

ANNUAL REPORT 2014

TUBERCULOSIS & CHEST SERVICE

OF THE

DEPARTMENT OF HEALTH

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PREFACE

In 2014, 9.6 million people became ill with tuberculosis (TB) worldwide, including 1.2 million people living with HIV. There were 1.5 million deaths, with 0.4 million occurring among HIV-infected individuals. TB surpassed human immunodeficiency virus (HIV) and became the leading cause of death from a single infectious agent. Effective anti-TB treatment has been available for half a century. However, with the long course of treatment required to cure the disease, non-adherence and emergence of drug resistance were encountered since the earliest days of chemotherapy. Globally, 480 000 cases of multidrug-resistant TB (MDR-TB) with bacillary resistance to at least isoniazid and rifampicin were estimated to have emerged in 2014. However, only 123 000 were diagnosed. In the same year, 111 000 were started MDR-TB treatment, an increase of 14% compared with 2013. The average cure rate for treated MDR-TB patients was only 50%. With the major gaps in diagnosis and treatment, there were an estimated 190 000 deaths from MDR-TB. An estimated 9.7% of MDR-TB cases were extensively drug-resistant TB (XDR-TB), defined as MDR-TB with additional resistance to fluoroquinolones and one or more of the three injectable drugs -- kanamycin, amikacin and capreomycin. XDR-TB carries a very poor prognosis with high treatment failure and mortality rates. Significant epidemiological clustering was also observed, probably reflecting the prolonged period of infectiousness with ineffective treatment, especially in the nosocomial settings.

In the 67th World Health Assembly held at Geneva, Switzerland in May 2014, a new set of global milestones were proposed for further progress after 2015: 75% reduction in TB deaths, 50% reduction in TB incidence rate (less than 55 estimated TB cases per 100 000 population) in 2025, and 95% reduction in TB deaths and 90% reduction in TB incidence rate (less than 10 TB cases per 100 000 population) in 2035. In addition, no affected families should face catastrophic costs due to TB in 2025 or 2035. To achieve the above targets, the following pillars and components are included under the post-2015 global TB strategy frame work:

i. Integrated, patient-centred 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;

ii. 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;

iii. 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.

Notwithstanding the steady progress in TB control since 1995, the encouraging evolving response to the global TB situation in line with countries' situations and needs, and noteworthy progress in the development of new diagnostic tools and TB drugs, the proposed milestones and targets underscore an attempt to rapidly accelerate the progress in TB control beyond 2015. For example, achieving the 2025 milestone of 50% reduction in TB incidence would require a compounded annual rate of decline of 6.7% as compared to the current annual rate of around 2%. Meeting the 2035 target of 90% reduction in TB incidence would require further acceleration of the compounded annual rate of decline to 14.9% from 2025 onwards. 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 a pre-requisite. This would, in turn, depend critically on the presence of bold policies and supportive systems to overcome the resources gap and field hurdles for large-scale implementation projects. Intensified research and innovation would also be required to overcome the limitations in currently available tools and guide the implementation and optimisation of relevant programmes across diversified socioeconomic settings.

The challenges faced by different areas would likely vary according to their particular local circumstances, especially in relation to their local epidemiology, socioeconomic situations and healthcare infrastructure. As a result, progress towards the post-2015 milestones and targets, may not be synchronous, just like what is happening for the 2015 targets. Again, successful implementation of the various components of the post-2015 strategy in the 22 high burden countries (accounting for 80% of the world's TB cases) would be crucial for attainment of the post-2015 targets. In this regard, the continuing emergence of drug resistance (multidrug-resistant and extensively drug-resistant TB) in quite a number of these countries might pose a genuine challenge to the implementation effective and affordable control programme on a population scale with the currently available diagnostic and treatment tools. In the low burden countries, the challenge might well be how to reduce TB incidence and mortality by similar percentages of

reduction from their much lower baselines, some of which have already reached the 2035 global targets in absolute terms.

Hong Kong has been classified by WHO as a place of intermediate TB burden with good health infrastructure. Like most other intermediate burden areas, the successful implementation of passive case-finding and directly observed treatment, short course (DOTS) has successfully controlled the TB infection at source, and effectively decreased the number of TB cases arising out of recent transmission. The notification rate of TB decreased from a peak of 697 per 100 000 in 1952 to 64.9 per 100 000 in 2013. Fluctuations did occur from time to time, possibly related to changes in attendance and/or notification patterns. In 2014, the TB notification slightly increased to 65.0 per 100 000. However, with the ageing of the TB epidemic, 41.1% of the TB patients are aged 65 or above, likely reflecting both the high past TB burden and waning immunity/increasing co-morbidities with age. Despite a smaller elderly population among the males, 47.3% of male TB patients were aged 65 or above, while the corresponding figure for females was 30.2%. The higher smoking prevalence in our male population likely accounted for a substantial portion of the gender disparity, but multiple other factors could also be involved. Bacillary resistance rates to the first-line TB drugs were also on a declining trend, with only about 1% of all culture-confirmed TB being MDR-TB and about 10% of the MDR-TