0.00	0.4	74.1
2014	0.00	0.00	0.00	0.4	76.0
2015	0.00	0.00	0.00	0.4	75.6

Note: * The average age of TB death is calculated by the exact age of TB death from 2011 onwards. Figures may be slightly different from previous years which were compiled basing on the age groups of TB death.

APPENDIX 11

Top Ten Causes of Death 2015

Rank	Causes of Death	Detailed List No.	2015		
		ICD 10th Revision	Male	Female	Total
	All Causes		25 810	20 943	46 757 (4)
1	Malignant neoplasms	C00-C97	8 345	5 971	14 316
2	Pneumonia	J12-J18	4 223	3 781	8 004
3	Diseases of heart	I00-I09, I11 I13, I20-I51	3 349	2 841	6 190
4	Cerebrovascular diseases	I60-I69	1 671	1 588	3 259
5	External causes of morbidity and mortality #	V01-Y89	1 280	714	1 994
6	Chronic lower respiratory diseases *	J40-J47	1 275	385	1 660
7	Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	812	843	1 655
8	Dementia	F01-F03	455	690	1 145
9	Septicaemia	A40-A41	424	467	891
10	Diabetes mellitus	E10-E14	241	251	492
	Tuberculosis (including late effects of tuberculosis)		143	26	169
	All other causes	Residues of all causes	3 592	3 386	6 982 (4)

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
2005 - 2015**

Origin	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
East Kowloon Chest Clinic	132	86	121	129	100	99	105	101	83	83	105
Kowloon Chest Clinic	287	231	220	184	171	165	122	154	167	127	95
Sai Ying Pun Chest Clinic	112	92	108	86	69	80	71	89	79	70	69
Shaukiwan Chest Clinic	111	104	128	105	80	72	74	65	74	66	72
Shaukiwan Pneumoconiosis	10	15	13	13	16	6	9	10	2	9	0
Shek Kip Mei Chest Clinic	140	96	111	127	92	87	90	101	95	80	89
South Kwai Chung Chest Clinic	282	224	187	200	158	166	146	158	122	127	103
Tai Po Chest Clinic	101	92	79	81	63	71	86	82	93	64	54
Wanchai Chest Clinic	214	191	169	168	170	143	118	110	113	95	89
Yan Oi Chest Clinic	263	238	165	179	172	152	173	144	146	104	105
Yaumatei Chest Clinic	249	204	151	137	139	131	128	132	112	101	92
Yuen Chau Kok Chest Clinic	148	136	122	116	124	131	112	108	110	98	80
Yung Fung Shee Chest Clinic	174	148	120	147	118	131	112	116	86	92	87
Castle Peak Hospital (Chest Clinic)	3	3	4	5	0	0	0	2	0	0	0
Cheung Chau Chest Clinic	3	1	1	2	1	1	1	1	0	0	0
Sai Kung Chest Clinic	4	9	5	9	1	3	6	4	4	2	3
Sheung Shui Chest Clinic	64	61	53	45	42	63	33	21	30	33	22
Tung Chung Chest Clinic	11	15	12	9	7	11	13	9	11	11	9
Yuen Long Chest Clinic	93	69	64	67	73	80	48	39	66	51	67
Sub-total	2 401	2 015	1 833	1 809	1 596	1 592	1 447	1 446	1 393	1 213	1 141
Grantham Hospital	165	176	215	209	214	180	163	138	148	140	166
Haven of Hope Hospital	127	124	124	87	103	65	80	68	77	95	96
Kowloon Hospital	113	142	108	120	84	108	92	97	64	74	105
Ruttonjee Hospital	256	264	218	165	183	170	176	165	127	140	109
Wong Tai Sin Hospital	184	140	90	104	82	105	57	58	86	69	62
Other Govt. Institutions (a)	84	60	66	78	54	64	62	54	51	61	49
Other H.A. Hospitals	2 543	2 538	2 530	2 648	2 472	2 425	2 364	2 497	2 377	2 578	2 370
Private Practitioners	156	164	90	83	57	101	100	109	118	129	122
Private Hospitals	131	143	189	332	348	283	253	226	223	206	198
Total	6 160	5 766	5 463	5 635	5 193	5 093	4 794	4 858	4 664	4 705	4 418
% of cases from Chest Clinics among the total	39.0	34.9	33.6	32.1	30.7	31.3	30.2	29.8	29.9	25.8	25.8
% from Chest Hospitals (b)	13.7	14.7	13.8	12.2	12.8	12.3	11.8	10.8	10.8	11.0	12.2
% from Other Public Hospitals	42.6	45.1	47.5	48.4	48.6	48.9	50.6	52.5	52.1	56.1	54.8
% from Private Sector	4.7	5.3	5.1	7.4	7.8	7.5	7.4	6.9	7.3	7.1	7.2

Notes : (a) Sources are from Public Mortuaries, Prison Hospitals, & Army Hospitals.

(b) 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" 2015

Name of Hospital	No. of TB Notification
Alice Ho Miu Ling Nethersole Hospital	90
Caritas Medical Centre	123
Castle Peak Hospital	2
Hong Kong Buddhist Hospital	9
Kwong Wah Hospital	192
North District Hospital	132
North Lantau Hospital	1
Our Lady of Maryknoll Hospital	12
Pamela Youde Nethersole Eastern Hospital	176
Pok Oi Hospital	67
Prince of Wales Hospital	185
Princess Margaret Hospital	249
Queen Elizabeth Hospital	275
Queen Mary Hospital	137
Shatin Hospital	5
St. John Hospital	2
Tai Po Hospital	5
Tseung Kwan O Hospital	104
Tuen Mun Hospital	243
Tung Wah Eastern Hospital	6
Tung Wah Group of Hospitals Fung Yiu King Hospital	3
Tung Wah Hospital	4
United Christian Hospital	242
Yan Chai Hospital	106
Total	2 370

Appendix 13

Tuberculosis Notifications & Notification Rates

by District Council District 2015

District Council District	Notification	Notification Rate (per 100 000 pop.)
<u>Hong Kong Island</u>	718	57.1
Central & Western	131	52.5
Wanchai	71	46.7
Eastern	325	56.1
Southern	191	69.2
<u>Kowloon</u>	1 587	71.9
Kowloon City	228	55.4
Kwun Tong	473	73.2
Sham Shui Po	312	78.5
Wong Tai Sin	337	78.3
Yau Tsim Mong	237	73.7
<u>NT (East)</u>	915	48.2
Islands	81	54.4
Northern	165	52.2
Sai Kung/Tseung Kwan O	207	45.0
Shatin	304	45.7
Tai Po	158	51.0
<u>NT (West)</u>	1 138	58.6
Kwai Tsing	413	80.1
Tsuen Wan	117	38.1
Tuen Mun	256	50.8
Yuen Long	352	57.4
Marine	0	0.0
Unknown	2	0.0
Others	58	0.0
Total	4 418	60.5

Appendix 14

Establishment & Strength of TB & Chest Service

As at 1.12.2015

Post	Establishment	Strength
Consultant Chest Physician i/c	1	1
Consultant Chest Physician	1	1
Senior Medical & Health Officer	7	7
Medical & Health Officer	23	23
Senior Nursing Officer	1	1
Nursing Officer	15	14
Registered Nurse	75	75
Enrolled Nurse	74	75
Senior Dispenser	9	9
Dispenser	9	9
Executive Officer I	1	1
Statistical Officer II	3	3
Personal Secretary I	1	1
Clerical Officer	16	16
Assistant Clerical Officer	20	21
Clerical Assistant	55	53
Office Assistant	9	8
Workman II	43	55
Senior Radiographer	3	3
Radiographer I	8	8
Radiographer II	21	22
Radiographic Technician	4	4
Darkroom Technician	10	7

Appendix 15
Total Attendances at Chest Clinics
2005 - 2015

Clinic/Hospital	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
East Kowloon Chest Clinic	61 835	56 737	63 191	59 670	56 566	58 167	55 678	49 894	51 368	52 449	52 874
Kowloon Chest Clinic	77 337	73 627	67 093	62 017	56 658	56 523	47 693	50 666	52 766	52 423	45 953
Sai Ying Pun Chest Clinic	45 159	42 034	42 770	40 126	36 036	34 502	36 441	36 877	33 892	33 274	36 301
Shaukiwan Chest Clinic	50 699	49 667	48 207	50 618	45 028	41 263	41 804	40 600	42 335	44 417	45 789
Shaukiwan Pneumoconiosis	9 144	8 866	8 359	8 501	8 187	7 719	6 869	6 576	6 137	5 433	4 920
Shek Kip Mei Chest Clinic	60 789	57 848	58 679	52 161	54 933	49 216	49 500	47 853	49 164	51 852	48 142
South Kwai Chung Chest Clinic	80 015	79 455	78 238	81 441	82 044	81 923	75 752	78 785	75 062	73 740	78 403
Tai Po Chest Clinic	35 347	35 728	34 769	33 297	35 492	36 215	37 628	39 318	41 316	32 443	30 988
Wanchai Chest Clinic	57 906	58 545	56 790	50 465	50 461	49 609	48 893	46 777	47 901	49 276	43 900
Yan Oi Chest Clinic	72 078	72 144	70 643	66 058	63 411	67 564	63 333	67 804	64 184	60 278	60 770
Yaumatei Chest Clinic	80 708	72 180	69 549	68 587	70 439	68 633	68 164	62 688	61 905	60 937	57 835
Yuen Chau Kok Chest Clinic	59 328	57 680	55 454	57 211	60 481	58 027	65 627	59 542	67 573	60 396	51 136
Yung Fung Shee Chest Clinic	78 279	72 570	73 944	71 767	74 196	80 444	73 038	74 204	75 140	67 274	65 603
Castle Peak Hospital	317	241	240	192	146	149	145	146	124	126	38
(ceased operation from 1 April 2015)											
Cheung Chau Chest Clinic	2 066	1 589	2 318	1 411	869	1 206	1 286	1 349	1 356	1 273	1 562
Sai Kung Chest Clinic	2 382	2 542	2 280	1 885	1 745	2 277	1 861	1 546	1 542	1 371	1 513
Sheung Shui Chest Clinic	22 601	21 765	22 333	21 909	22 468	22 303	21 775	17 495	15 308	16 827	15 361
Tung Chung	5 173	4 447	4 086	4 263	5 137	4 433	4 447	4 248	4 303	4 091	4 166
Yuen Long Chest Clinic	33 056	29 344	27 960	29 979	29 935	30 729	30 201	27 413	29 929	27 377	26 361
Hei Ling Chau ATC	585	472	282	290	344	303	202	190	240	162	127
Lai Chi Kok Reception Centre	479	356	519	412	379	303	330	365	279	250	278
Shek Pik Prison Hospital	141	157	188	232	201	186	94	140	192	184	199
Stanley Prison Hospital	527	603	665	796	719	687	688	529	488	443	360
Total	835 951	798 597	788 557	763 288	755 875	752 381	731 449	715 005	722 504	696 296	672 579

Appendix 16

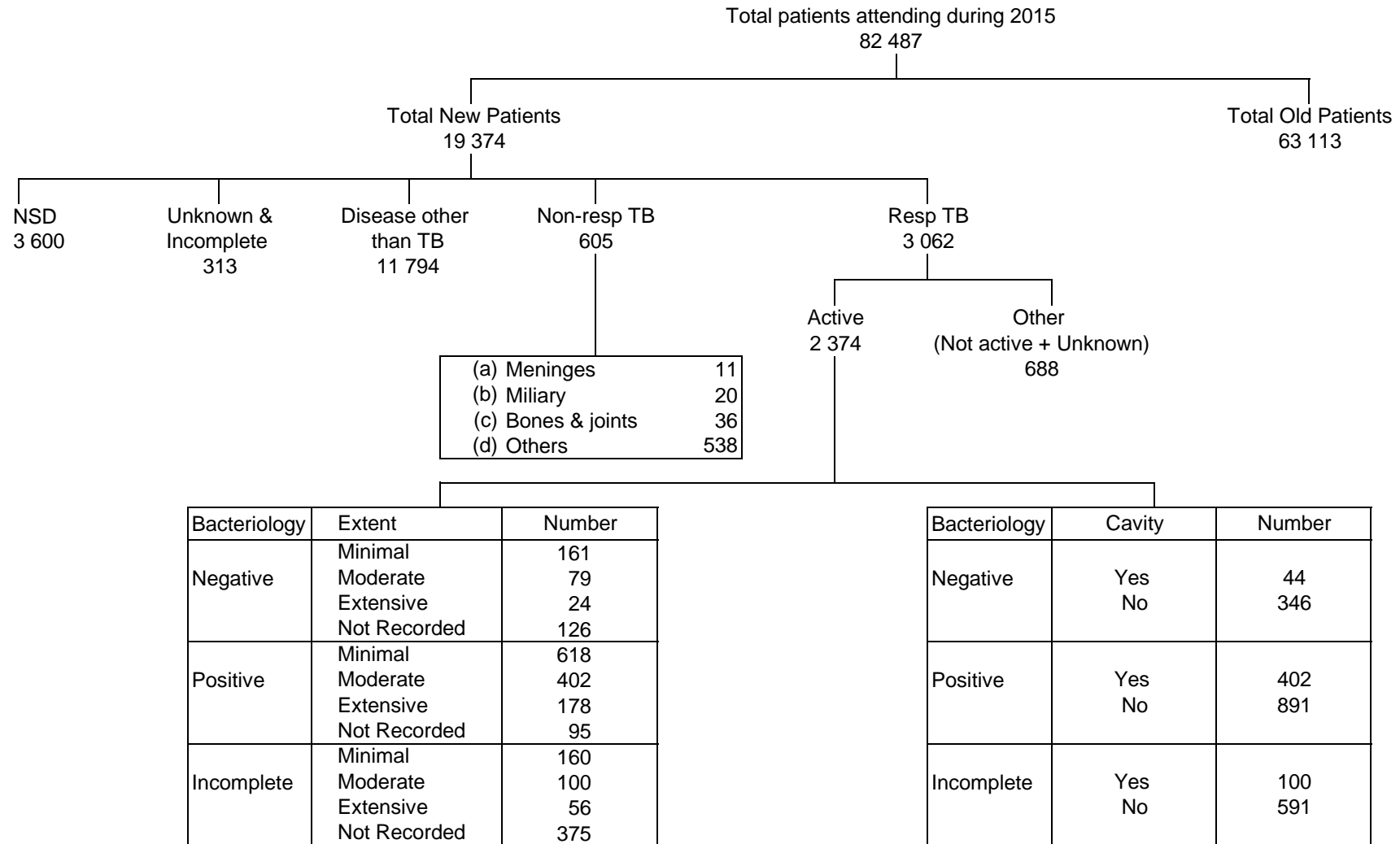
No. of Doctor Sessions, Cases Seen by Doctor and Patient/Doctor Session 2015

Clinic/Hospital	Doctor Sessions	Cases Seen by Doctor	Patient/Doctor Session
<u>Full Time Clinics</u>			
East Kowloon	575	12 759	22
Kowloon	665	14 820	22
Pneumoconiosis	350	4 926	14
Sai Ying Pun	607	9 877	16
Shaukeiwan	568	11 384	20
Shek Kip Mei	582	12 679	22
South Kwai Chung	955	21 492	23
Tai Po	534	7 741	14
Wanchai	654	14 627	22
Yan Oi	869	18 603	21
Yaumatei	836	14 972	18
Yuen Chau Kok	802	14 884	19
Yung Fung Shee	666	15 127	23
Sub-total	8 663	173 891	20
<u>Part Time Clinics</u>			
Castle Peak (ceased operation from 1 April 2015)	5	38	8
Cheung Chau	23	271	12
Sai Kung	51	639	13
Sheung Shui	319	3 785	12
Tung Chung	151	2 040	14
Yuen Long	425	6 653	16
Sub-total	974	13 426	14
<u>Institutions Correctional Services Department</u>			
Hei Ling Chau	13	127	10
Lai Chi Kok Reception Center	51	242	5
Shek Pik	14	199	14
Stanley Prison	25	292	12
Sub-total	103	860	8
Total	9 740	188 177	19

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

Appendix 17

Flow Chart of Patients Attending Chest Clinics 2015 *



* A total of 82 487 patients attended, comprising 63 113 old cases and 19 374 new cases. Among new cases, 3 062 had respiratory TB with 2 374 being active, 605 had non-respiratory TB, 11 794 had diseases other than TB, 313 had unknown and incomplete diagnoses, and 3 600 had NSD (no specific diagnosis). Of the 605 new cases with non-respiratory TB, 11 had TB affecting meninges, 20 had miliary TB, 36 had TB affecting bones and joints, and 538 had TB affecting other sites.

Appendix 18

**Classification of Patients of First Attendance with New Case Card Completed
By Clinics According to International Classification of Diseases Code 2015**

Code		Classification	Total
ICD 9	ICD 10		
010	A15.7, A16.7	Primary Tuberculosis Infection	2
011	A15.0-15.3, A16.0-16.3	Pulmonary Tuberculosis	2 122
012	A15.4-15.6, A15.8-15.9, A16.3-16.5, A16.8-16.9	Other Respiratory Tuberculosis	325
013	A17.0-17.1	Tuberculosis of Nervous System	11
014	A18.3	Tuberculosis of Intestines	76
015	A18.0	Tuberculosis of Bones & Joints	43
016	A18.1	Tuberculosis of Genito-urinary System	29
017	A18.2, A18.4-18.8	Tuberculosis of Other Organs	341
018	A19.0-19.2, A19.8-19.9	Miliary Tuberculosis	20
137	B90.0-90.2, B90.8-90.9	Late effects of Tuberculosis	688
160-165	C30-C39, C34.0-34.3, C34.8-34.9	Malignant Neoplasm of Respiratory System	246
212	D14.0-14.4	Benign Neoplasm of Respiratory System	0
460-466	J00-J06, J02.0, J02.8-02.9, J03.0, J03.9, J04.0-04.2, J05.0-05.1, J06.8-	Acute Respiratory Infection	622
470-478	J30-39, J30.0-30.4, J39.9	Other Diseases of Upper Resp Tract	49
480-486	J09-J18, J12.9, J15.0-15.2, J15.5-15.9	Pneumonia	0
487	J09, J10.0-10.1, J10.8, J11.0-11.1, J11.8	Influenza	3
490-491	J40, J41.0-41.1, J41.8, J42	Bronchitis, (not specified as acute or chronic) & chronic brochitis	1 610
492	J43, J43.0-43.2, J43.8-43.9	Emphysema	16
493	J45, J45.0-45.1, J45.8-45.9, J46	Asthma	87
494	J47	Bronchiectasis	321
495-496	J44, J44.0-44.1, J44.8-44.9	Others	91
501	J61	Asbestosis	1
502	J62, J62.0, J62.8	Silicosis	2
505	J64	Pneumoconiosis, unspecified	0
506-508	J63	Others	0
510	J86	Pyothorax (Empyema)	2
511	J90	Pleurisy	44
512	J93, J93.0-93.1, J93.8-93.9	Pneumothorax	8
513-519	J95-99, J96.0-96.1, J96.9, J98.4, J99.1, [J99.0* (M05.1†), J99.1*, J99.1* (M33.0-M33.1†), J99.1* (M31.3†), J99.1* (M32.1†), J99.1* (M33.2†), J99.1* (M34.8†)]	Other Diseases of Respiratory System	0
786	R00-09, R04.0-04.2, R04.8-04.9 R06.0-06.2, R06.5-06.8, R07.0-07.4, R09.1, R09.3	Unknown	2 805
V71	Z00, Z01.6, Z02, Z02.1-02.2, Z02.6-02.9, Z11.1, Z71.1	N.S.D.	3 512
		Diseases Other than TB & Resp System	6 298
Total			19 374

NB. Above is a crude mapping of some of the codings in ICD9 to ICD10 as a reference only. Such mapping may result in mis-classification of some cases.

Appendix 19 (a)

Extent of Active Respiratory TB in First Attenders at Chest Clinics

2013-2015

Extent *	2013		2014		2015	
	No.	%	No.	%	No.	%
1. Minimal	1 221	44.9	1 128	43.1	939	39.6
2. Moderate	682	25.1	694	26.5	581	24.5
3. Extensive	234	8.6	303	11.6	258	10.9
4. Not Recorded	584	21.5	495	18.9	596	25.1
Total	2 721	100.0	2 620	100.0	2 374	100.0
No. of first attenders	20 644		19 835		19 374	
% of active TB	13.2		13.2		12.3	

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

Percentage on Sputum Results of Active TB in First Attenders at Chest Clinics 2015

	Number	%
Smear +	739	31.1
Smear - Culture +	663	27.9
Smear - Culture -	362	15.2
Incomplete	610	25.7
Total	2 374	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 2015 (Data from Programme Forms)

Age Group	Category	% resistance to				* % resistance to			MDR-TB	# Total % resistance	Total no. of cases analysed
		E	R	H	S	1 drug	2 drugs	≥ 3 drugs			
0 - 19	New cases	0.00	0.00	2.94	8.82	11.76	0.00	0.00	0.00	11.76	34
	Previously treated cases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
	Overall	0.00	0.00	2.94	8.82	11.76	0.00	0.00	0.00	11.76	34
20 - 39	New cases	1.17	1.95	3.50	8.95	9.73	0.78	1.17	1.56	11.67	257
	Previously treated cases	0.00	0.00	14.29	28.57	14.29	14.29	0.00	0.00	28.57	7
	Overall	1.14	1.89	3.79	9.47	9.85	1.14	1.14	1.52	12.12	264
40 - 59	New cases	0.29	0.29	4.32	8.93	9.22	1.73	0.29	0.29	11.24	347
	Previously treated cases	7.14	7.14	14.29	25.00	10.71	7.14	7.14	7.14	25.00	28
	Overall	0.80	0.80	5.07	10.13	9.33	2.13	0.80	0.80	12.27	375
60 up	New cases	0.00	0.53	6.04	9.95	8.88	3.55	0.18	0.36	12.61	563
	Previously treated cases	3.92	3.92	15.69	9.80	11.76	3.92	3.92	3.92	19.61	51
	Overall	0.33	0.81	6.84	9.93	9.12	3.58	0.49	0.65	13.19	614
All	New cases	0.33	0.75	4.91	9.41	9.24	2.33	0.42	0.58	11.99	1 201
	Previously treated cases	4.65	4.65	15.12	16.28	11.63	5.81	4.65	4.65	22.09	86
	Overall	0.62	1.01	5.59	9.87	9.40	2.56	0.70	0.85	12.67	1 287

Notes: E = ethambutol; R = rifampicin; H = isoniazid; S = streptomycin

* % resistant to one, two or more than two of the four drugs E, R, H and S

total % resistance: resistant to at least one of the four drugs E, R, H and S

New cases: for cases with no past history of anti-tuberculosis treatment

Previously treated cases: for cases with past history of anti-tuberculosis treatment

Overall: for all cases

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

APPENDIX 19 (b2)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) with date of starting treatment during the period January to June 2015

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	1 201	100	86	100	1 287	100
Susceptible to all 4 drugs	1 057	88.01	67	77.91	1 124	87.33
Any resistance	146	12.16	20	23.26	166	12.90
H	59	4.91	13	15.12	72	5.59
R	9	0.75	4	4.65	13	1.01
E	4	0.33	4	4.65	8	0.62
S	113	9.41	14	16.28	127	9.87
Monoresistance	111	9.24	10	11.63	121	9.40
H	26	2.16	4	4.65	30	2.33
R	2	0.17	0	0.00	2	0.16
E	0	0.00	1	1.16	1	0.08
S	83	6.91	5	5.81	88	6.84
Multidrug resistance	7	0.58	4	4.65	11	0.85
H+R	3	0.25	0	0.00	3	0.23
H+R+E	0	0.00	0	0.00	0	0.00
H+R+S	1	0.08	1	1.16	2	0.16
H+R+E+S	3	0.25	3	3.49	6	0.47
Other patterns	26	2.16	5	5.81	31	2.41
H+E	0	0.00	0	0.00	0	0.00
H+S	25	2.08	5	5.81	30	2.33
H+E+S	1	0.08	0	0.00	1	0.08
R+E	0	0.00	0	0.00	0	0.00
R+S	0	0.00	0	0.00	0	0.00
R+E+S	0	0.00	0	0.00	0	0.00
E+S	0	0.00	0	0.00	0	0.00
Number of drugs resistant to:						
0 drug	1 057	88.01	67	77.91	1 124	87.33
1 drug	111	9.24	10	11.63	121	9.40
2 drugs	28	2.33	5	5.81	33	2.56
3 drugs	2	0.17	1	1.16	3	0.23
4 drugs	3	0.25	3	3.49	6	0.47

APPENDIX 19 (c1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) registered during the period January to December 2014 (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	3.45	3.45	8.04	21.84	18.39	1.15	4.60	3.45	24.14	87
	Previously treated cases	66.67	66.67	66.67	33.33	0.00	0.00	66.67	66.67	66.67	3
	Overall	5.56	5.56	10.00	22.22	17.78	1.11	6.66	5.56	25.55	90
20 - 39	New cases	0.99	1.19	5.57	10.54	9.74	1.99	1.39	1.19	13.12	503
	Previously treated cases	7.14	21.43	14.28	14.29	28.57	0.00	7.14	7.14	35.71	14
	Overall	1.16	1.74	5.80	10.64	10.25	1.93	1.55	1.36	13.73	517
40 - 59	New cases	0.55	1.23	7.06	8.70	10.87	2.72	0.41	0.82	13.99	736
	Previously treated cases	8.86	11.39	18.99	22.78	17.72	3.80	10.13	10.13	26.96	79
	Overall	1.35	2.21	8.22	10.06	11.53	2.82	1.35	1.72	15.71	815
60 up	New cases	0.35	0.26	3.91	8.33	8.16	1.91	0.26	0.17	10.33	1 152
	Previously treated cases	1.68	0.00	8.94	8.38	8.94	5.03	0.00	0.00	13.97	179
	Overall	0.53	0.22	4.58	8.34	8.27	2.33	0.22	0.15	10.82	1 331
All	New cases	0.65	0.85	5.33	9.36	9.65	2.14	0.68	0.68	12.47	2 478
	Previously treated cases	4.73	5.09	12.73	13.09	12.36	4.36	4.00	4.00	20.73	275
	Overall	1.05	1.27	6.07	9.73	9.92	2.36	1.02	1.02	13.29	2 753

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

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

APPENDIX 19 (c2)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) with date of starting treatment during the period January to December 2014

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	2 478	100	275	100	2 753	100
Susceptible to all 4 drugs	2 169	87.53	218	79.27	2 387	86.71
Any resistance	309	12.47	57	20.73	366	13.29
H	132	5.33	35	12.73	167	6.07
R	21	0.85	14	5.09	35	1.27
E	16	0.65	13	4.73	29	1.05
S	232	9.36	36	13.09	268	9.73
Monoresistance	239	9.64	34	12.36	273	9.92
H	62	2.50	12	4.36	74	2.69
R	4	0.16	3	1.09	7	0.25
E	3	0.12	2	0.73	5	0.18
S	170	6.86	17	6.18	187	6.79
Multidrug resistance	17	0.69	11	4.00	28	1.02
H+R	3	0.12	1	0.36	4	0.15
H+R+E	0	0.00	1	0.36	1	0.04
H+R+S	9	0.36	2	0.73	11	0.40
H+R+E+S	5	0.20	7	2.55	12	0.44
Other patterns	53	2.14	12	4.36	65	2.36
H+E	5	0.20	2	0.73	7	0.25
H+S	45	1.82	9	3.27	54	1.96
H+E+S	3	0.12	1	0.36	4	0.15
R+E	0	0.00	0	0.00	0	0.00
R+S	0	0.00	0	0.00	0	0.00
R+E+S	0	0.00	0	0.00	0	0.00
E+S	0	0.00	0	0.00	0	0.00
Number of drugs resistant to:						
0 drug	2 169	87.53	218	79.27	2 387	86.71
1 drug	239	9.64	34	12.36	273	9.92
2 drugs	53	2.14	12	4.36	65	2.36
3 drugs	12	0.48	4	1.45	16	0.58
4 drugs	5	0.20	7	2.55	12	0.44

Appendix 19 (d1)

Trend of anti-TB drug resistance (1998-2015) (Data from Programme Forms)

New cases

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (Jan-Jun)
Ethambutol	1.24	1.11	0.54	0.96	0.65	0.42	0.34	0.54	0.35	0.12	0.45	0.26	0.25	0.33	0.70	0.54	0.65	0.33
Rifampicin	1.17	0.97	0.61	0.83	0.46	0.69	0.75	0.83	0.86	0.46	0.64	0.90	0.78	0.88	0.95	1.03	0.85	0.75
Isoniazid	6.78	6.22	5.21	5.02	4.71	4.64	3.65	4.16	4.13	3.79	4.33	4.19	4.86	4.18	4.66	4.39	5.33	4.91
Streptomycin	7.65	9.34	7.78	7.39	7.40	7.59	6.90	6.72	6.00	7.47	6.89	8.04	7.61	7.32	9.48	8.22	9.36	9.41
MDR-TB	1.06	0.75	0.47	0.55	0.34	0.46	0.48	0.51	0.55	0.31	0.30	0.67	0.70	0.63	0.74	0.70	0.68	0.58
Total % resistance	10.89	12.61	10.35	10.39	10.22	10.54	8.84	9.33	8.64	9.32	9.41	10.59	9.88	10.08	11.67	10.72	12.47	12.16

Previously treated cases

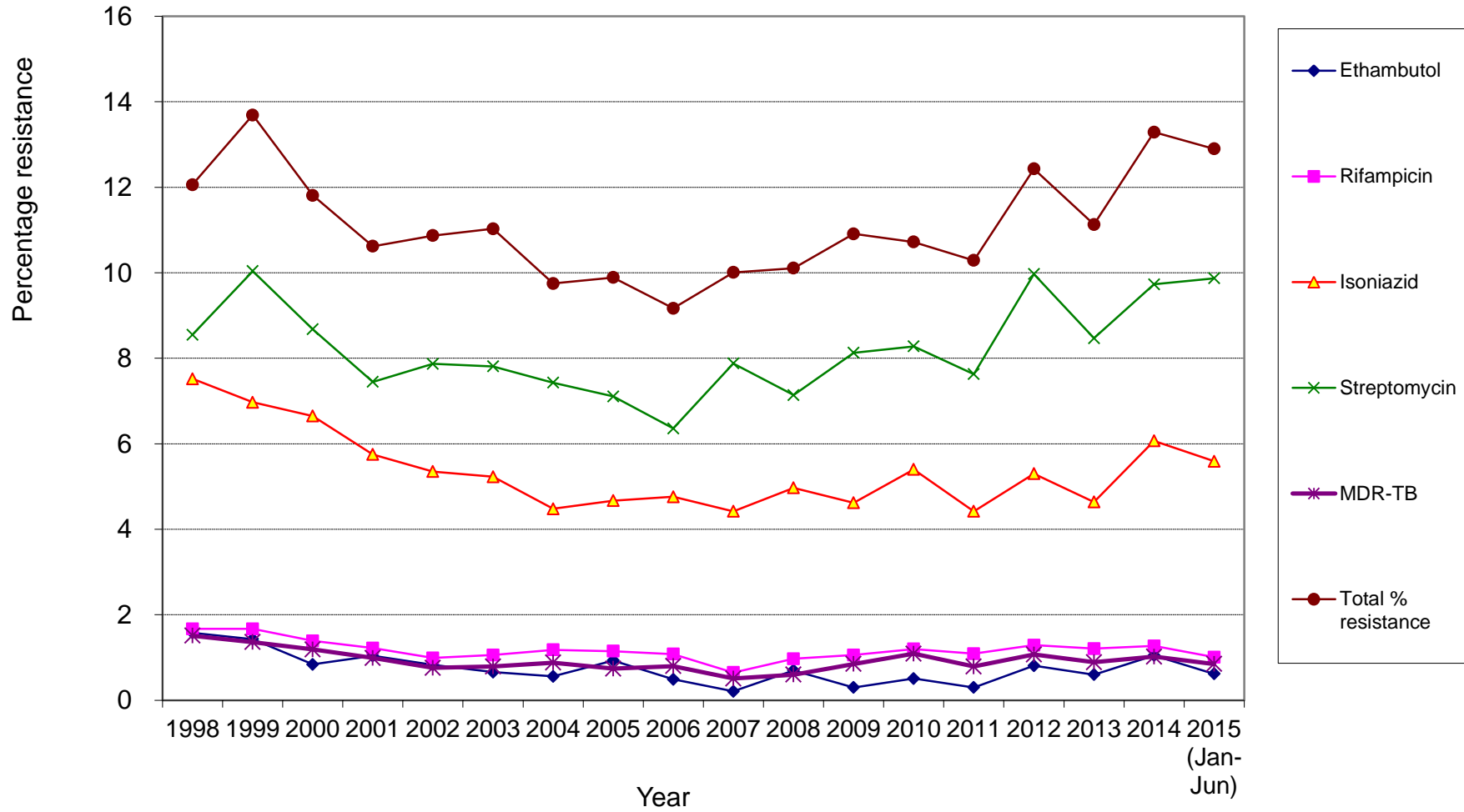
(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (Jan-Jun)
Ethambutol	3.51	3.16	2.68	1.85	2.04	2.19	2.14	3.92	1.61	0.90	2.65	0.47	2.56	0.00	1.70	0.99	4.73	4.65
Rifampicin	4.61	6.09	5.98	3.71	4.59	3.41	4.29	3.64	2.90	2.10	3.53	1.73	4.47	2.84	4.08	2.22	5.09	4.65
Isoniazid	11.84	11.51	15.26	11.80	9.69	9.00	10.46	8.68	10.00	9.31	10.00	6.45	9.58	6.38	10.54	6.17	12.73	15.12
Streptomycin	13.82	14.45	13.81	10.96	10.97	9.25	11.26	10.08	9.35	11.11	9.12	8.49	13.42	10.28	13.95	10.62	13.09	16.28
MDR-TB	4.17	5.19	5.36	3.54	3.57	2.92	3.75	2.52	2.90	2.10	2.94	1.57	4.15	2.13	3.74	1.98	4.00	4.65
Total % resistance	18.86	20.32	20.41	16.36	16.58	14.11	16.35	14.29	13.55	15.32	15.59	12.26	17.25	12.06	18.71	13.58	20.73	23.26

Overall

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 (Jan-Jun)
Ethambutol	1.58	1.43	0.84	1.04	0.83	0.66	0.56	0.93	0.49	0.21	0.70	0.30	0.51	0.30	0.81	0.60	1.05	0.62
Rifampicin	1.67	1.67	1.39	1.22	0.99	1.06	1.18	1.15	1.08	0.65	0.97	1.06	1.20	1.09	1.29	1.21	1.27	1.01
Isoniazid	7.52	6.97	6.65	5.75	5.35	5.23	4.48	4.67	4.76	4.42	4.97	4.62	5.40	4.42	5.30	4.64	6.07	5.59
Streptomycin	8.55	10.04	8.68	7.45	7.87	7.81	7.43	7.11	6.36	7.88	7.14	8.13	8.28	7.63	9.97	8.47	9.73	9.87
MDR-TB	1.51	1.36	1.19	0.99	0.76	0.79	0.88	0.74	0.80	0.51	0.60	0.85	1.09	0.79	1.07	0.89	1.02	0.85
Total % resistance	12.06	13.69	11.81	10.62	10.87	11.03	9.75	9.89	9.17	10.01	10.11	10.91	10.72	10.29	12.43	11.13	13.29	12.9

Appendix 19 (d2)

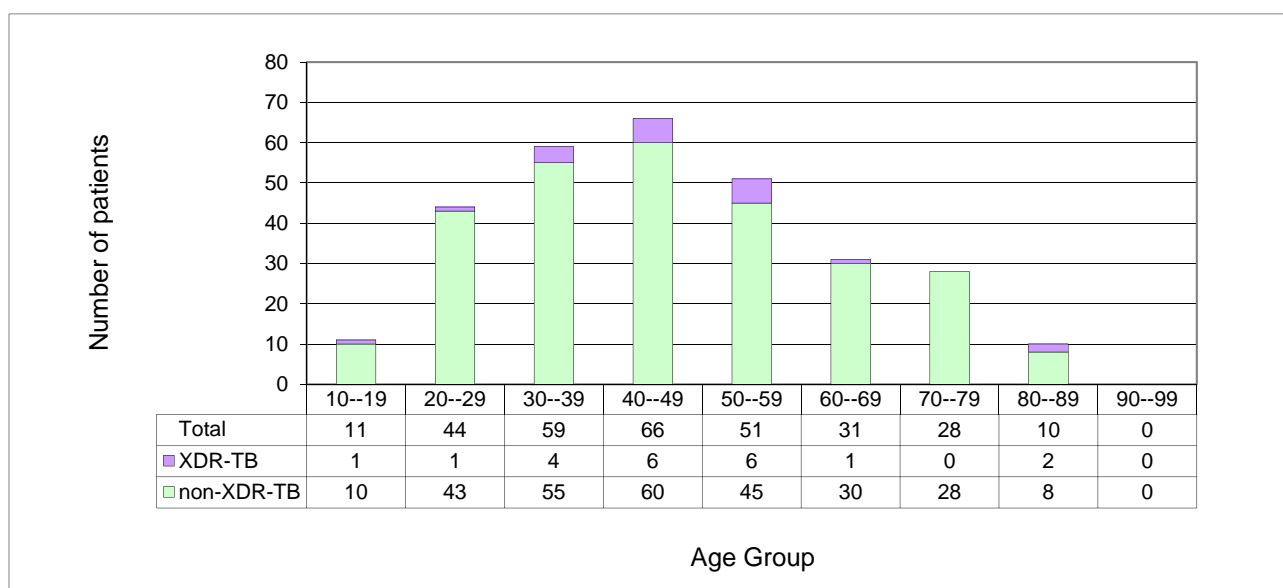
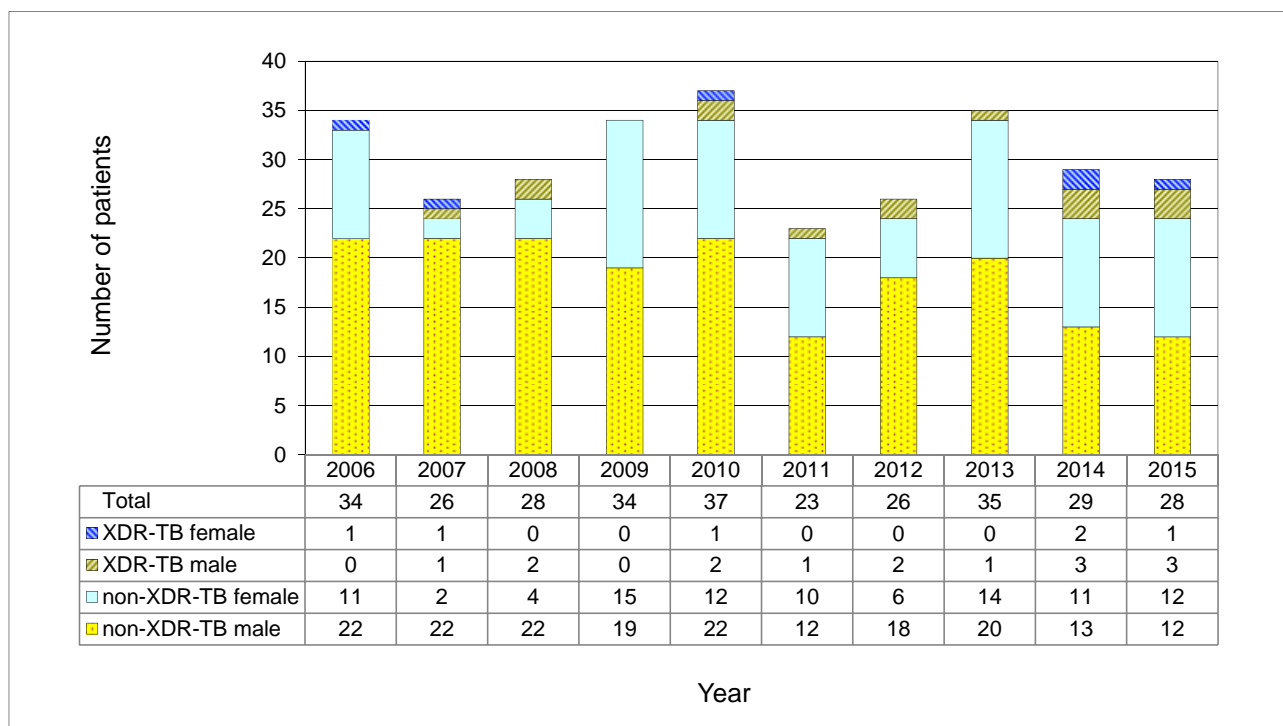
Trend of anti-TB drug resistance (1998-2015) (Overall) (Data from Programme Forms)



Appendix 19 (e)

MDR-TB and XDR-TB by Sex and Year (Upper Graph) and by Age (Lower Graph) (2006-2015)

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.



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

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

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

Appendix 20 (a)
Treatment Return 2015

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 onRx c/f	Unsup Rx	Incomp super. Rx	No. def. >2M <3M
		1	2	3	4	5	<6M	at 6M	>6M	NTM	%	hosp.	other cc	Rx temp	Died	Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M <3M	>3M	%	W	X	Y	Z	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V							
Full Time Clinics																												
East Kowloon	186	122	4	8	110	44	2	26	196	2	87.7	36	17	0	11	0	5	3	1	0	8	4	4.7	163	3	61	1	
Kowloon	183	127	12	4	88	40	7	33	177	7	87.9	30	7	0	9	0	6	0	3	0	0	4	1.7	171	0	32	0	
South Kwai Chung	230	123	6	8	215	63	14	44	252	2	84.6	43	18	0	19	3	14	1	2	2	5	7	4.0	219	0	24	0	
Sai Ying Pun	87	84	12	0	100	52	4	32	122	4	87.0	49	13	0	7	1	11	1	0	0	0	0	0.0	91	4	31	0	
Shaukeiwan	138	124	7	5	90	38	11	43	136	6	89.9	30	14	3	2	3	8	1	1	0	0	0	0.0	144	0	40	0	
Shek Kip Mei	109	121	6	7	110	45	5	39	173	7	85.5	34	18	0	11	3	10	8	5	0	0	0	0.0	85	0	61	5	
Tai Po	117	62	4	2	60	18	1	34	94	2	80.5	1	4	0	14	0	11	0	3	0	1	0	0.6	98	0	0	0	
Wanchai	108	93	10	9	51	39	3	45	108	7	81.8	25	6	0	6	3	16	0	0	0	2	0	1.1	89	8	9	0	
Yan Oi	98	146	3	13	133	48	8	58	171	2	88.8	31	11	0	16	1	4	2	4	0	2	0	0.8	131	0	106	0	
Yaumatei	187	93	7	3	132	59	6	23	158	1	79.7	52	27	0	16	1	12	1	5	1	2	8	4.8	168	1	38	5	
Yuen Chau Kok	159	120	6	2	82	31	3	60	127	1	92.6	19	8	2	4	0	7	4	3	0	0	0	0.0	162	0	29	2	
Yung Fung Shee	166	147	2	5	165	61	3	57	210	1	89.9	53	11	0	21	2	1	0	3	0	0	2	0.7	182	2	22	1	
Sub-total	1 768	1 362	79	66	1 336	538	67	494	1 924	42	86.5	403	154	5	136	17	105	21	30	3	20	25	1.7	1 703	18	453	14	
Hosp Discharge Clinic																												
East Kowloon	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
Part Time Clinics																												
Castle Peak	1	2	0	0	0	0	0	0	0	0	0.0	0	3	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
Cheung Chau	5	1	0	2	1	2	1	3	3	0	100.0	0	2	0	0	0	0	0	0	0	0	0	0.0	2	0	1	0	
Sai Kung	5	8	0	0	4	2	0	1	4	0	83.3	2	1	0	0	0	0	0	0	0	0	1	16.7	10	0	3	0	
Sheung Shui	85	39	3	2	61	13	2	21	82	1	83.7	10	4	0	5	0	0	0	2	0	1	11	9.8	64	15	55	0	
Tung Chung	20	12	1	2	25	4	2	13	17	0	85.7	1	1	0	1	1	3	0	0	0	0	0	0.0	25	0	25	0	
Yuen Long	128	89	3	3	72	37	3	24	116	2	81.4	25	10	0	10	2	0	0	1	0	2	15	9.9	122	0	116	2	
Sub-total	244	151	7	9	163	58	8	62	222	3	83.0	38	21	0	16	3	3	0	3	0	3	27	8.8	223	15	200	2	
Institutions Correctional Services Department																												
Hei Ling Chau	1	2	2	0	0	0	2	2	1	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
Stanley Prison	10	13	0	0	0	0	0	15	1	0	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	7	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	0	
Sub-total	11	15	2	0	0	0	2	17	2	0	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	7	0	0	0	
Total	2 023	1 528	88	75	1 499	596	77	573	2 148	45	86.2	441	175	5	152	20	108	21	33	3	23	52	2.5	1 933	33	653	16	

Appendix 20 (b)
Treatment Return 2015

Name of Clinic/Hospital	Other Regimen																											
	No. put on Rx b/f	Bought in					Treatment completed					Transfer out to		Interrupt	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	NTM	%	hosp.	other cc	Rx temp		Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M <3M	>3M	%	W				
	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		
<u>Full Time Clinics</u>																												
East Kowloon	55	19	0	1	55	17	4	6	40	0	78.0	15	1	2	10	0	0	0	1	0	0	2	3.4	66	6	25	5	
Kowloon	35	6	1	2	12	5	0	2	26	0	82.4	5	0	0	3	0	1	0	1	0	1	0	2.9	22	0	7	0	
South Kwai Chung	95	5	1	3	63	14	2	3	59	4	79.5	10	1	0	9	0	0	0	1	0	2	0	2.6	90	0	13	0	
Sai Ying Pun	54	6	2	1	27	9	1	1	20	2	84.0	14	2	0	1	0	0	0	1	0	0	0	0.0	57	0	12	0	
Shaukeiwan	17	5	0	0	22	5	0	2	13	1	78.9	5	1	0	3	0	0	0	0	0	0	0	0.0	24	0	13	0	
Shek Kip Mei	100	4	1	3	11	8	0	3	9	1	70.6	6	0	0	3	0	0	0	1	0	0	0	0.0	104	0	10	0	
Tai Po	32	19	1	0	16	2	2	1	22	4	63.9	0	2	0	7	0	1	0	0	0	0	1	2.8	30	0	0	0	
Wanchai	26	3	0	1	14	2	1	2	5	6	43.8	1	0	0	1	0	1	0	0	0	1	0	6.3	28	0	2	0	
Yan Oi	140	11	2	1	16	4	3	7	42	4	83.1	2	2	0	3	0	0	0	2	0	0	1	1.7	108	0	1	0	
Yaumatei	29	19	2	0	26	14	1	2	19	3	55.3	11	1	0	4	0	3	1	2	0	1	4	13.2	38	0	20	2	
Yuen Chau Kok	55	14	1	3	24	2	0	6	32	6	79.2	5	3	0	4	0	0	1	0	0	0	0	0.0	42	0	7	0	
Yung Fung Shee	43	4	0	2	20	0	1	0	10	2	58.8	0	1	0	5	0	0	0	0	0	0	0	0.0	50	0	2	0	
Sub-total	681	115	11	17	306	82	15	35	297	33	74.4	74	14	2	53	0	6	2	9	0	5	8	2.9	659	6	112	7	
<u>Hosp Discharge Clinic</u>																												
East Kowloon	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
<u>Part Time Clinics</u>																												
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	0	
Cheung Chau	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	
Sai Kung	0	0	0	0	1	2	0	0	0	0	0.0	1	1	0	0	0	0	0	0	0	0	0	0.0	1	0	2	0	
Sheung Shui	13	3	1	0	12	4	2	1	13	1	73.7	2	1	0	2	0	1	0	0	0	0	1	5.3	9	0	1	0	
Tung Chung	4	0	0	1	0	0	0	1	1	0	50.0	0	1	0	1	0	0	0	0	0	0	1	25.0	0	0	1	0	
Yuen Long	18	4	2	1	17	6	0	2	15	2	63.0	6	2	0	3	1	1	0	0	0	0	3	11.1	13	0	20	0	
Sub-total	35	7	3	2	30	12	2	4	29	3	66.0	9	5	0	6	1	2	0	0	0	0	5	10.0	23	0	24	0	
<u>Institutions Correctional Services Department</u>																												
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	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	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	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	0	
Total	716	122	14	19	336	94	17	39	326	36	73.6	83	19	2	59	1	8	2	9	0	5	13	3.6	682	6	136	7	

APPENDIX 20 (c)

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

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

* Explanatory Notes :

Service regimen Upon starting treatment, the regimen contains any combination of drugs including H (isoniazid), R (rifampicin), Z (pyrazinamide), E (ethambutol), and S (streptomycin).
 Other regimens Upon starting treatment, the regimen contains second line drugs apart from H, R, Z, E or S.

Item B New cases with treatment started in chest clinics.
 Item C Retreatment cases, with treatment newly started. Previous treatment either not completed, or even if claimed to be completed, without documentation in the available clinic record.
 Item D Relapse cases, with treatment newly started. Previous treatment is completed with documentation in the available clinic record.
 Item E Treatment cases transferred in from hospitals, private doctors, etc. without treatment started previously at any chest clinics for this episode of tuberculosis.
 Item F Other transferred in treatment cases, with treatment given previously in any chest clinics for this episode of tuberculosis.

APPENDIX 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) NTM = Non-tuberculous mycobacteria cases

Column following (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.

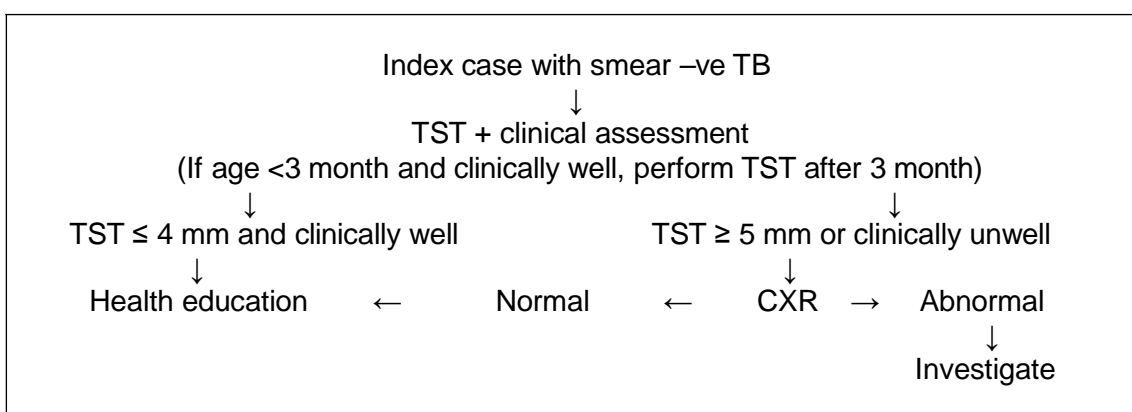
Appendix 21 (a)

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

(Updated 18 May 2015)

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 5 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 4 mm or less, health education is all that is required. If the contact case is clinically unwell or the tuberculin skin test result is 5 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)

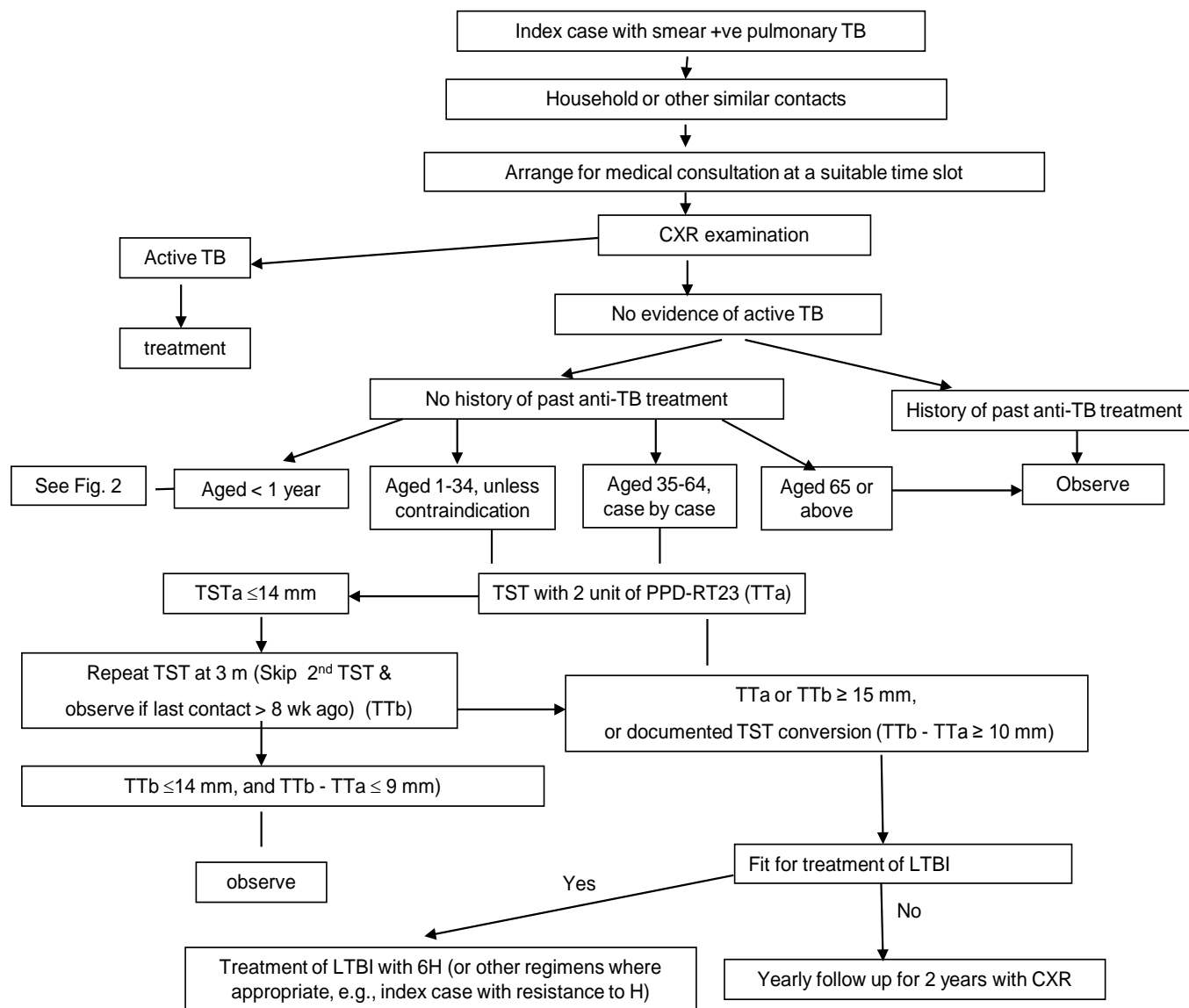


Figure 1: General schema for targeted screening of household contacts of smear-positive pulmonary TB patients

* Targeted screening for active TB and latent TB infection is regularly offered to subjects exposed to smear-positive pulmonary TB patients in the same household or other similar scenarios. Medical consultation is arranged at a suitable time slot, when chest X-ray examination will first be done to exclude active TB for which treatment will be given. Contacts with no evidence of active TB but a history of past anti-TB treatment will be observed, whereas those with no history of past anti-TB treatment will be managed according to their age group. For contacts aged below 1, please refer to App 21b2. For contacts aged 1 to 34, tuberculin skin test (TST) is routinely offered, unless there are contraindications. For those aged 35 to 64, TST is offered on a case-by-case basis. For those aged 65 or above, just observe. TST is done using 2 units of PPD-RT23. If the induration measured after 48 to 72 hours is no more than 14 mm, repeat TST 3 months later, unless the contact has had no further contact with the index case for more than 8 weeks. If the test response of either the first or the second TST is at least 15 mm, or if the difference between the two test responses is at least 10 mm, consider treatment of latent TB infection with daily isoniazid for 6 months (or other regimens where appropriate, for example, when the index case has TB with isoniazid resistance). If treatment of latent TB infection is indicated but the contact case is medically not fit, consider yearly follow up for 2 years with chest X-ray.

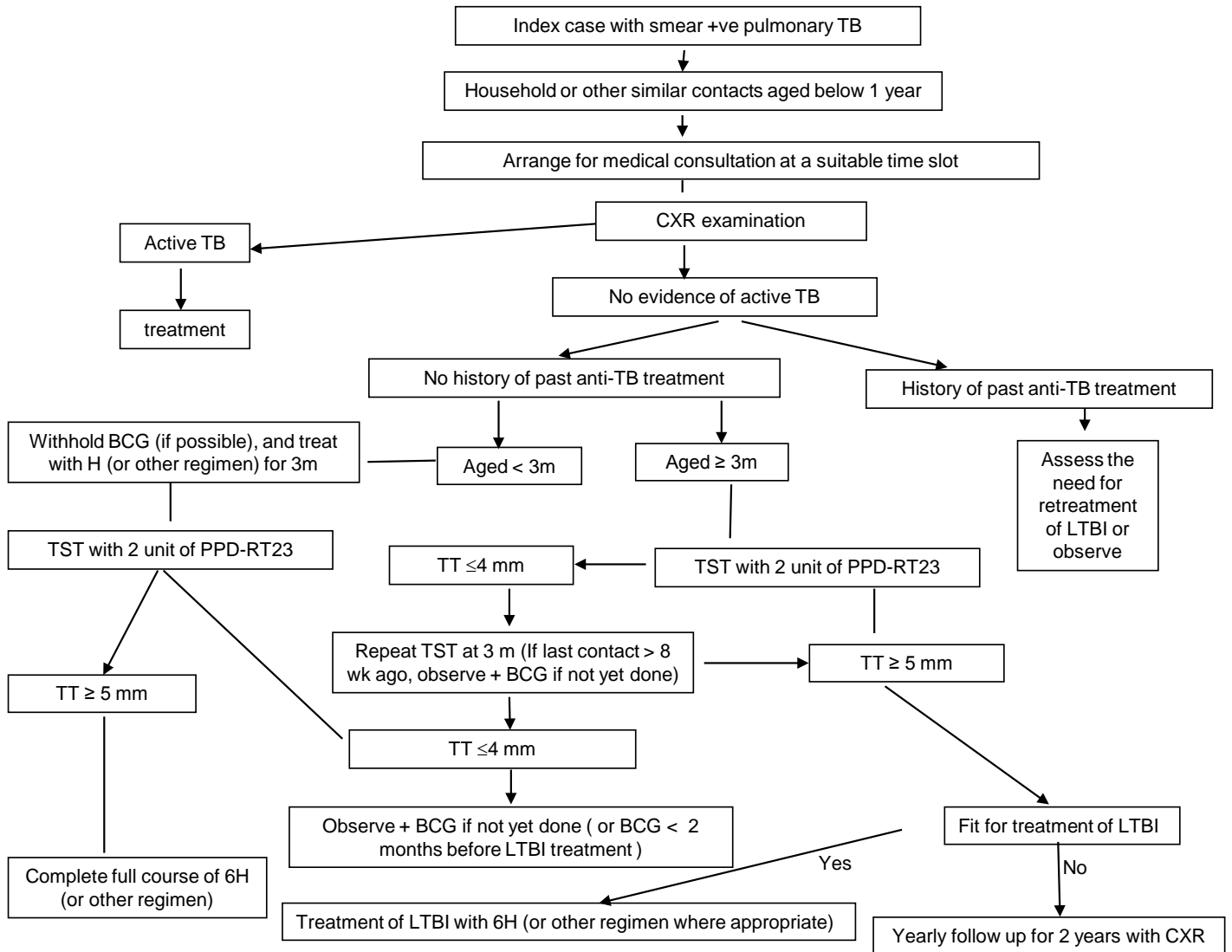


Figure 2: Targeted screening of household contacts aged below one year

* Targeted screening for active TB and latent TB infection is regularly offered to subjects aged below 1 year and exposed to smear-positive pulmonary TB patients in the same household or other similar scenarios. Medical consultation is arranged at a suitable time slot, when chest X-ray examination will first be done to exclude active TB for which treatment will be given. For contacts with no evidence of active TB but a history of past anti-TB treatment, the need for retreatment of latent TB infection versus observation will be assessed. For those with neither active TB nor a history of past anti-TB treatment, further management is stratified by their age group. For contacts aged below 3 months, withhold BCG if possible, and treat with isoniazid daily (or other regimens) for 3 months. This is followed by tuberculin skin test (TST) using 2 units of PPD-RT23. If the test response is at least 5 mm, complete a full course of 6-month isoniazid preventive treatment (or other regimens). If the test response is no more than 4 mm, observe and give BCG if it has not yet been given or given less than 2 months before starting treatment for latent TB infection.

For contacts aged 3 months or above, TST is done using 2 units of PPD-RT23. If the test response is no more than 4 mm, repeat TST 3 months later, unless the contact has had no further contact with the index case for more than 8 weeks. If the test response of either the first or second TST is at least 5 mm, consider treatment of latent TB infection with daily isoniazid for 6 months (or other regimens where appropriate). If treatment of latent TB infection is indicated but the contact case is medically not fit, consider yearly follow up for 2 years with chest X-ray. If the test response of the second TST (or the single TST done more than 8 weeks ago after last contact) is no more than 4 mm, observe and give BCG if it has not yet been given .

Appendix 21 (C)

Examination of Contacts in the Chest Clinics 2015

Particulars	Smear Positive Index Cases	Smear Negative Index Cases	Total
No. of patients (new & old) listed	1 245	3 082	4 327
No. of contacts listed	2 999	6 943	9 942
Number of contacts x-rayed	3 020 (100.00%)	6 865 (100.00%)	9 885 (100.00%)
<u>Results</u>			
(a) NSD & Unknown	2 782 (92.12%)	6 458 (94.07%)	9 240 (93.47%)
(b) Disease other than TB	141 (4.67%)	261 (3.80%)	402 (4.07%)
(c) Inactive respiratory TB	44 (1.46%)	94 (1.37%)	138 (1.40%)
(d) Active respiratory TB			
A (radiologically)	15 (0.50%)	15 (0.22%)	30 (0.30%)
B (bacteriologically)	8 (0.26%)	4 (0.06%)	12 (0.12%)
C (incomplete)	2 (0.07%)	2 (0.03%)	4 (0.04%)
(e) Non-respiratory TB	8 (0.26%)	8 (0.12%)	16 (0.16%)
(f) Result not yet known	20 (0.66%)	23 (0.34%)	43 (0.44%)

Appendix 22 (a)

Scheme for BCG Administration in Hong Kong 2015

<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 2015

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole East	2 787	2 521	90.5
	Queen Mary	3 839	3 667	95.5
Private Hospital	Canossa	737	733	99.5
	H.K. Adventist	478	459	96.0
	H.K. Sanatorium	3 073	3 053	99.3
	Matilda International	1 022	903	88.4
	St. Paul's	1 372	1 364	99.4
Total (HK Island)		13 308	12 700	95.4
Hospital under HA management	Kwong Wah	5 264	5 242	99.6
	Queen Elizabeth	6 130	6 156	100.4 *
	United Christian	4 295	4 240	98.7
Private Hospital	H.K. Baptist	2 508	2 478	98.8
	St. Teresa's	5 074	4 999	98.5
	Precious Blood	795	782	98.4
Total (Kowloon)		24 066	23 897	99.3
Hospital under HA management	Alice H.M.L. Nethersole	-	-	-
	Prince of Wales	6 857	6 889	100.5
	Princess Margaret	4 898	5 106	104.2 *
	Tuen Mun	5 513	5 496	99.7
Private Hospital	T.W. Adventist	1 174	1 166	99.3
	Shatin Int'l Medical Ctr Union	4 084	3 982	97.5
Total (NT Areas)		22 526	22 639	100.5
Mother & Child Health Centre		-	186	-
Grand Total		59 900	59 422	99.2

Note: * Including vaccinations of live births transferred from other maternity institutions and vaccinations of live births at end of 2011

Appendix 23

TB Beds in Public Services 2015

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	99
	Kowloon Hospital	109
	Ruttonjee Hospital	137
	Haven of Hope Hospital	129
	Wong Tai Sin Hospital	96
	Total (Hospital Authority)	570
Custody	Stanley Prison Hospital	20
Grand Total (2015)		590
Grand Total (2014)		609
Grand Total (2013)		611

Appendix 24

Annual Admissions to Hospitals from Government Chest Clinics 2004 - 2015

Year	Total Admissions
2004	4 986
2005	4 435
2006	4 571
2007	4 038
2008	3 170
2009	3 345
2010	3 330
2011	3 142
2012	2 940
2013	2 823
2014	2 799
2015	2 631

Admissions by Clinic	Year 2015
East Kowloon	255
Kowloon	119
Sai Ying Pun	276
Shaukeiwan	187
Shaukeiwan Pneumoconiosis	45
Shek Kip Mei	106
South Kwai Chung	400
Tai Po	36
Tung Chung	31
Wanchai	196
Yan Oi	372
Yaumatei	214
Yuen Chau Kok	112
Yung Fung Shee	134
Cheung Chau	7
NT Unit	141
Total	2 631

Appendix 25

HIV Surveillance Among TB Patients

Provider-initiated HIV Antibody Testing Among TB Patients in Government Chest Clinics (2005 - 2015)

Year	HIV positive		HIV negative		HIV results unknown or not done		Total	
	Number	%	Number	%	Number	%	Number	%
2005	35	0.7%	4 174	80.5%	973	18.8%	5 182	100%
2006	33	0.7%	4 478	90.4%	445	9.0%	4 956	100%
2007	41	0.9%	4 034	87.8%	517	11.3%	4 592	100%
2008	48	1.0%	4 073	88.8%	464	10.1%	4 585	100%
2009	40	0.9%	3 953	88.1%	496	11.0%	4 489	100%
2010	28	0.7%	3 805	89.5%	418	9.8%	4 251	100%
2011	33	0.8%	3 623	89.7%	381	9.4%	4 037	100%
2012	22	0.5%	3 685	90.7%	357	8.8%	4 064	100%
2013	24	0.6%	3 512	87.6%	473	11.8%	4 009	100%
2014	23	0.6%	3 322	87.5%	450	11.9%	3 795	100%
2015	24	0.7%	3 266	90.4%	322	8.9%	3 612	100%

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

<u>Period</u>	<u>Category</u>	<u>Sample</u>	<u>Number Tested</u> (No. +ve) (% +ve)	
1.12.90 - 31.1.91	Outpatient	Blood	1 548	
5.6.91 - 5.8.91	Inpatient	Blood	485	
1.4.92 – 30.6.92	Outpatient	Blood	1 469	(2) (0.14%)
1.4.93 – 30.6.93	Outpatient	Blood	1 173	
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	1 003	(2) (0.20%)
Oct 98 – Jan 99	Outpatient	Urine	833	(4) (0.48%)
Sep 99 – Dec 99	Outpatient	Urine	1 166	(8) (0.69%)
Sep 00 – Dec 00	Outpatient	Urine	1 018	(5) (0.49%)
Oct 01 – Dec 01	Outpatient	Urine	1 071	(4) (0.37%)
Oct 02 – Jan 03	Outpatient	Urine	1 000	(8) (0.80%)
Nov 03 – Feb 04	Outpatient	Urine	920	(6) (0.65%)
Oct 04 – Feb 05	Outpatient	Urine	1 056	(9) (0.85%)
Nov 05 – Jan 06	Outpatient	Urine	841	(7) (0.83%)
Nov 06 – Feb 07	Outpatient	Urine	841	(5) (0.59%)
Nov 07 – Feb 08	Outpatient	Urine	887	(11) (1.24%)

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

Appendix 26

Number of 'Confirmed' cases of TB in health care staff
Notified to Labour Department (1994 - 2015)

Year	Number
1994	1
1995	2
1996	2
1997	10
1998	39
1999	57
2000	39
2001	41
2002	29
2003	30
2004	42
2005	30
2006	18
2007	16
2008	25
2009	18
2010	11
2011	17
2012	15
2013	7
2014	7
2015	9

'Confirmed' Cases of TB in Health Care Staff Notified
to Labour Department (2015) by Age and Job Title

Age Group	Doctor	Nurse	Other Allied Health Professional	Other Supporting Staff	Total
20 – 24		2			
25 – 29			1		
30 – 34		1			
35 – 39					
40 – 44				2	
45 – 49					
50 – 54		2			
55 – 59					
60 – 64					
65 – 69	1				
70 – 74					
Total	1	5	1	2	9

Appendix 27
Cohorts of TB Patients

Treatment outcomes for TB cases registered in 2014 calendar year (number of patients)

	Number of cases registered in 2014 *		Cured or treatment completed		Treatment failed		Died		Lost to follow-up (defaulted)		Not evaluated **	
All new and relapse cases (bacteriologically confirmed or clinically diagnosed, pulmonary or extrapulmonary)	4 524	100.00%	2 928	64.72%	0	0.00%	824	18.21%	153	3.38%	619	13.68%
Previously treated patients (excluding relapse cases) ***	23	100.00%	9	39.13%	0	0.00%	6	26.09%	4	17.39%	4	17.39%
HIV-positive TB cases, all types	25	100.00%	16	64.00%	0	0.00%	4	16.00%	3	12.00%	2	8.00%

NB:

* Excludes cases moved to second-line treatment.

** "Not evaluated" includes "transferred out", "still on treatment" and any other registered cases where the treatment outcome has not been evaluated.

*** "Previously treated patients (excluding relapse cases)" include "treatment after default" and "failure of previous treatment" cases.

Treatment outcomes for TB cases started on second-line TB treatment in 2013 calendar year (number of patients)

	Number of cases started on second-line TB treatment in 2013		Cured or treatment completed		Treatment failed		Died		Lost to follow-up (defaulted)		Not evaluated ****	
All confirmed RR-TB/ MDR-TB cases	24	100.00%	15	62.50%	0	0.00%	2	8.33%	4	16.67%	3	12.50%
All confirmed XDR-TB cases *****	1	100.00%	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%

NB:

**** "Not evaluated" includes "transferred out", "still on treatment" and any other registered cases where the treatment outcome has not been evaluated.

***** Excluding all confirmed RR-TB/ MDR-TB cases which are not XDR-TB cases.

Part 2

PNEUMOCONIOSIS

Part 2 - Pneumoconiosis : Contents

Appendix No.

- 1 New Cases of Suspected Pneumoconiosis/Mesothelioma attending the Pneumoconiosis Clinic in Hong Kong 1956-2015
- 2 Age Distribution of Pneumoconiosis Patients confirmed in 2015
- 3 Occupation Distribution of Pneumoconiosis Patients confirmed in 2015
- 4 Pneumoconiosis Patients confirmed in 2015 by Duration of Exposure to Dust
- 5 Pneumoconiosis Patients confirmed in 2015 by Degree of Incapacity
- 6 Pneumoconiosis Patients confirmed in 2015 Classified by Radiological Appearance
- 7 History of Tuberculosis (TB) among Patients with Pneumoconiosis Confirmed in 2015
- 8 Pneumoconiosis Patients confirmed in 2015 by Other Particulars

Appendix 1

**New Cases of Suspected Pneumoconiosis/Mesothelioma attending
the Pneumoconiosis Clinic in Hong Kong 1956 - 2015**

Year	Number of New Cases Undergoing Assessment							
	Government Workers	Non-government Workers	Total	(b)	(e)	Cumulative Total	Cumulative Total Confirmed by the Board	
							R1	R2
1956	1	-	1			1		
1957	4	4	8			9		
1958	9	13	22			31		
1959	5	7	12			43		
1960	9	6	15			58		
1961	8	-	8			66		
1962	3	1	4			70		
1963	9	5	14			84		
1964	21	17	38			122		
1965	9	4	13			135		
1966	7	9	16			151		
1967	3	6	9			160		
1968	4	2	6			166		
1969	4	10	14			180		
1970	22	36	58			238		
1971	9	18	27			265		
1972	9	29	38			303		
1973	3	39	42			345		
1974	-	97	97			442		
1975	5	84	89			531		
1976	15	252	267			798		
1977	3	216	219			1 017		
1978	12	207	219			1 236		
1979	2	210	212			1 448		
1980	12	532 (a)	544			1 992	386 (a)	-
1981	8	608	616			2 608	1 332	162
1982	4	511	515			3 123	1 434	634
1983	2	292	294			3 417	1 469	945
1984	1	231	232			3 649	1 477	1 140
1985	1	179	180			3 829	1 479	1 322
1986	3	176	179	(3)		4 008	1 485	1 513
1987	4	166	170	(2)		4 178	1 485	1 679
1988	6	172	178	(4)		4 356	1 488	1 877
1989	-	156	156	(1)		4 512	1 488	2 023
1990	2	147	149	(1)		4 661	1 489	2 142
1991	-	171	171	(1)		4 832	1 489	2 151
1992	2	171	173	(3)		5 005	1 490	2 340
1993	2	247	249	(4)		5 254	1 492	2 492
1994	-	327	327	(7)		5 581	1 493	2 770
1995	9	245	254	(9)		5 835	1 494	3 000
1996	4	193	197	(9)		6 032	1 494	3 119
1997	4	154	158	(7)		6 190	1 494	3 242
1998	2	197	199	(5)		6 389	1 494	3 351
1999	-	291	291	(15)		6 680	1 494	3 505
2000	3	235	238	(11)		6 918	1 494	3 619
2001	6	230	236	(9)		7 154	1 494	3 751
2002	3	212	215	(9)		7 369	1 494	3 868
2003	3	142	145	(6)		7 514	1 494	3 948
2004	3	138	141	(4)		7 655	1 494	4 021
2005	-	134	134	(2)		7 789	1 494	4 091
2006	-	278	278	(7)		8 067	1 494	4 207
2007	-	120	120	(2)		8 187	1 494	4 276
2008	3	118	121	(5)	(2)	8 308	1 494	4 348
2009	-	167	167	(5)	(17)	8 475	1 494	4 456
2010	-	152	152	(1)	(12)	8 627	1 494	4 530
2011	-	130	130	(9)	(13)	8 757	1 494	4 615
2012	-	122	122	(3)	(12)	8 879	1 494	4 674
2013	-	156	156	(2)	(17)	9 035	1 494	4 744
2014	3	138	141	(2)	(14)	9 176	1 494	4 828
2015	4	153	157 (c)	(0)	(13)	9 333	1 494 (d)	4 897

- Notes :
- (a) The Pneumoconiosis Compensation Scheme was initiated in 1980, before that reporting was voluntary.
 - (b) The figures in this column denote the number of patients with asbestos-related lung disease confirmed by the Board.
 - (c) Up to the moment that this report is being compiled, 56 of these 157 assessment cases in 2015 had been confirmed to be pneumoconiosis by the Pneumoconiosis Medical Board. And the following tables (Appendix 2 to Appendix 8) are compiled based on these 56 cases.
 - (d) Under Revised Ordinance 1993 : 584 out of 1 494 pneumoconiotics had joined the pneumoconiosis ex-gratia scheme up to the year 2015. 70 living pneumoconiotics were each receiving a monthly ex-gratia payment of \$6,540.00 in 2015.
 - (e) The figures in this column denote the number of patients with Mesothelioma confirmed by the Board.
 - R1 Patients having pneumoconiosis with the date of diagnosis before 1 January 1981 who were alive as at 31 December 1980 are eligible for a government funded ex-gratia compensation scheme.
 - R2 Patients having pneumoconiosis with the date of diagnosis on or after 1 January 1981 are eligible for a levy funded compensation scheme under the Pneumoconiosis (Compensation) Ordinance (the Ordinance). The Ordinance was amended to cover for mesothelioma as well in 2008.

Appendix 2

Age Distribution of Pneumoconiosis Patients confirmed in 2015

Age	Number of Cases	%
25 - 29	-	-
30 - 34	-	-
35 - 39	-	-
40 - 44	-	-
45 - 49	-	-
50 - 54	3	5
55 - 59	20	36
60 - 64	16	29
65 - 69	2	4
70 - 74	8	14
75+	7	12
Total	56	100

Appendix 3

Occupation Distribution of Pneumoconiosis Patients confirmed in 2015

Type of Occupation	Number of Cases	%
Construction	45	80
Construction/Quarry	1	2
Others	10	18
Total	56	100

Appendix 4

Pneumoconiosis Patients confirmed in 2015 by Duration of Exposure to Dust

Duration	Number of Cases	%
<5 years	-	-
5 - 9	2	4
10 - 14	4	7
15 - 19	5	9
20 - 24	5	9
25 - 29	7	12
30+	33	59
Unknown	-	-
Total	56	100

Appendix 5

Pneumoconiosis Patients confirmed in 2015 by Degree of Incapacity

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	14
10	20
15	9
20	2
25	2
30	2
35	1
40	2
45	1
50	-
55	-
60	-
65	1
70	2
75	-
80	-
100	-
N. A.	-
Total	56

Appendix 6

Pneumoconiosis Patients confirmed in 2015 Classified by Radiological Appearance

Type of Opacity	Profusion			Sub-Total
	1	2	3	
<u>Small opacities</u>				
<u>Rounded</u>				
p (up to 1.5 mm diameter)	28	1	-	29
q (1.5 to 3.0 mm diameter)	15	6	-	21
r (3.0 to 10.0 mm diameter)	1	1	-	2
<u>Irregular</u>				
s (fine irregular or linear)	1	-	-	1
t (medium irregular)	2	-	-	2
u (coarse irregular)	-	-	-	-
Sub-total	47	8	-	55
<u>Combined opacities</u>	-	-	-	1
<u>N. A.</u>	-	-	-	-
Total				56

8 out of the 56 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)	4
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	4
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	-
Total	8

Appendix 7

History of Tuberculosis (TB) among Patients with Pneumoconiosis confirmed in 2015

History of TB		Number of Cases	%
History of TB	Bacteriological Positive	4	7
	Bacteriological Negative	3	5
	Not Available	10	18
No History of TB		39	70
Total		56	100

Appendix 8

Pneumoconiosis Patients confirmed in 2015 by Other Particulars

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	48	86
	Non-smoker	8	14
	Unknown	-	-
	Total	56	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	25	45
	No	31	55
	Unknown	-	-
	Total	56	100
General Condition	Good	51	91
	Fair	5	9
	Poor	-	-
	Died	-	-
	Total	56	100

Part 3

ANNEX

Part 3 – Annex : Contents

Annex No.

- 1(a) Treatment Outcomes up to 2 year of the 2012 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 (2011-2015)
- 2(c) TB Notification and Rates (All Cases) by Age & Sex (2011-2015)
- 3 Trend of Age-specific TB Notification Rates (1970-2015)
- 4(a)-4(d) TB-HIV Registry
- 5 HBsAg Seroprevalence Survey Among TB Patients Seen At Chest Clinics (2015)
- 6 Crude and Standardised Death Rate and Notification Rate 1981-2015

Annex 1 (a)

Treatment Outcomes up to 2 year of the 2012 Cohort of TB Patients

A total of 4 858 cases of TB were notified in the year 2012. Among them, 3 886 were ever seen at chest clinics (ES) while 972 were never seen at chest clinics (NS). They are categorised as follows:

Categories	ES	%	NS	%	ES/NS	%
(A) New pulmonary, smear positive	1 124	28.9	15	1.5	1 139	23.4
(B) New pulmonary, smear negative	1 555	40.0	34	3.5	1 589	32.7
(C) New pulmonary, smear not done/unknown	136	3.5	11	1.1	147	3.0
(D) New extra-pulmonary	647	16.6	5	0.5	652	13.4
(E) Relapse pulmonary, smear positive	113	2.9	17	1.7	130	2.7
(F) Pulmonary smear-positive retreatment after failure or default	9	0.2	0	0.0	9	0.2
(G) Other retreatment cases (not included in E and F) [i.e., including relapses (pulmonary, smear negative or unknown or not done; and extrapulmonary) and retreatment after failure or default (pulmonary, smear negative or unknown or not done; and extrapulmonary)]	302	7.8	890	91.6	1 192	24.5
Total	3 886	100.0	972	100.0	4 858	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)	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 2012

Discussion

Annex 1 (b) – Various age groups

Among the total of 4 858 patients, 134 (2.8%) were aged between 0 and 19, 1 051 (21.6%) between 20 and 39, 1 339 (27.6%) between 40 and 59, and 2 334 (48.0%) above 60. 63.5% were male. 40.3%, 21.1%, and 14.2% were never smokers, ex-smokers, and current smokers respectively. 72.5% were permanent local residents while 73.7% were of Chinese ethnicity. Most of them (72.3%) presented because of symptoms. 8.7% presented as incidental finding to pre-employment, pre-immigration, other body check or incidental to other illness, while 1.1% were diagnosed through contact tracing.

70.9% of patients had pulmonary TB, 17.7% had extra-pulmonary TB and 11.5% had both. TB pleura and TB lymph node accounted for 10.9% and 8.3% of the site of involvement respectively. Among pulmonary TB patients, 40.7% had pretreatment sputum smear +ve, 70.0% had pretreatment culture +ve and 21.4% had cavitory lesion on their chest radiographs.

With regard to co-morbidity factors for TB, 13.1% of TB patients had diabetes mellitus, 6.1% of patients had coexisting malignancy, 1.8% of patients were immuno-suppressed because of either steroid or cytotoxic therapy. HIV infection was reported for 0.4% of cases. 4.1% of all TB patients were reported to be hepatitis B carrier while 0.4% had chronic active hepatitis.

57.1% of patients were on 6 months short course chemotherapy for TB or other standard regimen based on HREZS. Treatment side effect was reported in 40.0% of patients. 12.5% were GI side effects, 13.1% were skin rash, 4.5% had transient rise in liver enzyme and 8.6% had frank hepatitis.

Among the 3 886 patients ever seen in chest clinic, 77.4% received >90% DOT in initial 2 months, while 67.7% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 19.4%, 75.0% and 85.8% respectively. Death rates at corresponding periods were 4.9%, 7.3% and 7.8% respectively.

Among the 972 patients never seen in chest clinic, 0.8% received >90% DOT in initial 2 months, while 0.8% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 0.7%, 25.0% and 25.0% respectively. Death rates at corresponding periods were 0.1%, 55.5% and 55.5% 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, 1 440 were pretreatment smear +ve, 2 801 were pretreatment culture +ve, and 22 were MDR-TB patients.

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

Overall sputum smear conversion rate at 2 months were 78.1% for smear +ve patients and 50.0% for MDRTB patients. Culture conversion rate at 2 months were 86.6% for culture +ve patients and 41.7% for MDR-TB patients.

Treatment success rates for smear +ve patients at 6 months, 12 months and 24 months were 15.2%, 66.7% and 77.8% respectively. Those for culture +ve patients were 17.7%, 64.0% and 73.3% respectively. Those for MDR-TB patients were 0.0%, 0.0% and 50.0% respectively. 0 out of 22 (0.0%) 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 18.7%, 73.3% and 85.9% respectively. The corresponding treatment success rates for retreatment pulmonary smear +ve patients were 2.0%, 41.9% and 47.5% respectively.

Annex 1 (e) – Treatment defaulters

There were 153 treatment defaulters at 24 months in the 2012 cohort. Around 5.2%, 26.8%, 30.7%, and 37.3% are in each of the age groups 0 to 19, 20 to 39, 40 to 59, and 60+ respectively. 20.3% worked full time, 2.0% part time, 20.9% retired, and 18.3% were unemployed. 83.0% were new case, 10.5% were relapse, 6.5% were retreatment after default cases, and 0.0% were retreatment after failure of previous treatment cases. 28.4% and 52.8% had pretreatment smear +ve and pretreatment culture +ve respectively, and 17.6% had cavitory lesions on the chest radiograph. 37.9% of patients lost contact after default and 13.1% 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	60	44.8	593	56.4	511	38.2	608	26.0	1 772	36.5
Male	74	55.2	458	43.6	828	61.8	1 726	74.0	3 086	63.5
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Marital status

Single	108	80.6	518	49.3	184	13.7	77	3.3	887	18.3
Married	0	0.0	351	33.4	826	61.7	1 474	63.2	2 651	54.6
Separated	0	0.0	3	0.3	14	1.0	15	0.6	32	0.7
Divorce	0	0.0	22	2.1	81	6.0	45	1.9	148	3.0
Widowed	0	0.0	3	0.3	13	1.0	73	3.1	89	1.8
Not recorded	26	19.4	154	14.7	221	16.5	650	27.8	1 051	21.6
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Smoking status

Never	94	70.1	623	59.3	551	41.2	691	29.6	1 959	40.3
Ex-smoker	4	3.0	89	8.5	252	18.8	680	29.1	1 025	21.1
Current smoker	4	3.0	151	14.4	293	21.9	242	10.4	690	14.2
Not recorded	32	23.9	188	17.9	243	18.1	721	30.9	1 184	24.4
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Institution-related

Yes	90	67.2	103	9.8	63	4.7	244	10.5	500	10.3
No	22	16.4	805	76.6	1 082	80.8	1 480	63.4	3 389	69.8
Not recorded	22	16.4	143	13.6	194	14.5	610	26.1	969	19.9
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Institution

Client	72	-	59	-	24	-	217	-	372	-
Staff	0	-	23	-	19	-	3	-	45	-

Institution type

Old age home	29	-	13	-	13	-	213	-	268	-
School	76	-	57	-	21	-	155	-	309	-
Hospital	0	-	8	-	11	-	2	-	21	-
Handicapped	0	-	4	-	12	-	2	-	18	-
Prison	0	-	11	-	13	-	2	-	26	-
Others	1	-	13	-	5	-	6	-	25	-

Living situation

Street-sleeper	0	0.0	1	0.1	1	0.1	3	0.1	5	0.1
Cubicle bed space	0	0.0	1	0.1	1	0.1	4	0.2	6	0.1
Institution	0	0.0	22	2.1	25	1.9	222	9.5	269	5.5
Work quarter	0	0.0	46	4.4	9	0.7	0	0.0	55	1.1
Alone (not above)	1	0.7	51	4.9	139	10.4	188	8.1	379	7.8
With friends	1	0.7	41	3.9	16	1.2	12	0.5	70	1.4
With family	108	80.6	733	69.7	940	70.2	1 272	54.5	3 053	62.8
Not recorded	24	17.9	156	14.8	208	15.5	633	27.1	1 021	21.0

Residential status

Permanent resident	101	75.4	659	62.7	1 070	79.9	1 693	72.5	3 523	72.5
Chinese immigrant	8	6.0	77	7.3	16	1.2	7	0.3	108	2.2
Imported worker	1	0.7	140	13.3	29	2.2	2	0.1	172	3.5
Tourist - 2 way permit Chinese	1	0.7	4	0.4	4	0.3	1	0.0	10	0.2
Other tourist	0	0.0	12	1.1	3	0.2	1	0.0	16	0.3
Vietnamese	0	0.0	1	0.1	2	0.1	0	0.0	3	0.1
Illegal immigrants	0	0.0	7	0.7	5	0.4	3	0.1	15	0.3
Not recorded	23	17.2	151	14.4	210	15.7	627	26.9	1 011	20.8
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	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	78	58.2	457	43.5	660	49.3	408	17.5	1 603	33.0
Mainland China	29	21.6	249	23.7	397	29.6	1 231	52.7	1 906	39.2
Others	4	3.0	210	20.0	89	6.6	73	3.1	376	7.7
Not recorded	23	17.2	135	12.8	193	14.4	622	26.6	973	20.0
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Ethnicity

Chinese	105	78.4	700	66.6	1 076	80.4	1 699	72.8	3 580	73.7
Other Asian	4	3.0	203	19.3	63	4.7	21	0.9	291	6.0
Caucasian	0	0.0	0	0.0	2	0.1	1	0.0	3	0.1
Others	0	0.0	3	0.3	2	0.1	0	0.0	5	0.1
Not recorded	25	18.7	145	13.8	196	14.6	613	26.3	979	20.2
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Previous BCG history

Yes	94	70.1	574	54.6	538	40.2	144	6.2	1 350	27.8
No	2	1.5	111	10.6	205	15.3	726	31.1	1 044	21.5
Unknown	38	28.4	366	34.8	596	44.5	1 464	62.7	2 464	50.7
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

BCG scar

Yes	83	-	551	-	482	-	139	-	1 255	-
No	22	-	316	-	619	-	1 462	-	2 419	-

Evidence of previous BCG

BCG history +ve or scar +ve	101	75.4	622	59.2	589	44.0	178	7.6	1 490	30.7
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Employment status

Full-time	6	4.5	595	56.6	623	46.5	129	5.5	1 353	27.9
Part-time	2	1.5	32	3.0	56	4.2	28	1.2	118	2.4
Retired	0	0.0	2	0.2	79	5.9	1 231	52.7	1 312	27.0
Unemployed	9	6.7	139	13.2	227	17.0	69	3.0	444	9.1
Housewife	0	0.0	79	7.5	148	11.1	260	11.1	487	10.0
Student	89	66.4	53	5.0	0	0.0	1	0.0	143	2.9
Not recorded	28	20.9	151	14.4	206	15.4	616	26.4	1 001	20.6
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Occupation

Blue collar	6	4.5	268	25.5	384	28.7	110	4.7	768	15.8
White collar	1	0.7	201	19.1	125	9.3	19	0.8	346	7.1
Medical	0	0.0	1	0.1	2	0.1	0	0.0	3	0.1
Nursing	0	0.0	7	0.7	4	0.3	1	0.0	12	0.2
Paramedical	0	0.0	3	0.3	5	0.4	0	0.0	8	0.2
Supporting health staff	0	0.0	1	0.1	4	0.3	1	0.0	6	0.1
Not applicable	58	43.3	234	22.3	393	29.4	1 457	62.4	2 142	44.1
Not recorded	69	51.5	336	32.0	422	31.5	746	32.0	1 573	32.4
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

First presentation

Private doctor	24	17.9	229	21.8	259	19.3	158	6.8	670	13.8
Private hospital	3	2.2	28	2.7	21	1.6	17	0.7	69	1.4
GOPC	5	3.7	33	3.1	60	4.5	78	3.3	176	3.6
Chest Clinic	14	10.4	66	6.3	97	7.2	146	6.3	323	6.6
Other DH Clinic	4	3.0	11	1.0	24	1.8	21	0.9	60	1.2
HA Clinic	6	4.5	35	3.3	47	3.5	66	2.8	154	3.2
HA Hospital	56	41.8	486	46.2	617	46.1	1 230	52.7	2 389	49.2
Mainland	0	0.0	21	2.0	26	1.9	19	0.8	66	1.4
Overseas	0	0.0	4	0.4	4	0.3	2	0.1	10	0.2
Not recorded	22	16.4	138	13.1	184	13.7	597	25.6	941	19.4
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	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	102	76.1	835	79.4	1 025	76.5	1 552	66.5	3 514	72.3
N	10	7.5	80	7.6	133	9.9	185	7.9	408	8.4
Not recorded	22	16.4	136	12.9	181	13.5	597	25.6	936	19.3
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Chest symptoms	75	-	602	-	764	-	1 197	-	2 638	-
Systemic symptoms	18	-	147	-	175	-	287	-	627	-
Other site-specific symptoms	21	-	206	-	226	-	220	-	673	-

Reason for presentation

Symptom	100	74.6	812	77.3	1 001	74.8	1 507	64.6	3 420	70.4
Contact screening	7	5.2	19	1.8	12	0.9	15	0.6	53	1.1
Pre-employment	3	2.2	22	2.1	16	1.2	6	0.3	47	1.0
Pre-emigration	1	0.7	0	0.0	1	0.1	1	0.0	3	0.1
Other body check	0	0.0	31	2.9	61	4.6	63	2.7	155	3.2
Incidental to other illness	0	0.0	23	2.2	57	4.3	137	5.9	217	4.5
Others	1	0.7	1	0.1	0	0.0	0	0.0	2	0.0
Not recorded	22	16.4	143	13.6	191	14.3	605	25.9	961	19.8
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Contact with TB patients

Yes	26	19.4	85	8.1	66	4.9	71	3.0	248	5.1
No	85	63.4	829	78.9	1 087	81.2	1 660	71.1	3 661	75.4
Not recorded	23	17.2	137	13.0	186	13.9	603	25.8	949	19.5
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Contact type

Household	21	-	61	-	44	-	48	-	174	-
Work	3	-	7	-	4	-	2	-	16	-
Casual	2	-	11	-	15	-	11	-	39	-

Time of contact

Within 2 year	11	-	36	-	24	-	18	-	89	-
Over 2 year	11	-	42	-	36	-	41	-	130	-

Previous chemoprophylaxis

Yes	0	-	2	-	2	-	9	-	13	-
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Reason for chemoprophylaxis

Contact	0	-	0	-	1	-	0	-	1	-
Silicosis	0	-	1	-	0	-	0	-	1	-
HIV	0	-	0	-	0	-	1	-	1	-
Old scar on CXR	0	-	0	-	0	-	2	-	2	-
Others	0	-	0	-	0	-	3	-	3	-

Disease Classification

Pulmonary TB only	83	61.9	673	64.0	945	70.6	1 742	74.6	3 443	70.9
Extrapulmonary TB only	30	22.4	224	21.3	244	18.2	360	15.4	858	17.7
Both	21	15.7	154	14.7	150	11.2	232	9.9	557	11.5
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	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	18	13.4	127	12.1	121	9.0	264	11.3	530	10.9
Lymph node	15	11.2	146	13.9	135	10.1	107	4.6	403	8.3
Meninges	0	0.0	9	0.9	7	0.5	5	0.2	21	0.4
Miliary	1	0.7	10	1.0	12	0.9	19	0.8	42	0.9
Abdomen	3	2.2	22	2.1	23	1.7	23	1.0	71	1.5
Bone and joint (not spine)	1	0.7	5	0.5	11	0.8	17	0.7	34	0.7
Spine	0	0.0	8	0.8	14	1.0	14	0.6	36	0.7
Genito-urinary tract	1	0.7	9	0.9	12	0.9	28	1.2	50	1.0
Naso/oro-pharynx	2	1.5	8	0.8	10	0.7	5	0.2	25	0.5
Larynx	0	0.0	2	0.2	3	0.2	5	0.2	10	0.2
Pericardium	0	0.0	0	0.0	2	0.1	6	0.3	8	0.2
Skin	3	2.2	7	0.7	11	0.8	9	0.4	30	0.6
Other sites	3	2.2	15	1.4	15	1.1	18	0.8	51	1.0

Case category

New case	134	100.0	999	95.1	1 222	91.3	2 041	87.4	4 396	90.5
Relapse	0	0.0	45	4.3	108	8.1	282	12.1	435	9.0
Treatment after default	0	0.0	6	0.6	9	0.7	10	0.4	25	0.5
Failure of previous treatment	0	0.0	1	0.1	0	0.0	1	0.0	2	0.0
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	40	38.5	360	43.5	461	42.1	766	38.8	1 627	40.7
Pretreatment culture +ve	72	69.2	561	67.8	702	64.1	1 466	74.3	2 801	70.0
Extent = 1	43	41.3	387	46.8	487	44.5	766	38.8	1 683	42.1
Extent=1 & cavity=N	38	36.5	315	38.1	398	36.3	676	34.2	1 427	35.7
Extent=1 & cavity=Y	5	4.8	72	8.7	89	8.1	90	4.6	256	6.4
Extent = 2	31	29.8	181	21.9	263	24.0	409	20.7	884	22.1
Extent=2 & cavity=N	14	13.5	97	11.7	136	12.4	276	14.0	523	13.1
Extent=2 & cavity=Y	17	16.3	84	10.2	127	11.6	133	6.7	361	9.0
Extent=3	10	9.6	90	10.9	126	11.5	204	10.3	430	10.8
Extent=3 & cavity=N	1	1.0	34	4.1	48	4.4	113	5.7	196	4.9
Extent=3 & cavity=Y	9	8.7	56	6.8	78	7.1	91	4.6	234	5.9
Extent=not specified	20	19.2	169	20.4	219	20.0	595	30.1	1 003	25.1
Extent=ns & cavity=N	19	18.3	168	20.3	219	20.0	594	30.1	1 000	25.0
Extent=ns & cavity=Y	1	1.0	1	0.1	0	0.0	1	0.1	3	0.1
Cavity=N	72	69.2	614	74.2	801	73.2	1 659	84.0	3 146	78.7
Cavity=Y	32	30.8	213	25.8	294	26.8	315	16.0	854	21.4

Mode of diagnosis

Bacteriological	85	63.4	734	69.8	923	68.9	1 784	76.4	3 526	72.6
Histological	11	8.2	119	11.3	174	13.0	181	7.8	485	10.0
Clinical-radiological	20	14.9	123	11.7	133	9.9	160	6.9	436	9.0
Clinical only	1	0.7	4	0.4	3	0.2	3	0.1	11	0.2
Not recorded	17	12.7	71	6.8	106	7.9	206	8.8	400	8.2
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Histology

Typical (with caseation)	1	-	38	-	46	-	46	-	131	-
Granulomatous inflammation	12	-	112	-	149	-	166	-	439	-
Other	2	-	23	-	32	-	28	-	85	-

Ziehl-Neelsen staining

Positive	3	-	70	-	100	-	124	-	297	-
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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	1	0.7	56	5.3	348	26.0	867	37.1	1 272	26.2
Diabetes mellitus	0	0.0	11	1.0	179	13.4	446	19.1	636	13.1
Lung cancer	0	0.0	1	0.1	14	1.0	60	2.6	75	1.5
Other malignancies	0	0.0	10	1.0	59	4.4	154	6.6	223	4.6
On cytotoxic drugs	1	0.7	2	0.2	18	1.3	13	0.6	34	0.7
On steroid	0	0.0	6	0.6	25	1.9	24	1.0	55	1.1
Chronic renal failure	0	0.0	0	0.0	16	1.2	37	1.6	53	1.1
HIV	0	0.0	7	0.7	5	0.4	8	0.3	20	0.4
Silicosis	0	0.0	0	0.0	5	0.4	10	0.4	15	0.3
Alcoholism	0	0.0	4	0.4	25	1.9	14	0.6	43	0.9
Drug abuser	0	0.0	9	0.9	28	2.1	11	0.5	48	1.0
Gastrectomy	0	0.0	1	0.1	4	0.3	9	0.4	14	0.3
General debilitation	0	0.0	1	0.1	4	0.3	225	9.6	230	4.7
Others	0	0.0	3	0.3	7	0.5	11	0.5	21	0.4

Factors affecting treatment choices

Yes	5	3.7	71	6.8	195	14.6	633	27.1	904	18.6
Hepatitis-B carrier	2	1.5	35	3.3	79	5.9	84	3.6	200	4.1
Chronic active hepatitis	0	0.0	1	0.1	11	0.8	8	0.3	20	0.4
Impaired renal function	0	0.0	1	0.1	9	0.7	83	3.6	93	1.9
Chronic renal failure	0	0.0	2	0.2	7	0.5	14	0.6	23	0.5
Impaired vision	2	1.5	21	2.0	57	4.3	369	15.8	449	9.2
Impaired hearing	0	0.0	2	0.2	5	0.4	32	1.4	39	0.8
Known drug reaction	0	0.0	0	0.0	2	0.1	5	0.2	7	0.1
Known drug resistance	0	0.0	1	0.1	2	0.1	3	0.1	6	0.1
Gout	0	0.0	1	0.1	10	0.7	68	2.9	79	1.6
Idiopathic thromb. purpura	0	0.0	0	0.0	0	0.0	3	0.1	3	0.1
Others	1	0.7	9	0.9	26	1.9	63	2.7	99	2.0

6-month short course treatment

Yes	35	26.1	168	16.0	174	13.0	141	6.0	518	10.7
2HRZE+4HR	30	22.4	147	14.0	147	11.0	112	4.8	436	9.0
2HRZS+4HR	0	0.0	1	0.1	1	0.1	0	0.0	2	0.0

Other standard regimen based on HRZES

Yes	63	47.0	562	53.5	695	51.9	937	40.1	2 257	46.5
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Treatment side effects

Yes	19	14.2	346	32.9	585	43.7	991	42.5	1 941	40.0
GI upset	6	4.5	107	10.2	163	12.2	330	14.1	606	12.5
Skin rash	5	3.7	96	9.1	224	16.7	311	13.3	636	13.1
Visual	4	3.0	22	2.1	45	3.4	104	4.5	175	3.6
Transient rise liver enzyme	1	0.7	38	3.6	71	5.3	109	4.7	219	4.5
Hepatitis	1	0.7	75	7.1	126	9.4	218	9.3	420	8.6
Vestibular	0	0.0	7	0.7	13	1.0	7	0.3	27	0.6
Arthropathy	0	0.0	13	1.2	30	2.2	67	2.9	110	2.3
Fever-chill	1	0.7	17	1.6	18	1.3	18	0.8	54	1.1
Dizziness	2	1.5	23	2.2	16	1.2	48	2.1	89	1.8
Thrombocytopenia	0	0.0	3	0.3	8	0.6	23	1.0	34	0.7
Leucopenia	0	0.0	3	0.3	3	0.2	6	0.3	12	0.2
Flush face	0	0.0	5	0.5	7	0.5	3	0.1	15	0.3
Others	2	1.5	35	3.3	78	5.8	97	4.2	212	4.4

Consequence of side effects

Rx temporarily withheld	10	7.5	204	19.4	375	28.0	671	28.7	1 260	25.9
Desensitiation or drug trial	5	3.7	126	12.0	273	20.4	456	19.5	860	17.7
Change in dosage/frequency	2	1.5	47	4.5	78	5.8	144	6.2	271	5.6
Change of drugs	5	3.7	133	12.7	255	19.0	548	23.5	941	19.4

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

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

Treatment supervision

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

>90%	87	64.9	644	61.3	858	64.1	1 427	61.1	3 016	62.1
>75%	16	11.9	108	10.3	130	9.7	71	3.0	325	6.7
>50%	3	2.2	55	5.2	60	4.5	54	2.3	172	3.5
>25%	4	3.0	25	2.4	24	1.8	36	1.5	89	1.8
≤25%	3	2.2	18	1.7	26	1.9	20	0.9	67	1.4
Not recorded	21	15.7	201	19.1	241	18.0	726	31.1	1 189	24.5

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

>90%	70	52.2	532	50.6	752	56.2	1 284	55.0	2 638	54.3
>75%	23	17.2	132	12.6	145	10.8	93	4.0	393	8.1
>50%	7	5.2	74	7.0	76	5.7	60	2.6	217	4.5
>25%	7	5.2	37	3.5	45	3.4	38	1.6	127	2.6
≤25%	4	3.0	40	3.8	40	3.0	25	1.1	109	2.2
Not recorded	23	17.2	236	22.5	281	21.0	834	35.7	1 374	28.3

Under supervision by relatives (initial 2 months)

>90%	1	0.7	2	0.2	4	0.3	4	0.2	11	0.2
>75%	0	0.0	5	0.5	3	0.2	4	0.2	12	0.2
>50%	1	0.7	2	0.2	1	0.1	4	0.2	8	0.2
>25%	0	0.0	6	0.6	6	0.4	6	0.3	18	0.4
≤25%	68	50.7	601	57.2	762	56.9	1 148	49.2	2 579	53.1
Not recorded	64	47.8	435	41.4	563	42.0	1 168	50.0	2 230	45.9

Under supervision by relatives (subsequent 4 months)

>90%	1	0.7	4	0.4	6	0.4	8	0.3	19	0.4
>75%	0	0.0	5	0.5	6	0.4	3	0.1	14	0.3
>50%	2	1.5	7	0.7	2	0.1	11	0.5	22	0.5
>25%	2	1.5	6	0.6	9	0.7	5	0.2	22	0.5
≤25%	63	47.0	569	54.1	732	54.7	1 063	45.5	2 427	50.0
Not recorded	66	49.3	460	43.8	584	43.6	1 244	53.3	2 354	48.5

Supplied for unsupervised treatment (initial 2 months)

<5%	67	50.0	553	52.6	742	55.4	1 215	52.1	2 577	53.0
<10%	6	4.5	55	5.2	51	3.8	33	1.4	145	3.0
<15%	6	4.5	36	3.4	39	2.9	23	1.0	104	2.1
<25%	8	6.0	51	4.9	50	3.7	31	1.3	140	2.9
<50%	2	1.5	38	3.6	32	2.4	32	1.4	104	2.1
≥50%	4	3.0	17	1.6	36	2.7	29	1.2	86	1.8
Not recorded	41	30.6	301	28.6	389	29.1	971	41.6	1 702	35.0

Supplied for unsupervised treatment (subsequent 4 months)

<5%	63	47.0	469	44.6	659	49.2	1 081	46.3	2 272	46.8
<10%	6	4.5	82	7.8	63	4.7	66	2.8	217	4.5
<15%	6	4.5	36	3.4	51	3.8	29	1.2	122	2.5
<25%	8	6.0	68	6.5	51	3.8	37	1.6	164	3.4
<50%	5	3.7	46	4.4	59	4.4	35	1.5	145	3.0
≥50%	4	3.0	33	3.1	57	4.3	39	1.7	133	2.7
Not recorded	42	31.3	317	30.2	399	29.8	1 047	44.9	1 805	37.2

Defaulted (initial 2 months)

<5%	103	76.9	713	67.8	945	70.6	1 424	61.0	3 185	65.6
<10%	3	2.2	38	3.6	24	1.8	29	1.2	94	1.9
<15%	0	0.0	14	1.3	17	1.3	7	0.3	38	0.8
<25%	2	1.5	14	1.3	23	1.7	19	0.8	58	1.2
<50%	1	0.7	11	1.0	16	1.2	9	0.4	37	0.8
≥50%	1	0.7	11	1.0	7	0.5	14	0.6	33	0.7
Not recorded	24	17.9	250	23.8	307	22.9	832	35.6	1 413	29.1

Defaulted (subsequent 4 months)

<5%	92	68.7	654	62.2	899	67.1	1 323	56.7	2 968	61.1
<10%	3	2.2	35	3.3	33	2.5	19	0.8	90	1.9
<15%	2	1.5	22	2.1	19	1.4	12	0.5	55	1.1
<25%	7	5.2	32	3.0	23	1.7	17	0.7	79	1.6
<50%	3	2.2	16	1.5	17	1.3	5	0.2	41	0.8
≥50%	2	1.5	20	1.9	19	1.4	12	0.5	53	1.1
Not recorded	25	18.7	272	25.9	329	24.6	946	40.5	1 572	32.4

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	41	30.6	229	21.8	231	17.3	259	11.1	760	15.6
Still on treatment	69	51.5	569	54.1	835	62.4	1 196	51.2	2 669	54.9
Died	0	0.0	3	0.3	18	1.3	171	7.3	192	4.0
Transferred	2	1.5	80	7.6	29	2.2	29	1.2	140	2.9
Defaulted	1	0.7	27	2.6	28	2.1	41	1.8	97	2.0
Failure	0	0.0	0	0.0	1	0.1	0	0.0	1	0.0
Revised dx/ others	0	0.0	1	0.1	3	0.2	7	0.3	11	0.2
Not recorded	21	15.7	142	13.5	194	14.5	631	27.0	988	20.3
Total	134	100.0	1 051	100.0	1 339	100.0	2 334	100.0	4 858	100.0

Among those cured/ treatment completed

Bacteriological conversion	29	70.7	162	70.7	148	64.1	185	71.4	524	68.9
Radiological improvement	39	95.1	198	86.5	194	84.0	207	79.9	638	83.9
Other clinical improvement	6	14.6	45	19.7	36	15.6	43	16.6	130	17.1
No evidence of response	0	0.0	7	3.1	8	3.5	8	3.1	23	3.0

Among those still on treatment

Reasons for still on treatment:

Retreatment case	0	0.0	22	3.9	59	7.1	132	11.0	213	8.0
Extrapulmonary disease	34	49.3	262	46.0	276	33.1	276	23.1	848	31.8
Extensive disease	19	27.5	131	23.0	178	21.3	211	17.6	539	20.2
Interrupted treatment	7	10.1	132	23.2	217	26.0	357	29.8	713	26.7
Drug resistance	7	10.1	30	5.3	47	5.6	60	5.0	144	5.4
Poor response	5	7.2	40	7.0	85	10.2	85	7.1	215	8.1
Others	11	15.9	92	16.2	260	31.1	507	42.4	870	32.6

Among those died - causes of death:

TB-related cause	0	-	2	-	4	22.2	20	11.7	26	13.5
Not TB-related	0	-	1	-	12	66.7	119	69.6	132	68.8
Unknown	0	-	0	-	2	11.1	32	18.7	34	17.7

Among those transferred, new sources of care:

GP	0	0.0	2	2.5	4	13.8	5	17.2	11	7.9
Chest Clinic	0	0.0	1	1.3	0	0.0	0	0.0	1	0.7
Hospital	0	0.0	6	7.5	5	17.2	8	27.6	19	13.6
Outside HK	2	100.0	69	86.3	19	65.5	13	44.8	103	73.6
Not recorded	0	0.0	2	2.5	1	3.4	3	10.3	6	4.3

Among those defaulted

Never found	0	0.0	21	77.8	18	64.3	22	53.7	61	62.9
Retreated after default	0	0.0	2	7.4	0	0.0	4	9.8	6	6.2
Treatment stopped by doctor	1	100.0	3	11.1	5	17.9	11	26.8	20	20.6
Not recorded	0	0.0	1	3.7	5	17.9	4	9.8	10	10.3

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	116	86.6	790	75.2	985	73.6	1267	54.3	3158	65.0
Still on treatment	7	5.2	94	8.9	159	11.9	218	9.3	478	9.8
Died	1	0.7	13	1.2	83	6.2	726	31.1	823	16.9
Transferred	2	1.5	110	10.5	33	2.5	22	0.9	167	3.4
Defaulted	7	5.2	35	3.3	55	4.1	52	2.2	149	3.1
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	1	0.7	8	0.8	21	1.6	46	2.0	76	1.6
Not recorded	0	0.0	1	0.1	3	0.2	3	0.1	7	0.1
Total	134	100.0	1051	100.0	1339	100.0	2334	100.0	4858	100.0

Among those cured/ treatment completed

Bacteriological conversion	61	52.6	434	54.9	546	55.4	815	64.3	1856	58.8
Radiological improvement	86	74.1	553	70.0	681	69.1	924	72.9	2244	71.1
Other clinical improvement	37	31.9	259	32.8	288	29.2	286	22.6	870	27.5
No evidence of response	0	0.0	8	1.0	16	1.6	27	2.1	51	1.6
After treatment completed:										
No relapse	81	69.8	591	74.8	762	77.4	994	78.5	2428	76.9
Loss to follow up	10	8.6	55	7.0	45	4.6	30	2.4	140	4.4
Died	0	0.0	1	0.1	3	0.3	25	2.0	29	0.9
<i>TB-related</i>	0		0		0		1		1	
<i>Not TB-related</i>	0		1		3		20		24	
<i>Unknown</i>	0		0		0		4		4	
Relapse	0	0.0	1	0.1	1	0.1	1	0.1	3	0.1
<i>Bacteriological</i>	0		0		1		1		2	
<i>Histological</i>	0		1		0		0		1	
<i>Clinico-radiological</i>	0		0		0		0		0	
Not recorded	25	21.6	142	18.0	174	17.7	217	17.1	558	17.7

Among those still on treatment

Reasons for still on treatment:

Retreatment case	0	0.0	1	1.1	2	1.3	12	5.5	15	3.1
Extrapulmonary disease	1	14.3	29	30.9	36	22.6	46	21.1	112	23.4
Extensive disease	2	28.6	20	21.3	26	16.4	36	16.5	84	17.6
Interrupted treatment	1	14.3	40	42.6	80	50.3	134	61.5	255	53.3
Drug resistance	3	42.9	14	14.9	28	17.6	27	12.4	72	15.1
Poor response	1	14.3	13	13.8	21	13.2	20	9.2	55	11.5
Others	1	14.3	20	21.3	49	30.8	88	40.4	158	33.1

Among those died - causes of death:

TB-related cause	0	-	2	15.4	5	6.0	22	3.0	29	3.5
Not TB-related	0	-	1	7.7	17	20.5	165	22.7	183	22.2
Unknown	0	-	1	7.7	3	3.6	52	7.2	56	6.8

Among those transferred, new sources of care:

GP	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chest Clinic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hospital	0	0.0	1	0.9	2	6.1	1	4.5	4	2.4
Outside HK	2	100.0	63	57.3	11	33.3	7	31.8	83	49.7
Not recorded	0	0.0	46	41.8	20	60.6	14	63.6	80	47.9

Among those defaulted

Never found	4	57.1	20	57.1	15	27.3	16	30.8	55	36.9
Retreated after default	0	0.0	0	0.0	3	5.5	1	1.9	4	2.7
Treatment stopped by doctor	0	0.0	3	8.6	11	20.0	12	23.1	26	17.4
Not recorded	3	42.9	12	34.3	26	47.3	23	44.2	64	43.0

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

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

Outcome at 24 months

Cured/ treatment completed	122	91.0	870	82.8	1133	84.6	1453	62.3	3578	73.7
Still on treatment	0	0.0	4	0.4	4	0.3	2	0.1	10	0.2
Died	1	0.7	13	1.2	86	6.4	741	31.7	841	17.3
Transferred	2	1.5	112	10.7	34	2.5	18	0.8	166	3.4
Defaulted	8	6.0	41	3.9	47	3.5	57	2.4	153	3.1
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	3	0.2	2	0.1	5	0.1
Not recorded	1	0.7	11	1.0	32	2.4	61	2.6	105	2.2
Total	134	100.0	1051	100.0	1339	100.0	2334	100.0	4858	100.0

Among those cured/ treatment completed

Bacteriological conversion	67	54.9	510	58.6	683	60.3	990	68.1	2250	62.9
Radiological improvement	92	75.4	643	73.9	837	73.9	1124	77.4	2696	75.3
Other clinical improvement	44	36.1	351	40.3	404	35.7	417	28.7	1216	34.0
No evidence of response	0	0.0	5	0.6	16	1.4	18	1.2	39	1.1
After treatment completed:										
No relapse	80	65.6	582	66.9	865	76.3	1109	76.3	2636	73.7
Loss to follow up	21	17.2	162	18.6	113	10.0	105	7.2	401	11.2
Died	0	0.0	1	0.1	11	1.0	84	5.8	96	2.7
<i>TB-related</i>	0		0		0		1		1	
<i>Not TB-related</i>	0		1		11		66		78	
<i>Unknown</i>	0		0		0		15		15	
Relapse	2	1.6	4	0.5	9	0.8	3	0.2	18	0.5
<i>Bacteriological</i>	0		3		5		1		9	
<i>Histological</i>	1		1		2		0		4	
<i>Clinico-radiological</i>	0		0		2		1		3	
<i>Clinical only</i>	1		0		0		1		2	
Not recorded	19	15.6	121	13.9	135	11.9	152	10.5	427	11.9

Among those still on treatment

Reasons for still on treatment:

Retreatment case	0	-	0	-	0	-	1	-	1	10.0
Extrapulmonary disease	0	-	2	-	0	-	0	-	2	20.0
Extensive disease	0	-	0	-	0	-	0	-	0	0.0
Interrupted treatment	0	-	1	-	0	-	1	-	2	20.0
Drug resistance	0	-	1	-	2	-	0	-	3	30.0
Poor response	0	-	3	-	2	-	0	-	5	50.0
Others	0	-	0	-	0	-	1	-	1	10.0

Among those died - causes of death:

TB-related cause	0	-	2	15.4	7	8.1	22	3.0	31	3.7
Not TB-related	0	-	1	7.7	19	22.1	176	23.8	196	23.3
Unknown	0	-	1	7.7	3	3.5	57	7.7	61	7.3

Among those transferred, new sources of care:

GP	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Chest Clinic	0	0.0	1	0.9	0	0.0	0	0.0	1	0.6
Hospital	0	0.0	2	1.8	3	8.8	3	16.7	8	4.8
Outside HK	2	100.0	67	59.8	16	47.1	4	22.2	89	53.6
Not recorded	0	0.0	42	37.5	15	44.1	11	61.1	68	41.0

Among those defaulted

Never found	3	37.5	22	53.7	17	36.2	16	28.1	58	37.9
Retreated after default	2	25.0	5	12.2	6	12.8	7	12.3	20	13.1
Treatment stopped by doctor	0	0.0	3	7.3	5	10.6	8	14.0	16	10.5
Not recorded	3	37.5	11	26.8	19	40.4	26	45.6	59	38.6

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	52	45.6	510	55.7	436	38.0	435	25.4	1 433	36.9
Male	62	54.4	405	44.3	710	62.0	1 276	74.6	2 453	63.1
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	100.0

First presentation

Private doctor	24	21.1	228	24.9	259	22.6	156	9.1	667	17.2
Private hospital	3	2.6	28	3.1	21	1.8	16	0.9	68	1.7
GOPC	5	4.4	33	3.6	59	5.1	78	4.6	175	4.5
Chest Clinic	14	12.3	62	6.8	89	7.8	144	8.4	309	8.0
Other DH Clinic	4	3.5	7	0.8	20	1.7	21	1.2	52	1.3
HA Clinic	6	5.3	35	3.8	46	4.0	66	3.9	153	3.9
HA Hospital	56	49.1	484	52.9	612	53.4	1 195	69.8	2 347	60.4
Mainland	0	0.0	20	2.2	23	2.0	19	1.1	62	1.6
Overseas	0	0.0	4	0.4	4	0.3	2	0.1	10	0.3
Not recorded	2	1.8	14	1.5	13	1.1	14	0.8	43	1.1
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	100.0

Symptomatic on presentation

Y	102	89.5	827	90.4	1 006	87.8	1 514	88.5	3 449	88.8
N	10	8.8	76	8.3	129	11.3	182	10.6	397	10.2
Not recorded	2	1.8	12	1.3	11	1.0	15	0.9	40	1.0
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	100.0

Chest symptoms	75	-	596	-	746	-	1 169	-	2 586	-
Systemic symptoms	18	-	145	-	173	-	284	-	620	-
Other site-specific symptoms	21	-	206	-	226	-	218	-	671	-

Reason for presentation

Symptom	100	87.7	805	88.0	984	85.9	1 470	85.9	3 359	86.4
Contact screening	7	6.1	18	2.0	12	1.0	14	0.8	51	1.3
Pre-employment	3	2.6	22	2.4	16	1.4	6	0.4	47	1.2
Pre-emigration	1	0.9	0	0.0	1	0.1	1	0.1	3	0.1
Other body check	0	0.0	28	3.1	57	5.0	63	3.7	148	3.8
Incidental to other illness	0	0.0	23	2.5	56	4.9	134	7.8	213	5.5
Others	1	0.9	1	0.1	0	0.0	0	0.0	2	0.1
Not recorded	2	1.8	18	2.0	20	1.7	23	1.3	63	1.6
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	100.0

Disease Classification

Pulmonary TB only	70	61.4	564	61.6	781	68.2	1 225	71.6	2 640	67.9
Extrapulmonary TB only	23	20.2	200	21.9	217	18.9	261	15.3	701	18.0
Both	21	18.4	151	16.5	148	12.9	225	13.2	545	14.0
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	100.0

6-month short course treatment

Yes	35	30.7	166	18.1	172	15.0	140	8.2	513	13.2
2HRZE+4HR	30	26.3	145	15.8	145	12.7	112	6.5	432	11.1
2HRZS+4HR	0	0.0	1	0.1	1	0.1	0	0.0	2	0.1

Other standard regimen based on HRZES

Yes	63	55.3	561	61.3	687	59.9	936	54.7	2 247	57.8
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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%	87	76.3	642	70.2	854	74.5	1 425	83.3	3 008	77.4
>75%	16	14.0	108	11.8	130	11.3	71	4.1	325	8.4
>50%	3	2.6	55	6.0	60	5.2	54	3.2	172	4.4
>25%	4	3.5	25	2.7	23	2.0	36	2.1	88	2.3
≤25%	3	2.6	18	2.0	26	2.3	20	1.2	67	1.7
Not recorded	1	0.9	67	7.3	53	4.6	105	6.1	226	5.8

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

>90%	70	61.4	530	57.9	748	65.3	1 282	74.9	2 630	67.7
>75%	23	20.2	132	14.4	145	12.7	93	5.4	393	10.1
>50%	7	6.1	74	8.1	76	6.6	60	3.5	217	5.6
>25%	7	6.1	37	4.0	44	3.8	38	2.2	126	3.2
≤25%	4	3.5	40	4.4	40	3.5	25	1.5	109	2.8
Not recorded	3	2.6	102	11.1	93	8.1	213	12.4	411	10.6

Under supervision by relatives (initial 2 months)

>90%	1	0.9	2	0.2	4	0.3	4	0.2	11	0.3
>75%	0	0.0	5	0.5	3	0.3	4	0.2	12	0.3
>50%	1	0.9	2	0.2	1	0.1	4	0.2	8	0.2
>25%	0	0.0	6	0.7	6	0.5	6	0.4	18	0.5
≤25%	68	59.6	601	65.7	761	66.4	1 148	67.1	2 578	66.3
Not recorded	44	38.6	299	32.7	371	32.4	545	31.9	1 259	32.4

Under supervision by relatives (subsequent 4 months)

>90%	1	0.9	4	0.4	6	0.5	8	0.5	19	0.5
>75%	0	0.0	5	0.5	6	0.5	3	0.2	14	0.4
>50%	2	1.8	7	0.8	2	0.2	11	0.6	22	0.6
>25%	2	1.8	6	0.7	9	0.8	5	0.3	22	0.6
≤25%	63	55.3	569	62.2	732	63.9	1 063	62.1	2 427	62.5
Not recorded	46	40.4	324	35.4	391	34.1	621	36.3	1 382	35.6

Supplied for unsupervised treatment (initial 2 months)

<5%	67	58.8	553	60.4	742	64.7	1 215	71.0	2 577	66.3
<10%	6	5.3	55	6.0	51	4.5	33	1.9	145	3.7
<15%	6	5.3	36	3.9	39	3.4	23	1.3	104	2.7
<25%	8	7.0	51	5.6	49	4.3	31	1.8	139	3.6
<50%	2	1.8	38	4.2	32	2.8	32	1.9	104	2.7
≥50%	4	3.5	17	1.9	36	3.1	29	1.7	86	2.2
Not recorded	21	18.4	165	18.0	197	17.2	348	20.3	731	18.8

Supplied for unsupervised treatment (subsequent 4 months)

<5%	63	55.3	469	51.3	659	57.5	1 081	63.2	2 272	58.5
<10%	6	5.3	82	9.0	63	5.5	66	3.9	217	5.6
<15%	6	5.3	36	3.9	51	4.5	29	1.7	122	3.1
<25%	8	7.0	68	7.4	51	4.5	37	2.2	164	4.2
<50%	5	4.4	46	5.0	59	5.1	35	2.0	145	3.7
≥50%	4	3.5	33	3.6	56	4.9	39	2.3	132	3.4
Not recorded	22	19.3	181	19.8	207	18.1	424	24.8	834	21.5

Defaulted (initial 2 months)

<5%	103	90.4	713	77.9	944	82.4	1 424	83.2	3 184	81.9
<10%	3	2.6	38	4.2	24	2.1	29	1.7	94	2.4
<15%	0	0.0	14	1.5	17	1.5	7	0.4	38	1.0
<25%	2	1.8	14	1.5	23	2.0	19	1.1	58	1.5
<50%	1	0.9	11	1.2	16	1.4	9	0.5	37	1.0
≥50%	1	0.9	11	1.2	7	0.6	14	0.8	33	0.8
Not recorded	4	3.5	114	12.5	115	10.0	209	12.2	442	11.4

Defaulted (subsequent 4 months)

<5%	92	80.7	654	71.5	899	78.4	1 323	77.3	2 968	76.4
<10%	3	2.6	35	3.8	33	2.9	19	1.1	90	2.3
<15%	2	1.8	22	2.4	19	1.7	12	0.7	55	1.4
<25%	7	6.1	32	3.5	23	2.0	17	1.0	79	2.0
<50%	3	2.6	16	1.7	17	1.5	5	0.3	41	1.1
≥50%	2	1.8	20	2.2	19	1.7	12	0.7	53	1.4
Not recorded	5	4.4	136	14.9	136	11.9	323	18.9	600	15.4

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	41	36.0	226	24.7	228	19.9	258	15.1	753	19.4
Still on treatment	69	60.5	569	62.2	828	72.3	1 194	69.8	2 660	68.5
Died	0	0.0	3	0.3	18	1.6	170	9.9	191	4.9
Transferred	2	1.8	80	8.7	28	2.4	29	1.7	139	3.6
Defaulted	1	0.9	27	3.0	28	2.4	41	2.4	97	2.5
Failure	0	0.0	0	0.0	1	0.1	0	0.0	1	0.0
Revised dx/ others	0	0.0	1	0.1	2	0.2	7	0.4	10	0.3
Not recorded	1	0.9	9	1.0	13	1.1	12	0.7	35	0.9
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	100.0

Outcome at 12 months

Cured/ treatment completed	99	86.8	717	78.4	905	79.0	1 194	69.8	2 915	75.0
Still on treatment	7	6.1	93	10.2	151	13.2	216	12.6	467	12.0
Died	1	0.9	5	0.5	30	2.6	248	14.5	284	7.3
Transferred	2	1.8	71	7.8	18	1.6	13	0.8	104	2.7
Defaulted	5	4.4	27	3.0	38	3.3	34	2.0	104	2.7
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	2	0.2	3	0.3	6	0.4	11	0.3
Not recorded	0	0.0	0	0.0	1	0.1	0	0.0	1	0.0
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	100.0

Outcome at 24 months

Cured/ treatment completed	105	92.1	797	87.1	1 053	91.9	1 380	80.7	3 335	85.8
Still on treatment	0	0.0	4	0.4	4	0.3	2	0.1	10	0.3
Died	1	0.9	5	0.5	33	2.9	263	15.4	302	7.8
Transferred	2	1.8	73	8.0	18	1.6	9	0.5	102	2.6
Defaulted	6	5.3	33	3.6	31	2.7	39	2.3	109	2.8
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	2	0.2	2	0.1	4	0.1
Not recorded	0	0.0	3	0.3	5	0.4	16	0.9	24	0.6
Total	114	100.0	915	100.0	1 146	100.0	1 711	100.0	3 886	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	8	40.0	83	61.0	75	38.9	173	27.8	339	34.9
Male	12	60.0	53	39.0	118	61.1	450	72.2	633	65.1
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

First presentation

Private doctor	0	0.0	1	0.7	0	0.0	2	0.3	3	0.3
Private hospital	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
GOPC	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
Chest Clinic	0	0.0	4	2.9	8	4.1	2	0.3	14	1.4
Other DH Clinic	0	0.0	4	2.9	4	2.1	0	0.0	8	0.8
HA Clinic	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
HA Hospital	0	0.0	2	1.5	5	2.6	35	5.6	42	4.3
Mainland	0	0.0	1	0.7	3	1.6	0	0.0	4	0.4
Overseas	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	20	100.0	124	91.2	171	88.6	583	93.6	898	92.4
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

Symptomatic on presentation

Y	0	0.0	8	5.9	19	9.8	38	6.1	65	6.7
N	0	0.0	4	2.9	4	2.1	3	0.5	11	1.1
Not recorded	20	100.0	124	91.2	170	88.1	582	93.4	896	92.2
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

Chest symptoms	0	-	6	-	18	-	28	-	52	-
Systemic symptoms	0	-	2	-	2	-	3	-	7	-
Other site-specific symptoms	0	-	0	-	0	-	2	-	2	-

Reason for presentation

Symptom	0	0.0	7	5.1	17	8.8	37	5.9	61	6.3
Contact screening	0	0.0	1	0.7	0	0.0	1	0.2	2	0.2
Pre-employment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pre-emigration	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other body check	0	0.0	3	2.2	4	2.1	0	0.0	7	0.7
Incidental to other illness	0	0.0	0	0.0	1	0.5	3	0.5	4	0.4
Others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	20	100.0	125	91.9	171	88.6	582	93.4	898	92.4
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

Disease Classification

Pulmonary TB only	13	65.0	109	80.1	164	85.0	517	83.0	803	82.6
Extrapulmonary TB only	7	35.0	24	17.6	27	14.0	99	15.9	157	16.2
Both	0	0.0	3	2.2	2	1.0	7	1.1	12	1.2
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

6-month short course treatment

Yes	0	0.0	2	1.5	2	1.0	1	0.2	5	0.5
2HRZE+4HR	0	0.0	2	1.5	2	1.0	0	0.0	4	0.4
2HRZS+4HR	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Other standard regimen based on HRZES

Yes	0	0.0	1	0.7	8	4.1	1	0.2	10	1.0
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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%	0	0.0	2	1.5	4	2.1	2	0.3	8	0.8
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
≤25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	20	100.0	134	98.5	188	97.4	621	99.7	963	99.1

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

>90%	0	0.0	2	1.5	4	2.1	2	0.3	8	0.8
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
≤25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	20	100.0	134	98.5	188	97.4	621	99.7	963	99.1

Under supervision by relatives (initial 2 months)

>90%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≤25%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
Not recorded	20	100.0	136	100.0	192	99.5	623	100.0	971	99.9

Under supervision by relatives (subsequent 4 months)

>90%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>75%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
>25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≤25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

Supplied for unsupervised treatment (initial 2 months)

<5%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<10%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<15%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<25%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
<50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≥50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	20	100.0	136	100.0	192	99.5	623	100.0	971	99.9

Supplied for unsupervised treatment (subsequent 4 months)

<5%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<10%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<15%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<25%	0	0.0	0	0.0	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	1	0.5	0	0.0	1	0.1
Not recorded	20	100.0	136	100.0	192	99.5	623	100.0	971	99.9

Defaulted (initial 2 months)

<5%	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
<10%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<15%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<25%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
≥50%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	20	100.0	136	100.0	192	99.5	623	100.0	971	99.9

Defaulted (subsequent 4 months)

<5%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<10%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<15%	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<25%	0	0.0	0	0.0	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	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

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

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

Outcome at 6 months

Cured/ treatment completed	0	0.0	3	2.2	3	1.6	1	0.2	7	0.7
Still on treatment	0	0.0	0	0.0	7	3.6	2	0.3	9	0.9
Died	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Transferred	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
Defaulted	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
Not recorded	20	100.0	133	97.8	181	93.8	619	99.4	953	98.0
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

Outcome at 12 months

Cured/ treatment completed	17	85.0	73	53.7	80	41.5	73	11.7	243	25.0
Still on treatment	0	0.0	1	0.7	8	4.1	2	0.3	11	1.1
Died	0	0.0	8	5.9	53	27.5	478	76.7	539	55.5
Transferred	0	0.0	39	28.7	15	7.8	9	1.4	63	6.5
Defaulted	2	10.0	8	5.9	17	8.8	18	2.9	45	4.6
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	1	5.0	6	4.4	18	9.3	40	6.4	65	6.7
Not recorded	0	0.0	1	0.7	2	1.0	3	0.5	6	0.6
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	100.0

Outcome at 24 months

Cured/ treatment completed	17	85.0	73	53.7	80	41.5	73	11.7	243	25.0
Still on treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Died	0	0.0	8	5.9	53	27.5	478	76.7	539	55.5
Transferred	0	0.0	39	28.7	16	8.3	9	1.4	64	6.6
Defaulted	2	10.0	8	5.9	16	8.3	18	2.9	44	4.5
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	1	0.5	0	0.0	1	0.1
Not recorded	1	5.0	8	5.9	27	14.0	45	7.2	81	8.3
Total	20	100.0	136	100.0	193	100.0	623	100.0	972	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	1 254	87.1	2 291	81.8	19	86.4
No	186	12.9	510	18.2	3	13.6
Total	1 440	100.0	2 801	100.0	22	100.0

Age group

0 to 19	37	2.6	72	2.6	2	9.1
Female	20		34		2	
Male	17		38		0	
20 to 39	329	22.8	561	20.0	6	27.3
Female	170		286		2	
Male	159		275		4	
40 to 59	412	28.6	702	25.1	9	40.9
Female	103		203		1	
Male	309		499		8	
60+	662	46.0	1 466	52.3	5	22.7
Female	126		293		1	
Male	536		1 173		4	
Total	1 440	100.0	2 801	100.0	22	100.0
Female	419	29.1	816	29.1	6	27.3
Male	1 021	70.9	1 985	70.9	16	72.7

Marital status

Single	295	20.5	514	18.4	4	18.2
Married	836	58.1	1 560	55.7	13	59.1
Separated	14	1.0	19	0.7	1	4.5
Divorce	58	4.0	97	3.5	1	4.5
Widowed	25	1.7	50	1.8	0	0.0
Not recorded	212	14.7	561	20.0	3	13.6
Total	1 440	100.0	2 801	100.0	22	100.0

Smoking status

Never	531	36.9	999	35.7	7	31.8
Ex-smoker	379	26.3	685	24.5	4	18.2
Current smoker	288	20.0	488	17.4	7	31.8
Not recorded	242	16.8	629	22.5	4	18.2
Total	1 440	100.0	2 801	100.0	22	100.0

Institution-related

Yes	124	8.6	275	9.8	2	9.1
No	1 137	79.0	2 021	72.2	17	77.3
Not recorded	179	12.4	505	18.0	3	13.6
Total	1 440	100.0	2 801	100.0	22	100.0

Institution

Client	100	-	211	-	1	-
Staff	4	-	15	-	0	-

Institution type

Old age home	62	-	144	-	0	-
School	68	-	183	-	1	-
Hospital	2	-	8	-	0	-
Handicapped	2	-	6	-	0	-
Prison	8	-	19	-	0	-
Others	5	-	12	-	1	-

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	1	0.1	3	0.1	0	0.0
Cubicle bed space	4	0.3	5	0.2	0	0.0
Institution	62	4.3	143	5.1	0	0.0
Work quarter	23	1.6	29	1.0	1	4.5
Alone (not above)	148	10.3	252	9.0	3	13.6
With friends	23	1.6	38	1.4	0	0.0
With family	975	67.7	1 794	64.0	14	63.6
Not recorded	204	14.2	537	19.2	4	18.2

Residential status

Permanent resident	1 152	80.0	2 120	75.7	12	54.5
Chinese immigrant	27	1.9	51	1.8	4	18.2
Imported worker	49	3.4	70	2.5	2	9.1
Tourist - 2 way permit Chinese	6	0.4	7	0.2	0	0.0
Other tourist	4	0.3	8	0.3	0	0.0
Vietnamese	0	0.0	2	0.1	0	0.0
Illegal immigrants	6	0.4	10	0.4	1	4.5
Not recorded	196	13.6	533	19.0	3	13.6
Total	1 440	100.0	2 801	100.0	22	100.0

Place of birth

Hong Kong	518	36.0	925	33.0	7	31.8
Mainland China	619	43.0	1 186	42.3	9	40.9
Others	116	8.1	178	6.4	3	13.6
Not recorded	187	13.0	512	18.3	3	13.6
Total	1 440	100.0	2 801	100.0	22	100.0

Ethnicity

Chinese	1 163	80.8	2 149	76.7	16	72.7
Other Asian	80	5.6	125	4.5	3	13.6
Caucasian	0	0.0	1	0.0	0	0.0
Others	4	0.3	4	0.1	0	0.0
Not recorded	193	13.4	522	18.6	3	13.6
Total	1 440	100.0	2 801	100.0	22	100.0

Previous BCG history

Yes	439	30.5	757	27.0	5	22.7
No	331	23.0	638	22.8	4	18.2
Unknown	670	46.5	1 406	50.2	13	59.1
Total	1 440	100.0	2 801	100.0	22	100.0

BCG scar

Yes	414	-	733	-	7	-
No	780	-	1 447	-	11	-

Employment status

Full-time	441	30.6	748	26.7	9	40.9
Part-time	35	2.4	65	2.3	0	0.0
Retired	433	30.1	879	31.4	1	4.5
Unemployed	164	11.4	269	9.6	6	27.3
Housewife	120	8.3	224	8.0	1	4.5
Student	47	3.3	87	3.1	1	4.5
Not recorded	200	13.9	529	18.9	4	18.2
Total	1 440	100.0	2 801	100.0	22	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	285	19.8	458	16.4	1	4.5
White collar	103	7.2	181	6.5	0	0.0
Medical	1	0.1	1	0.0	0	0.0
Nursing	1	0.1	5	0.2	0	0.0
Paramedical	1	0.1	4	0.1	0	0.0
Supporting health staff	2	0.1	2	0.1	0	0.0
Not applicable	698	48.5	1 346	48.1	2	9.1
Not recorded	349	24.2	804	28.7	4	18.2
Total	1 440	100.0	2 801	100.0	7	31.8

First presentation

Private doctor	226	15.7	373	13.3	3	13.6
Private hospital	18	1.3	28	1.0	0	0.0
GOPC	84	5.8	133	4.7	2	9.1
Chest Clinic	77	5.3	198	7.1	0	0.0
Other DH Clinic	12	0.8	33	1.2	0	0.0
HA Clinic	28	1.9	58	2.1	1	4.5
HA Hospital	792	55.0	1 447	51.7	11	50.0
Mainland	16	1.1	25	0.9	0	0.0
Overseas	4	0.3	6	0.2	1	4.5
Not recorded	183	12.7	500	17.9	4	18.2
Total	1 440	100.0	2 801	100.0	22	100.0

Symptomatic on presentation

Y	1 204	83.6	2 110	75.3	16	72.7
N	55	3.8	196	7.0	2	9.1
Not recorded	181	12.6	495	17.7	4	18.2
Total	1 440	100.0	2 801	100.0	22	100.0

Chest symptoms	1 104	-	1 900	-	15	-
Systemic symptoms	256	-	409	-	3	-
Other site-specific symptoms	53	-	105	-	1	-

Reason for presentation

Symptom	1 178	81.8	2 058	73.5	16	72.7
Contact screening	8	0.6	25	0.9	0	0.0
Pre-employment	4	0.3	20	0.7	1	4.5
Pre-emigration	0	0.0	2	0.1	0	0.0
Other body check	17	1.2	64	2.3	0	0.0
Incidental to other illness	42	2.9	124	4.4	1	4.5
Others	0	0.0	0	0.0	0	0.0
Not recorded	191	13.3	508	18.1	4	18.2
Total	1 440	100.0	2 801	100.0	22	100.0

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

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

Contact with TB patients

Yes	65	4.5	133	4.7	1	4.5
No	1 190	82.6	2 165	77.3	17	77.3
Not recorded	185	12.8	503	18.0	4	18.2
Total	1 440	100.0	2 801	100.0	22	100.0

Contact type

Household	47	-	90	-	0	-
Work	4	-	10	-	0	-
Casual	9	-	23	-	1	-

Time of contact

Within 2 year	19	-	45	-	1	-
Over 2 year	36	-	72	-	0	-

Previous chemoprophylaxis

Yes	3	-	7	-	0	-
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Reason for chemoprophylaxis

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

Disease Classification

Pulmonary TB only	1 333	92.6	2 535	90.5	20	90.9
Both pulm & extrapulm	107	7.4	266	9.5	2	9.1
Total	1 440	100.0	2 801	100.0	22	100.0

Case category

New case	1 301	90.3	2 514	89.8	15	68.2
Relapse	130	9.0	267	9.5	7	31.8
Treatment after default	9	0.6	19	0.7	0	0.0
Failure of previous treatment	0	0.0	1	0.0	0	0.0
Total	1 440	100.0	2 801	100.0	22	100.0

Disease characteristics (pulmonary cases)

Extent = 1	454	31.5	1 135	40.5	9	40.9
Extent=1 & cavity=N	321	22.3	924	33.0	5	22.7
Extent=1 & cavity=Y	133	9.2	211	7.5	4	18.2
Extent = 2	499	34.7	739	26.4	8	36.4
Extent=2 & cavity=N	240	16.7	420	15.0	3	13.6
Extent=2 & cavity=Y	259	18.0	319	11.4	5	22.7
Extent=3	275	19.1	357	12.7	1	4.5
Extent=3 & cavity=N	95	6.6	146	5.2	0	0.0
Extent=3 & cavity=Y	180	12.5	211	7.5	1	4.5
Extent=not specified	212	14.7	570	20.3	4	18.2
Extent=ns & cavity=N	211	14.7	569	20.3	4	18.2
Extent=ns & cavity=Y	1	0.1	1	0.0	0	0.0
Cavity=N	867	60.2	2 059	73.5	12	54.5
Cavity=Y	573	39.8	742	26.5	10	45.5

6-month short course treatment

Yes	154	10.7	340	12.1	0	0.0
2HRZE+4HR	125	8.7	282	10.1	0	0.0
2HRZS+4HR	0	0.0	1	0.0	0	0.0

Other standard regimen based on HRZES

Yes	757	52.6	1 300	46.4	2	9.1
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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%	995	69.1	1 805	64.4	13	59.1
>75%	96	6.7	187	6.7	1	4.5
>50%	61	4.2	103	3.7	1	4.5
>25%	27	1.9	50	1.8	1	4.5
≤25%	23	1.6	39	1.4	0	0.0
Not recorded	238	16.5	617	22.0	6	27.3

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

>90%	848	58.9	1 574	56.2	12	54.5
>75%	139	9.7	238	8.5	2	9.1
>50%	70	4.9	128	4.6	0	0.0
>25%	46	3.2	75	2.7	0	0.0
≤25%	38	2.6	67	2.4	0	0.0
Not recorded	299	20.8	719	25.7	8	36.4

Under supervision by relatives (initial 2 months)

>90%	2	0.1	4	0.1	0	0.0
>75%	4	0.3	7	0.2	0	0.0
>50%	0	0.0	1	0.0	0	0.0
>25%	6	0.4	10	0.4	1	4.5
≤25%	827	57.4	1 532	54.7	12	54.5
Not recorded	601	41.7	1 247	44.5	9	40.9

Under supervision by relatives (subsequent 4 months)

>90%	5	0.3	9	0.3	0	0.0
>75%	7	0.5	8	0.3	0	0.0
>50%	5	0.3	11	0.4	0	0.0
>25%	4	0.3	11	0.4	0	0.0
≤25%	770	53.5	1 443	51.5	13	59.1
Not recorded	649	45.1	1 319	47.1	9	40.9

Supplied for unsupervised treatment (initial 2 months)

<5%	848	58.9	1 525	54.4	12	54.5
<10%	54	3.8	86	3.1	1	4.5
<15%	28	1.9	64	2.3	0	0.0
<25%	36	2.5	80	2.9	0	0.0
<50%	40	2.8	64	2.3	0	0.0
≥50%	30	2.1	51	1.8	0	0.0
Not recorded	404	28.1	931	33.2	9	40.9

Supplied for unsupervised treatment (subsequent 4 months)

<5%	736	51.1	1 346	48.1	10	45.5
<10%	64	4.4	127	4.5	0	0.0
<15%	42	2.9	72	2.6	1	4.5
<25%	64	4.4	107	3.8	2	9.1
<50%	51	3.5	85	3.0	0	0.0
≥50%	50	3.5	84	3.0	0	0.0
Not recorded	433	30.1	980	35.0	9	40.9

Defaulted (initial 2 months)

<5%	1 042	72.4	1 893	67.6	13	59.1
<10%	30	2.1	51	1.8	0	0.0
<15%	15	1.0	24	0.9	0	0.0
<25%	17	1.2	30	1.1	1	4.5
<50%	14	1.0	22	0.8	2	9.1
≥50%	9	0.6	20	0.7	0	0.0
Not recorded	313	21.7	761	27.2	6	27.3

Defaulted (subsequent 4 months)

<5%	964	66.9	1 758	62.8	12	54.5
<10%	37	2.6	55	2.0	0	0.0
<15%	20	1.4	36	1.3	1	4.5
<25%	33	2.3	53	1.9	1	4.5
<50%	15	1.0	27	1.0	0	0.0
≥50%	13	0.9	32	1.1	1	4.5
Not recorded	358	24.9	840	30.0	7	31.8

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	219	15.2	496	17.7	0	0.0
Still on treatment	909	63.1	1 548	55.3	16	72.7
Died	65	4.5	121	4.3	1	4.5
Transferred	40	2.8	70	2.5	2	9.1
Defaulted	20	1.4	47	1.7	0	0.0
Failure	0	0.0	0	0.0	0	0.0
Revised dx/ others	1	0.1	2	0.1	0	0.0
Not recorded	186	12.9	517	18.5	3	13.6
Total	1 440	100.0	2 801	100.0	22	100.0

Outcome at 12 months

Cured/ treatment completed	961	66.7	1 792	64.0	0	0.0
Still on treatment	179	12.4	297	10.6	14	63.6
Died	206	14.3	495	17.7	5	22.7
Transferred	49	3.4	81	2.9	2	9.1
Defaulted	39	2.7	84	3.0	1	4.5
Failure	0	0.0	0	0.0	0	0.0
Revised dx/ others	5	0.3	50	1.8	0	0.0
Not recorded	1	0.1	2	0.1	0	0.0
Total	1 440	100.0	2 801	100.0	22	100.0

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

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

Outcome at 24 months

Cured/ treatment completed	1121	77.8	2053	73.3	11	50.0
Still on treatment	4	0.3	5	0.2	1	4.5
Died	209	14.5	507	18.1	6	27.3
Transferred	48	3.3	78	2.8	3	13.6
Defaulted	44	3.1	92	3.3	0	0.0
Failure	0	0.0	0	0.0	0	0.0
Revised dx/ others	1	0.1	1	0.0	0	0.0
Not recorded	13	0.9	65	2.3	1	4.5
Total	1440	100.0	2801	100.0	22	100.0

Among those cured/ treatment completed

Bacteriological conversion	1070	95.5	1937	94.3	10	90.9
Radiological improvement	1041	92.9	1845	89.9	10	90.9
Other clinical improvement	250	22.3	480	23.4	2	18.2
No evidence of response	0	0.0	2	0.1	0	0.0

After treatment completed:

No relapse	859	76.6	1569	76.4	11	100.0
Loss to follow up	127	11.3	233	11.3	0	0.0
Died	36	3.2	66	3.2	0	0.0
<i>TB-related</i>	1		1		0	
<i>Not TB-related</i>	29		57		0	
<i>Unknown</i>	4		6		0	
Relapse	6	0.5	9	0.4	0	0.0
<i>Bacteriological</i>	3		5		0	
<i>Histological</i>	0		0		0	
<i>Clinico-radiological</i>	3		3		0	
<i>Clinical only</i>	0		1			
Not recorded	93	8.3	176	8.6	0	0.0

Among those still on treatment

Reasons for still on treatment:

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

Among those died - causes of death:

TB-related cause	13	6.2	22	4.3	2	-
Not TB-related	58	27.8	120	23.7	0	-
Unknown	22	10.5	37	7.3	2	-

Among those transferred, new sources of care:

GP	0	0.0	0	0.0	0	0.0
Chest Clinic	1	2.1	1	1.3	0	0.0
Hospital	1	2.1	3	3.8	0	0.0
Outside HK	34	70.8	46	59.0	2	66.7
Not recorded	12	25.0	28	35.9	1	33.3

Among those defaulted

Never found	19	43.2	36	39.1	0	#DIV/0!
Retreated after default	6	13.6	13	14.1	0	#DIV/0!
Treatment stopped by doctor	2	4.5	7	7.6	0	#DIV/0!
Not recorded	17	38.6	36	39.1	0	#DIV/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	116	9.4	224	10.0	19	86.4
Streptomycin - S	1112	90.6	2024	90.0	3	13.6

Isoniazid - R	66	5.4	120	5.3	22	100.0
Isoniazid - S	1161	94.6	2127	94.7	0	0.0

Rifampicin - R	16	1.3	27	1.2	22	100.0
Rifampicin - S	1212	98.7	2221	98.8	0	0.0

Ethambutol - R	7	0.6	17	0.8	4	18.2
Ethambutol - S	1220	99.4	2230	99.2	18	81.8

Pyrazinamide - R	7	20.0	9	12.3	4	26.7
Pyrazinamide - S	28	80.0	64	87.7	11	73.3

Ofloxacin - R	3	6.8	5	5.4	4	19.0
Ofloxacin - S	41	93.2	87	94.6	17	81.0

Smear conversion rates

1. Smear at 2 month = N (a)	701				6	
2. Smear at 2 month = P (b)	196				6	
2. Sm 2m (P); Sm 3m (N) (c)	88					2
2. Sm 2m (P); Sm 3m (P) (d)	78					3
2. Sm 2m (P); Sm 3m (U) (e)	30					1
3. Smear at 2 month = U (f)	543				10	
3. Sm 2m (U); Sm 3m (N) (g)	165					2
3. Sm 2m (U); Sm 3m (P) (h)	20					0
3. Sm 2m (U); Sm 3m (U) (i)	358					8

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

78.1		-		50.0	
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Overall percentage of smear conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]

90.7		-		76.9	
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Culture conversion rates

1. Culture at 2 month = N (a)			1242		5	
2. Culture at 2 month = P (b)			192		7	
2. Cu 2m (P); Cu 3m (N) (c)			103			4
2. Cu 2m (P); Cu 3m (P) (d)			34			2
2. Cu 2m (P); Cu 3m (U) (e)			55			1
3. Culture at 2 month = U (f)			1367		10	
3. Cu 2m (U); Cu 3m (N) (g)			366			1
3. Cu 2m (U); Cu 3m (P) (h)			12			0
3. Cu 2m (U); Cu 3m (U) (i)			989			9

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

-		86.6		41.7	
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Overall percentage of culture conversion at 3m = [(a)+(c)+(g)]/ [(a)+(c)+(d)+(g)+(h)]

-		97.4		83.3	
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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	1 124	98.7	130	43.2
No	15	1.3	171	56.8
Total	1 139	100.0	301	100.0

Age group

0 to 19	36	3.2	1	0.3
Female	19		1	
Male	17		0	
20 to 39	288	25.3	41	13.6
Female	149		21	
Male	139		20	
40 to 59	343	30.1	69	22.9
Female	79		24	
Male	264		45	
60+	472	41.4	190	63.1
Female	97		29	
Male	375		161	
Total	1 139	100.0	301	100.0
Female	344	30.2	75	24.9
Male	795	69.8	226	75.1

Disease Classification

Pulmonary TB only	1 043	91.6	290	96.3
Both pulmon and extrapulm	96	8.4	11	3.7
Total	1 139	100.0	301	100.0

6-month short course treatment

Yes	152	13.3	2	0.7
2HRZE+4HR	124	10.9	1	0.3
2HRZS+4HR	0	0.0	0	0.0

Other standard regimen based on HRZES

Yes	678	59.5	79	26.2
-----	-----	------	----	------

Outcome at 6 months

Cured/ treatment completed	213	18.7	6	2.0
Still on treatment	797	70.0	112	37.2
Died	56	4.9	9	3.0
Transferred	40	3.5	0	0.0
Defaulted	17	1.5	3	1.0
Failure	0	0.0	0	0.0
Revised dx/ others	1	0.1	0	0.0
Not recorded	15	1.3	171	56.8
Total	1 139	100.0	301	100.0

Outcome at 12 months

Cured/ treatment completed	835	73.3	126	41.9
Still on treatment	151	13.3	28	9.3
Died	85	7.5	121	40.2
Transferred	38	3.3	11	3.7
Defaulted	27	2.4	12	4.0
Failure	0	0.0	0	0.0
Revised dx/ others	2	0.2	3	1.0
Not recorded	1	0.1	0	0.0
Total	1 139	100.0	301	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	978	85.9	143	47.5
Still on treatment	2	0.2	2	0.7
Died	87	7.6	122	40.5
Transferred	37	3.2	11	3.7
Defaulted	29	2.5	15	5.0
Failure	0	0.0	0	0.0
Revised dx/ others	1	0.1	0	0.0
Not recorded	5	0.4	8	2.7
Total	1 139	100.0	301	100.0

Among those cured/ treatment completed

Bacteriological conversion	960	98.2	110	76.9
Radiological improvement	936	95.7	105	73.4
Other clinical improvement	228	23.3	22	15.4
No evidence of response	0	0.0	0	0.0

After treatment completed:

No relapse	770	78.7	89	62.2
Loss to follow up	115	11.8	12	8.4
Died	32	3.3	4	2.8
<i>TB-related</i>	1		0	
<i>Not TB-related</i>	26		3	
<i>Unknown</i>	3		1	
Relapse	6	0.6	0	0.0
<i>Bacteriological</i>	3		0	
<i>Histological</i>	0		0	
<i>Clinico-radiological</i>	3		0	
<i>Clinical only</i>	0		0	
Not recorded	55	5.6	38	26.6

Among those still on treatment

Reasons for still on treatment:

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

Among those died - causes of death:

TB-related cause	11	12.6	2	1.6
Not TB-related	50	57.5	8	6.6
Unknown	19	21.8	3	2.5

Among those transferred, new sources of care:

GP	0	0.0	0	0.0
Chest Clinic	1	2.7	0	0.0
Hospital	1	2.7	0	0.0
Outside HK	34	91.9	0	0.0
Not recorded	1	2.7	11	100.0

Among those defaulted

Never found	17	58.6	2	13.3
Retreated after default	4	13.8	2	13.3
Treatment stopped by doctor	2	6.9	0	0.0
Not recorded	6	20.7	11	73.3

Annex 1 (e) - Treatment defaulters - 01

Ever seen at chest clinics	N	
Yes	109	71.2
No	44	28.8
Total	153	100.0

Age group

0 to 19	8	5.2
Female	3	
Male	5	
20 to 39	41	26.8
Female	18	
Male	23	
40 to 59	47	30.7
Female	13	
Male	34	
60+	57	37.3
Female	18	
Male	39	
Total	153	100.0
Female	52	34.0
Male	101	66.0

Marital status

Single	34	22.2
Married	62	40.5
Separated	4	2.6
Divorce	7	4.6
Widowed	4	2.6
Not recorded	42	27.5
Total	153	100.0

Smoking status

Never	48	31.4
Ex-smoker	26	17.0
Current smoker	39	25.5
Not recorded	40	26.1
Total	153	100.0

Institution-related

Yes	5	3.3
No	106	69.3
Not recorded	42	27.5
Total	153	100.0

Institution

Client	3	-
Staff	0	-

Institution type

Old age home	4	-
School	3	-
Hospital	0	-
Handicapped	0	-
Prison	1	-
Others	2	-

Annex 1 (e) - Treatment defaulters - 02

Living situation	N	
Street-sleeper	0	0.0
Cubicle bed space	1	0.7
Institution	1	0.7
Work quarter	4	2.6
Alone (not above)	19	12.4
With friends	2	1.3
With family	81	52.9
Not recorded	45	29.4

Residential status

Permanent resident	93	60.8
Chinese immigrant	6	3.9
Imported worker	7	4.6
Tourist - 2 way permit Chinese	0	0.0
Other tourist	1	0.7
Vietnamese	0	0.0
Illegal immigrants	1	0.7
Not recorded	45	29.4
Total	153	100.0

Place of birth

Hong Kong	40	26.1
Mainland China	54	35.3
Others	20	13.1
Not recorded	39	25.5
Total	153	100.0

Ethnicity

Chinese	98	64.1
Other Asian	15	9.8
Caucasian	0	0.0
Others	2	1.3
Not recorded	38	24.8
Total	153	100.0

Employment status

Full-time	31	20.3
Part-time	3	2.0
Retired	32	20.9
Unemployed	28	18.3
Housewife	15	9.8
Student	3	2.0
Not recorded	41	26.8
Total	153	100.0

Occupation

Blue collar	19	12.4
White collar	6	3.9
Medical	0	0.0
Nursing	0	0.0
Paramedical	1	0.7
Supporting health staff	0	0.0
Not applicable	70	45.8
Not recorded	57	37.3
Total	153	100.0

Annex 1 (e) - Treatment defaulters - 03

First presentation	N	
Private doctor	7	4.6
Private hospital	1	0.7
GOPC	1	0.7
Chest Clinic	16	10.5
Other DH Clinic	4	2.6
HA Clinic	5	3.3
HA Hospital	74	48.4
Mainland	4	2.6
Overseas	0	0.0
Not recorded	41	26.8
Total	153	100.0

Symptomatic on presentation

Y	97	63.4
N	18	11.8
Not recorded	38	24.8
Total	153	100.0

Chest symptoms	76	-
Systemic symptoms	11	-
Other site-specific symptoms	17	-

Reason for presentation

Symptom	92	60.1
Contact screening	3	2.0
Pre-employment	0	0.0
Pre-emigration	0	0.0
Other body check	8	5.2
Incidental to other illness	10	6.5
Others	0	0.0
Not recorded	40	26.1
Total	153	100.0

Contact with TB patients

Yes	10	6.5
No	104	68.0
Not recorded	39	25.5
Total	153	100.0

Contact type

Household	9	-
Work	0	-
Casual	0	-

Time of contact

Within 2 year	2	-
Over 2 year	7	-

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	161	105.2
Extrapulmonary TB only	32	20.9
Both	15	9.8
Total	208	135.9

Case category

New case	127	83.0
Relapse	16	10.5
Treatment after default	10	6.5
Failure of previous treatment	0	0.0
Total	153	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	50	28.4
Pretreatment culture +ve	93	52.8
Extent = 1	60	34.1
Extent=1 & cavity=N	48	27.3
Extent=1 & cavity=Y	12	6.8
Extent = 2	21	11.9
Extent=2 & cavity=N	8	4.5
Extent=2 & cavity=Y	13	7.4
Extent=3	12	6.8
Extent=3 & cavity=N	6	3.4
Extent=3 & cavity=Y	6	3.4
Extent=not specified	39	22.2
Extent=ns & cavity=N	39	22.2
Extent=ns & cavity=Y	0	0.0
Cavity=N	101	57.4
Cavity=Y	31	17.6

6-month short course treatment

Yes	2	1.3
2HRZE+4HR	0	0.0
2HRZS+4HR	0	0.0

Other standard regimen based on HRZES

Yes	41	26.8
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Among those defaulted

Never found	58	37.9
Retreated after default	20	13.1
Treatment stopped by doctor	16	10.5
Not recorded	59	38.6

Annex 1 (e) - Treatment defaulters - 05

Treatment supervision

N	
---	--

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

>90%	49	32.0
>75%	13	8.5
>50%	13	8.5
>25%	4	2.6
≤25%	11	7.2
Not recorded	63	41.2

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

>90%	18	11.8
>75%	10	6.5
>50%	9	5.9
>25%	10	6.5
≤25%	16	10.5
Not recorded	90	58.8

Under supervision by relatives (initial 2 months)

>90%	0	0.0
>75%	0	0.0
>50%	0	0.0
>25%	2	1.3
≤25%	65	42.5
Not recorded	86	56.2

Under supervision by relatives (subsequent 4 months)

>90%	0	0.0
>75%	0	0.0
>50%	0	0.0
>25%	0	0.0
≤25%	48	31.4
Not recorded	105	68.6

Supplied for unsupervised treatment (initial 2 months)

<5%	58	37.9
<10%	6	3.9
<15%	4	2.6
<25%	5	3.3
<50%	2	1.3
≥50%	2	1.3
Not recorded	76	49.7

Supplied for unsupervised treatment (subsequent 4 months)

<5%	38	24.8
<10%	7	4.6
<15%	3	2.0
<25%	3	2.0
<50%	1	0.7
≥50%	3	2.0
Not recorded	98	64.1

Defaulted (initial 2 months)

<5%	53	34.6
<10%	8	5.2
<15%	4	2.6
<25%	4	2.6
<50%	6	3.9
≥50%	11	7.2
Not recorded	67	43.8

Defaulted (subsequent 4 months)

<5%	21	13.7
<10%	3	2.0
<15%	3	2.0
<25%	6	3.9
<50%	11	7.2
≥50%	24	15.7
Not recorded	85	55.6

Annex 1 (f) Sources completing Programme Forms

Sources completing Programme Forms	PFA	PFB1	PFB2	PFC	PFD
Chest Clinics	3 478	3 866	3 869	3 867	3 736
Hospital Authority	440	3	2	1	2
Private Practitioners/ Private Hospitals	0	0	0	0	0
Correctional Services and Others	25	15	15	9	12
Not Recorded	915	974	972	981	1 108
Total	4 858	4 858	4 858	4 858	4 858

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	1	0	0	0	1
Duchess of Kent Children Hospital	0	0	0	0	0
Fung Yiu King Hospital	0	0	0	0	0
Grantham Hospital	135	0	0	0	0
Haven of Hope Hospital	4	1	0	1	0
Kowloon Hospital	63	0	0	0	0
Kwong Wah Hospital	0	0	0	0	0
North District Hospital	69	0	0	0	0
Nam Long Hospital	0	0	0	0	0
Our Lady of Maryknoll Hospital	0	0	0	0	0
Pamela Youde Nethersole Eastern Hospital	0	0	0	0	0
Pok Oi Hospital	0	0	0	0	0
Prince of Wales Hospital	0	0	0	0	0
Princess Margaret Hospital	0	0	0	0	0
Queen Elizabeth Hospital	0	0	0	0	0
Queen Mary Hospital	27	0	0	0	0
Ruttonjee Hospital	139	1	1	0	1
Shatin Hospital	0	0	0	0	0
Tai Po Hospital	0	0	0	0	0
Tseung Kwan O Hosital	0	0	0	0	0
Tuen Mun Hospital	0	0	0	0	0
Tung Wah Eastern Hospital	0	0	0	0	0
Tung Wah Hospital	0	0	0	0	0
United Christian Hospital	2	1	1	0	0
Wong Tai Sin Hospital	0	0	0	0	0
Wong Chuk Hang Hospital	0	0	0	0	0
Yan Chai Hospital	0	0	0	0	0
Total	440	3	2	1	2

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

Name of institution: _____

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

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

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

Job title: _____

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

Drugs & duration: _____

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

1. New case (<1m previous Rx)
 2. Relapse case.
 3. Treatment after default.
 4. Failure of previous treatment.
 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: ₁minimal (total area < RUL)/ ₂moderate (> RUL)/ ₃advanced (> 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: ₁Chest Clinic/ ₂Chest Hospital/ ₃General Hospital/ ₄Private Practice. ; Name (and ward) of institution: _____
(After completion, this form should be sent to Consultant Chest Physician i/c, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong. Fax: (852) 28346627)
(If patient is transferred, a copy of this completed form should also be sent to the new source of care for information.)

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

Name: _____ DOS: __/__/____

PFB1 – To be completed at 6 month from DOS (for TB patients)**Part (E) Mode of TB diagnosis:** ₁ Bacteriological/ ₂ Histological/ ₃ Clinical-radiological/ ₄ Clinical only (choose 1 item, priority from left to right)**Bacteriological examination for MTB:** P (positive), N (negative), U (not done), NTM (Non-tuberculous Mycobacteria)

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

- Histological result from (site) _____: ₁ Typical (with caseation) / ₂ Granulomatous inflammation / ₃ other
Ziehl-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: ₁ [2HRZE+4HR] / ₂ [2HRZS+4HR]

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

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

Drugs that have been used (for at least over 1 month): ₁ Isoniazid (H) / ₂ Rifampicin (R) / ₃ Ethambutol (E) / ₄ Streptomycin (S) / ₅ Pyrazinamide (Z) / ₆ Ofloxacin / ₇ Levofloxacin / ₈ Ethionamide / ₉ Prothionamide / ₁₀ Kanamycin / ₁₁ Cycloserine / ₁₂ PAS /₁₂ Other(1) _____ / ₁₃ Other(2) _____ / ₁₄ Other (3) _____

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

Institution: ₁ Chest Clinic/ ₂ Chest Hospital/ ₃ General Hospital/ ₄ Private Practice. ; Name (and ward) of institution: _____
(After completion, this form should be sent to Consultant Chest Physician i/c, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong. Fax: (852) 28346627)
(If patient is transferred, a copy of this completed form should also be sent to the new source of care for information.)

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

Name: _____ DOS: __/__/____

PFB2 – To be completed at 6 month from DOS (for TB patients)**Part (J) Treatment side effects:** N / Y (If Y, please circle)

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

Treatment temporarily withheld for side effects: N / Y

Desensitisation or drug trial required: N / Y

Change in dosage or frequency required: N / Y

Change of drugs required: N / Y

Part (K) Treatment Supervision:

Proportion of doses:	Initial 2 month	Subsequent 4 months (up to 6 month from DOS)
Under DOT at chest clinic, hospital, CNS or other health staff	>90% >75% >50% >25% ≤25%	>90% >75% >50% >25% ≤25%
Under 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: ₁ retreatment/ ₂ extrapulm./ ₃ extensive/ ₄ interrupted treatment/ ₅ drug resistance/ ₆ poor response/
₇ others, specify: _____

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

Date of death (mm/yyyy): ____/____/____

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

Details: _____

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

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

- Never found
- 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: ₁ Chest Clinic/ ₂ Chest Hospital/ ₃ General Hospital/ ₄ Private Practice; Name (and ward) of institution: _____

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

HKID/ Passport/ Birth certificate no.: _____	Clinic/ Hospital no.: _____
Name: _____	DOS: __/__/____

PFC – To be completed at 12 month from DOS (for TB patients)**Part (M) Bacteriological examination for MTB:** P (positive), N (negative), U (not done), NTM (Non-tuberculous Mycobacteria)

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

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

- (1) Cured/ treatment completed Date treatment completed (mm/yyyy): ____/____/____
- (a) Status at completion:
- Bacteriological conversion
 - Radiological improvement
 - Other clinical improvement
 - No available evidence of response
- (b) After treatment completed:
- No relapse
- Loss to follow-up
- Died Cause: ₁TB-related/ ₂Not TB-related/ ₃Unknown
- Relapse
- ₁Bacteriological / ₂Histological / ₃Clinical-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: ₁retreatment/ ₂extrapulm./ ₃extensive/ ₄interrupted treatment/ ₅drug resistance/ ₆poor response/
₇others, specify: _____
 - Died Cause: ₁TB-related/ ₂Not TB-related/ ₃Unknown
- Date of death (mm/yyyy): ____/____/____
- (3) Transferred to: ₁GP/ ₂Chest Clinic/ ₃Hospital/ ₄Outside 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: ₁Chest Clinic/ ₂Chest Hospital/ ₃General Hospital/ ₄Private 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: ₁TB-related/ ₂Not TB-related/ ₃Unknown Date of death (mm/yyyy): ____/____/____
 Relapse Date relapse (mm/yyyy): ____/____/____
 • ₁Bacteriological / ₂Histological / ₃Clinical-radiological / ₄Clinical only (choose 1 item, priority from left to right)
- (2) Treatment incomplete (including death while on treatment)
 • Still on treatment, reason: ₁retreatment/ ₂extrapulm./ ₃extensive/ ₄interrupted treatment/ ₅drug resistance/ ₆poor response/
₇others, specify: _____ Date of death (mm/yyyy): ____/____/____
 • Died Cause: ₁TB-related/ ₂Not TB-related/ ₃Unknown
- (3) Transferred to: ₁GP/ ₂Chest Clinic/ ₃Hospital/ ₄Outside 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: ₁Chest Clinic/ ₂Chest Hospital/ ₃General Hospital/ ₄Private 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	2011	2012	2013	2014	2015
Notified TB cases who are Chinese New Immigrants (with years of arrival in Hong Kong)	≤1 year	14	24	18	12	10
	1 < and ≤2 year	18	14	9	15	14
	2 < and ≤3 year	10	15	11	12	12
	3 < and ≤4 year	8	19	14	14	16
	4 < and ≤5 year	10	7	14	12	10
	5 < and ≤6 year	11	6	16	7	7
	6 < and ≤7 year	10	15	10	13	13
	Total	81	100	92	85	82
Overall notified TB cases		4 794	4 858	4 664	4 705	4 418

The above table shows the number of all notified TB cases in Hong Kong from 2011 to 2015 and the number of TB cases among the Chinese new immigrants (staying in Hong Kong for less than 7 years) according to the number of years they have arrived in Hong Kong.

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 2011 to 2015 are 67.8, 67.9, 64.9, 65.0 and 60.5 respectively.

From Annex 2 (b), the overall estimated rates (per 100 000) among the new immigrants from 2011 to 2015 are 25.4, 31.4, 29.7, 26.9 and 26.2 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 (2011-2015)

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

	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014	2015	2015	2015
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	3	4	7	4	4	8	7	3	10	5	2	7	3	3	6
20-39	3	37	40	19	50	69	12	43	55	20	30	50	9	35	44
40-59	14	10	24	10	10	20	9	14	23	12	12	24	10	16	26
60+	5	5	10	1	2	3	2	2	4	2	2	4	5	1	6
Total	25	56	81	34	66	100	30	62	92	39	46	85	27	55	82

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

	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014	2015	2015	2015
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	5.4	7.8	6.6	7.9	8.5	8.2	15.9	7.3	11.8	11.6	5.0	8.4	7.3	8.0	7.6
20-39	12.4	28.0	25.6	70.1	39.9	45.2	42.9	35.0	36.5	68.6	24.1	32.5	30.1	28.9	29.2
40-59	80.5	29.9	47.2	45.1	25.1	32.2	39.4	32.3	34.7	49.9	25.6	33.8	39.7	32.4	34.9
60+	240.0	136.4	173.9	38.6	48.2	44.5	66.7	42.8	52.2	59.8	40.0	48.0	132.4	18.8	65.9
Total	25.3	25.4	25.4	33.2	30.5	31.4	30.7	29.3	29.7	39.1	21.2	26.9	27.1	25.8	26.2

Annex 2 (c)

TB Notification and Rates (All Cases) By Age & Sex (2011-2015)

All TB cases by age and sex

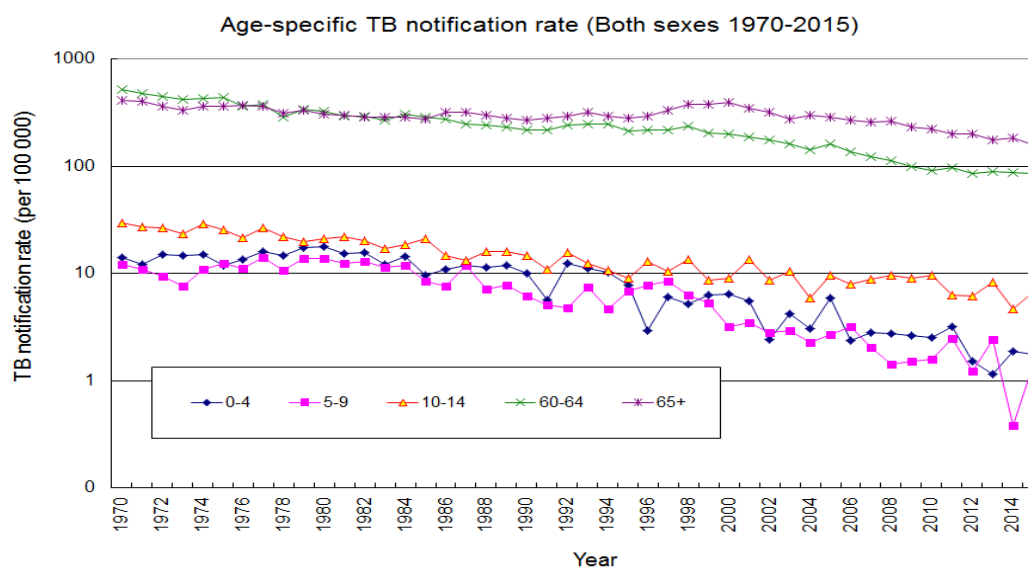
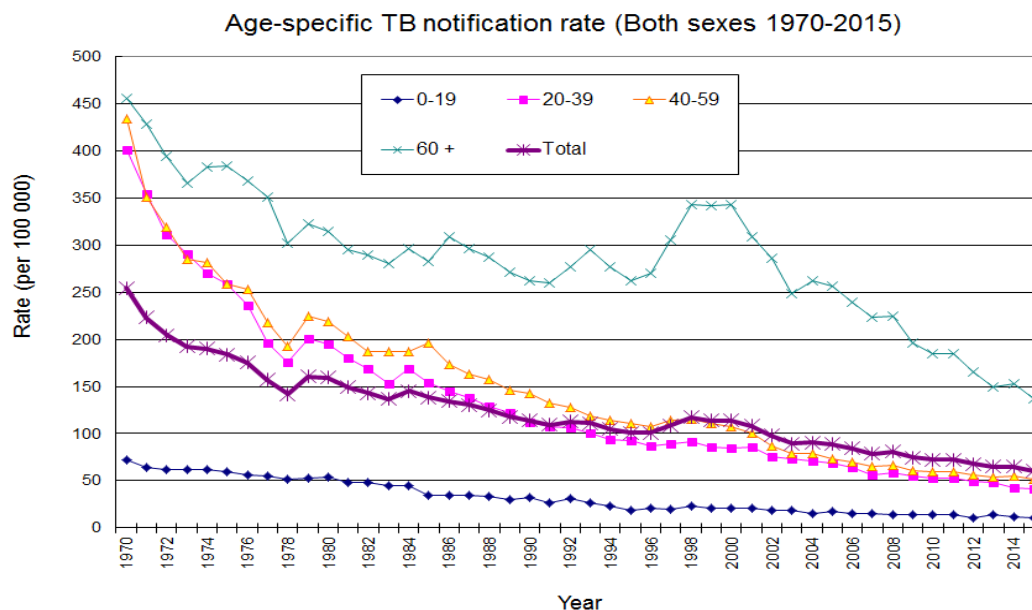
	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014	2015	2015	2015
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	94	63	157	74	59	133	100	71	171	83	55	138	75	52	127
20-39	445	605	1 050	458	593	1 051	428	580	1 008	400	493	893	370	490	860
40-59	842	468	1 310	828	511	1 339	813	489	1 302	806	532	1 338	774	477	1 251
60+	1 711	566	2 277	1 726	609	2 335	1 565	618	2 183	1 709	627	2 336	1 607	573	2 180
Total	3 092	1 702	4 794	3 086	1 772	4 858	2 906	1 758	4 664	2 998	1 707	4 705	2 826	1 592	4 418

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

	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014	2015	2015	2015
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	14.6	10.4	12.6	11.6	9.9	10.8	16.1	12.2	14.2	13.5	9.5	11.6	12.2	9.0	10.7
20-39	48.8	51.0	50.0	50.1	49.3	49.7	47.1	48.3	47.8	44.1	41.1	42.4	40.8	40.9	40.8
40-59	76.2	36.8	55.2	74.8	39.6	55.9	73.5	37.5	54.0	73.3	40.3	55.3	71.0	35.9	51.7
60+	266.0	80.0	168.5	257.8	82.4	165.7	224.9	80.4	149.1	235.8	78.2	153.0	212.6	68.5	136.9
Total	93.6	45.2	67.8	92.7	46.3	67.9	87.2	45.6	64.9	89.6	43.8	65.0	83.9	40.4	60.5

Annex 3

Trend of age-specific TB notification rates (1970-2015)



- 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 24 cases with TB-HIV co-infection were reported to the TB-HIV Registry in 2015. The cumulative number of cases reported to the TB-HIV Registry from all sources as in 2015 was 610 (Table 1).

Information on TB as a primary AIDS-defining illness is available in 20 out of 24 cases reported to the TB-HIV Registry in 2015. Of these 20 cases, 12 (60.0%) had TB as a primary AIDS-defining illness (Table 2). The proportion of patients with pulmonary TB and a low CD4 count below 200/ μ L as primary AIDS-defining illness was similar to that with extra-pulmonary TB for 2015.

The pre-treatment drug susceptibility pattern among culture-positive (sputum or other specimens) TB-HIV cases for the years 1996-2015 is shown in Table 3. Twenty patients reported to the TB-HIV Registry had a positive sputum or other specimen culture in 2015. Drug sensitivity result was available in eighteen. 15 (83.3%) had disease due to *Mycobacterium tuberculosis* with favourable susceptibility pattern. One (5.6%) had bacillary resistance to streptomycin and isoniazid. Two patients had MDRTB in 2015. Among all the 426 cases reported to TB-HIV Registry with a positive sputum or other specimen culture between 1996 and 2015, 7 (1.6%) had MDRTB. This figure is slightly higher than the MDRTB rate of around 1% in general population. There is no XDR-TB cases detected among the reported TB-HIV cases. DH will continue to monitor prevalence of drug resistance in the context of HIV.

Table 4 shows the characteristics of 24 patients seen at chest clinics and/or SPP in 2015. The characteristics of these patients are similar to those of the 2014 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 was not excessively low (median 147) at time of TB diagnosis. Extra-pulmonary involvement is common, with over half of the patients having TB involving one or more extra-pulmonary sites.

Annex 4 (b)

Table 1. Total number of TB-HIV cases reported to TB-HIV Registry, all sources (1996-2015)*

Year	Number of TB-HIV cases**
1996	22
1997	19
1998	22
1999	25
2000	24
2001	34
2002	22
2003	28
2004	35
2005	42
2006	50
2007	56
2008	50
2009	38
2010	25
2011	28
2012	20
2013	21
2014	25
2015	24
Total	610

* Including cases reported from all sources (chest clinics, SPP, HA hospitals and private centres).

** Some of the figures in the table for the previous years have been updated after (1) taking out some mismatched cases and cases with a revised diagnosis (2) adding some cases which were previously unreported.

Annex 4 (c)

Table 2. TB as primary AIDS-defining illness among 424 cases reported to chest clinics and/or SPP (1996-2015)*

Year	TB as primary AIDS-defining illness					Total
	Yes			No	Information not available	
	Extra-pulmonary	Pulmonary and TB cervical lymph node with CD4 < 200 µL	Subtotal			
1996	1	7	8	1	0	9
1997	2	3	5	2	0	7
1998	6	3	9	3	0	12
1999	7	6	13	3	0	16
2000	3	4	7	5	0	12
2001	4	6	10	7	0	17
2002	4	9	13	2	0	15
2003	1	10	11	5	0	16
2004	5	7	12	11	0	23
2005	8	14	22	7	0	29
2006	9	19	28	7	0	35
2007	10	17	27	8	2	37
2008	14	13	27	6	0	33
2009	9	3	12	6	5	23
2010	4	10	14	5	3	22
2011	6	8	14	8	6	28
2012	4	9	13	5	2	20
2013	7	10	17	1	3	21
2014	7	8	15	9	1	25
2015	7	5	12	8	4	24
Total	118	171	289	109	26	424

* Some of the figures in the table for the previous years have been updated. Of all the cases reported to the TB-HIV Registry from 1996 to 2015, 424 cases were seen at chest clinics and/or SPP. The table is compiled basing on data of these 424 cases.

Table 3. Pre-treatment drug susceptibility pattern among culture positive (sputum and/or other specimens) TB-HIV cases from TB-HIV Registry, all sources (1996-2015)*

Year	Susceptible to SHRE	Any resistance** (non-MDR/XDR)	MDR	XDR	Total number of culture positive cases
1996	7	1	0	0	8
1997	5	1	0	0	6
1998	13	1	0	0	14
1999	16	4	1	0	21
2000	13	2	0	0	15
2001	23	5	0	0	28
2002	11	3	1	0	15
2003	18	3***	0 (+1)***	0	21
2004	20	6	0	0	26
2005	29	5	0	0	34
2006	32	3	0	0	35
2007	30	7	1	0	38
2008	30	3	0	0	33
2009	22	7	0	0	29
2010	12	2	0	0	14
2011	12	4	0	0	16
2012	13	2	1	0	16
2013	13	5	0	0	18
2014	11	7	0	0	19****
2015	15	1	1 (+1)*****	0	20****
Total	345	72	5 (+2)	0	426

* Of all the cases reported to the TB-HIV Registry from 1996 to 2015, 426 had a positive culture (sputum or other specimens). The table is compiled basing on data of these 426 cases.

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

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

**** Drug sensitivity result unknown in one patient in 2014 and two patients in 2015.

*****One patient's pre-treatment sputum culture showed MTB with favourable drug susceptibility pattern; sputum culture at 3 month showed MDRTB, which might represent mixed population or acquired drug resistance

Annex 4 (d)

Table 4 Characteristics of 24 TB-HIV cases reported from chest clinics and SPP in 2015

	Number	Proportion
Age distribution		
0 to 19	0	0.0%
20 to 39	10	41.7%
40 to 59	13	54.2%
60+	1	4.2%
Sex distribution		
Male	21	87.5%
Female	3	12.5%
Ethnicity		
Chinese	16	66.7%
Asians, non-Chinese	7	29.2%
African	1	4.2%
Others	0	0.0%
Case category		
New case	20	83.3%
Relapse	2	8.3%
Treatment after default	1	4.2%
Failure of previous treatment	0	0.0%
Others	1	4.2%
TB as a primary AIDS defining illness*		
Yes	12	60.0%
No	8	40.0%
CD4 count at time of co-infection (median, IQR)**	147 (67.5- 247.5) / μ L	
Anti-retroviral therapy at time of co-infection***		
Yes	6	27.3%
No	16	72.7%
Presence of extra-pulmonary TB		
Yes	13	54.2%
No	11	45.8%
Extent of Respiratory TB****		
Minimal	7	43.8%
Moderate	4	25.0%
Extensive	5	31.3%
Sputum bacteriological status (pre-treatment)		
Smear + culture +	6	25.0%
Smear - culture +	8	33.3%
Smear + culture -	1	4.2%
Smear - culture -	7	29.2%
Incomplete/sputum test not performed	2	8.3%
Drug resistance pattern *****		
Susceptible to SHRE	15	83.3%
Resistant to streptomycin + isoniazid	1	5.6%
MDR	2	11.1%
XDR	0	0.0%

* Information on TB as primary AIDS-defining illness unknown in four patients.

** Information on CD4 count unknown in three patients.

*** Information on anti-retroviral therapy at time of diagnosis unknown in two patients

**** Information on pre-treatment CXR finding not available in one patient. Of the remaining 23 patients, 16 had lung parenchyma

***** 20 of 24 cases had a positive sputum and/or other specimen culture. Drug sensitivity result unknown in two patients

Annex 5

HBsAg Seroprevalence Survey Among TB Patients Seen at Chest Clinics (2015)

In a sample survey conducted by the TB & Chest Service of the Department of Health in 2015 (2-month period from 1.3.2015 to 31.5.2015), the overall HBsAg seropositive rate among TB patients seen at chest clinics was 8.69%.

Sex/Age group	HBsAg status			HBsAg seropositive rate (%)*	Total
	Positive	Negative	Unknown		
Male					
0-19	0	19	1	0.00	20
20-39	5	78	3	6.02	86
40-59	18	142	2	11.25	162
≥60	33	255	4	11.46	292
Female					
0-19	0	7	3	0.00	10
20-39	8	89	4	8.25	101
40-59	8	88	2	8.33	98
≥60	2	100	3	1.96	105
Total	74	778	12	8.69	874

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

HBsAg Seroprevalence Survey 2014-2015

Sex/Age group	HBsAg seropositive rate (%)	
	2014	2015
Male		
0-19	0.00	0.00
20-39	2.60	6.02
40-59	14.69	11.25
≥60	10.70	11.46
Female		
0-19	7.69	0.00
20-39	4.65	8.25
40-59	7.75	8.33
≥60	6.14	1.96
Total	8.80	8.69

Annex 6

Crude and Standardised Death Rate and Notification Rate 1981 - 2015 (per 100 000 population)

Year	Crude Death Rate	Standardised Death Rate *	Crude Notification Rate	Standardised Notification Rate *
1981	9.4	9.4	149.1	149.1
1982	8.6	8.4	140.3	142.1
1983	8.3	7.2	136.6	135.2
1984	7.8	7.9	145.3	142.7
1985	7.5	6.9	138.3	134.6
1986	7.4	6.6	134.5	134.6
1987	7.3	6.3	130.3	124.2
1988	6.9	5.8	124.8	122.1
1989	7.1	5.9	117.9	111.4
1990	6.7	5.7	114.1	107.7
1991	7.1	5.6	109.2	100.5
1992	7.1	5.5	112.6	107.9
1993	6.7	5.1	110.8	100.2
1994	6.8	5.0	104.7	88.9
1995	6.8	4.8	100.9	88.9
1996	4.5	3.1	101.0	88.7
1997	3.9	2.6	109.0	93.1
1998	4.1	2.8	117.3	98.6
1999	4.7	3.1	113.7	93.9
2000	4.5	2.8	113.7	93.4
2001	4.6	2.8	108.2	88.6
2002	4.0	2.4	97.9	78.9
2003	4.1	2.5	89.5	72.3
2004	4.2	2.4	91.8	71.1
2005	4.0	2.2	90.4	70.5
2006	4.3	2.4	84.1	63.3
2007	3.3	1.8	79.0	58.5
2008	3.3	1.7	81.0	59.3
2009	2.9	1.5	74.5	54.1
2010	2.7	1.4	72.5	52.0
2011	2.6	1.3	67.8	48.4
2012	2.8	1.4	67.9	47.2
2013	2.5	1.2	64.9	46.1
2014	2.6	1.3	65.0	44.2
2015	2.3	1.0	60.5	41.2

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

NB. The rates have been updated based on the updated population figures from the 2015 Population Census.

Part 4

SUPPLEMENT

Part 4 – Supplement : Contents

Supplement

- 1 Form for notification of TB under the Prevention and Control of Disease Ordinance (Cap. 599) – DH1A(s)(Rev. Jul 2008) (for notification to Department of Health)
- 2 TB denotification form
- 3 Form for notification of occupational diseases under the Occupational Safety and Health Ordinance (Cap. 509) – LD483(Rev.8.2.2005) (for notification of occupational TB and other notifiable occupational diseases to Labour Department)

FORM 1
PREVENTION AND CONTROL OF DISEASE ORDINANCE
(Cap. 599)

TUBERCULOSIS NOTIFICATION

Particulars of Infected Person

Name in English:	Name in Chinese:	Age / Sex:	I.D. Card / Passport No.:				
Residential Address:			Telephone No.:				
Name and address of workplace / school / other institution:			(Home) :				
Job title / Class attended :			(Mobile) :				
Hospital / Clinic sent to (if any):			Patient :				
			Family member :				
			(Office / school / others):				
Hospital / Clinic sent to (if any):			Hospital No.:				
Site of TB (please ✓ all applicable)		Sputum (please ✓ and attach laboratory report if available)			Other specimens (specify and ✓ below):		
<input type="checkbox"/> Lung	<input type="checkbox"/> Meninges						
<input type="checkbox"/> Pleura	<input type="checkbox"/> Bone & Joint						
<input type="checkbox"/> Lymph node	<input type="checkbox"/> Urinary system						
<input type="checkbox"/> Miliary	<input type="checkbox"/> Genital system						
<input type="checkbox"/> Other(s) (please specify):							
		Positive	Smear	Culture	PCR test	Smear	Culture
		Negative					
		Unknown					
		Not done					
Duration of stay in Hong Kong: _____ Years			Disposal (please ✓ in front boxes and specify):				
History of past treatment for TB (delete whichever not applicable): Yes / No			<input type="checkbox"/> Treatment started on: _____ (Date: dd/mm/yyyy)				
If yes, YEAR first receiving treatment: _____			<input type="checkbox"/> On observation				
			<input type="checkbox"/> Referred to _____ Hospital / Clinic / Private Practitioner				
			<input type="checkbox"/> Died on: _____ (Date: dd/mm/yyyy)				

(Please DELETE whichever is not applicable)

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

Further Remarks:

Notified under the Prevention and Control of Disease Regulation by

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

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

Telephone No.: _____ Fax No.: _____

(Signature)

[Part 1: To be completed by DOCTOR requesting TB denotification]

To: Statistics Unit, Wanchai Chest Clinic, 99 Kennedy Road, Hong Kong (Fax: 2572 8921)

Denotification of Previously Notified TB Case

Clinic/ Hospital:		Clinic Hospital number:	
Name of patient:	HKID/ passport number:		
Date notified:	Smear:	Positive / Negative / Unknown	
Revised diagnosis or other remarks:	Culture:	Negative / M tuberculosis / Non-tuberculous mycobacteria / Unknown / Others _____	
Denotification requested by (Name and signature of doctor):		Tel:	Date:
		Fax:	

+++++

[Part 2: To be completed by Statistics Unit of TB&CS]

From: Statistics Unit of TB&CS

To: DOCTOR who sent in this request for denotification (Fax no.)

It is confirmed that the above TB denotification request has been received by the Statistics Unit of TB & Chest Service at Wanchai Chest Clinic.

Date:

Chop or signature:

+++++

[Part 3: To be completed by Statistics Unit of TB&CS]

From: Statistics Unit of TB&CS

To: _____ Chest Clinic (AE Chest Clinic) (Fax no.:)

Please note the above request for denotification for further necessary actions.

+++++

[Part 4: To be completed by AE Chest Clinic]

We have taken note of the above request for denotification. We have the following comments:

- No comments
- Agree with the request for denotification
- Please ignore the request for denotification, reason:

Signature and name of Chest Clinic doctor:	Chest Clinic:	Date:
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Notes for using the Form “TBdenotification/1403” for requesting denotification of a case previously notified as TB

1. If a doctor wants to request for denotification of a previously notified TB case, he fills in Part 1 and fax the form to Wanchai Chest Clinic (Fax: 2572 8921; Attention: Statistics Unit of TB&CS).
2. Upon receiving the request for denotification, Statistics Unit of TB&CS fills in Part 2 and fax back to the doctor for acknowledgment of receiving the request.
3. The Statistics Unit of TB&CS then fills in Part 3, and fax the form to the NO of the relevant Chest Clinic (the AE Chest Clinic) which has been handling this case as AE case, for further necessary actions.
4. The health nurse of AE Chest Clinic, upon receiving the fax, will take note of the denotification for further necessary actions. For example, if there is no evidence to suggest otherwise, the AE Chest Clinic will treat the case now as not a TB case, and discontinue the public health actions which would then become unnecessary. Alternatively, if the AE Chest Clinic, with the input of the doctor i/c of the case (when necessary), is of the opinion that the case should not be denotified, it will continue to carry out the necessary public health actions and inform Statistics Unit of TB&CS to ignore the request for denotification. Thus, the doctor i/c of the AE Chest Clinic fills in Part 4 and tick the appropriate item, and fax the form back to Statistics Unit of TB&CS. If the AE chest clinic does not have any additional information on whether to support or refute the denotification (e.g., patient is not being followed up at chest clinic), the doctor i/c of the AE Chest Clinic may tick the item “No comments”.
5. Upon receiving the fax return back from the AE Chest Clinic, the Statistics Unit will act accordingly, e.g., denotify the case or ignore the denotification request.
6. For cases denotified by chest clinic doctors, there is no need to fill in Part 3 and Part 4.

OCCUPATIONAL SAFETY AND HEALTH ORDINANCE NOTIFICATION OF OCCUPATIONAL DISEASES

To : Commissioner for Labour

PARTICULARS OF PATIENT

Name: _____ HKID/Passport no.: _____

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

Home address: _____

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

Name and address of employer: _____

_____ Telephone no. (Employer) _____

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

For Internal
use:

Code: _____

Code: _____

Code: _____

Code: _____

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

<input type="checkbox"/> 1	Radiation Illness	<input type="checkbox"/> 18	Lead Poisoning	<input type="checkbox"/> 35	Chrome Ulceration
<input type="checkbox"/> 2	Heat Cataract	<input type="checkbox"/> 19	Manganese Poisoning	<input type="checkbox"/> 36	Urinary Tract Cancer
<input type="checkbox"/> 3	Compressed Air Illness	<input type="checkbox"/> 20	Phosphorus Poisoning	<input type="checkbox"/> 37	Peripheral Polyneuropathy
<input type="checkbox"/> 4	Cramp of Hand or Forearm	<input type="checkbox"/> 21	Arsenic Poisoning	<input type="checkbox"/> 38	Localised Papillomatous or Keratotic New Skin Growth
<input type="checkbox"/> 5	Beat Hand	<input type="checkbox"/> 22	Mercury Poisoning	<input type="checkbox"/> 39	Occupational Vitiligo
<input type="checkbox"/> 6	Beat Knee	<input type="checkbox"/> 23	Carbon Bisulphide Poisoning	<input type="checkbox"/> 40	Occupational Dermatitis
<input type="checkbox"/> 7	Beat Elbow	<input type="checkbox"/> 24	Benzene Poisoning	<input type="checkbox"/> 41	Chemical Induced Upper Respiratory Tract Inflammation
<input type="checkbox"/> 8	Tenosynovitis of Hand or Forearm	<input type="checkbox"/> 25	Poisoning by Nitro-, Amino-, or Chloro- Derivatives of Benzene	<input type="checkbox"/> 42	Nasal or Paranasal Sinus Cancer
<input type="checkbox"/> 9	Anthrax	<input type="checkbox"/> 26	Dinitrophenol Poisoning	<input type="checkbox"/> 43	Byssinosis
<input type="checkbox"/> 10	Glanders	<input type="checkbox"/> 27	Poisoning by Halogen Derivatives of Hydrocarbons	<input type="checkbox"/> 44	Occupational Asthma
<input type="checkbox"/> 11	Leptospirosis	<input type="checkbox"/> 28	Diethylene Dioxide Poisoning	<input type="checkbox"/> 45	Silicosis
<input type="checkbox"/> 12	Extrinsic Allergic Alveolitis	<input type="checkbox"/> 29	Chlorinated Naphthalene Poisoning	<input type="checkbox"/> 46	Asbestos-Related Diseases
<input type="checkbox"/> 13	Brucellosis	<input type="checkbox"/> 30	Poisoning by Oxides of Nitrogen	<input type="checkbox"/> 47	Occupational Deafness
<input type="checkbox"/> 14	Tuberculosis in health care workers	<input type="checkbox"/> 31	Beryllium Poisoning	<input type="checkbox"/> 48	Carpal Tunnel Syndrome
<input type="checkbox"/> 15	Parenterally Contracted Viral Hepatitis in health care workers	<input type="checkbox"/> 32	Cadmium Poisoning	<input type="checkbox"/> 49	Legionnaires' Disease
<input type="checkbox"/> 16	Streptococcus suis Infection	<input type="checkbox"/> 33	Dystrophy of the Cornea	<input type="checkbox"/> 50	Severe Acute Respiratory Syndrome
<input type="checkbox"/> 17	Avian Chlamydiosis	<input type="checkbox"/> 34	Skin Cancer	<input type="checkbox"/> 51	Avian Influenza A

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

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

Other relevant information: _____

Name of notifying medical practitioner: _____

Address of notifying medical practitioner: _____

Telephone no. of notifying medical practitioner: _____

Fax no. of notifying medical practitioner: _____

Date: _____

Signature: _____

**Delete whichever is inapplicable*

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

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

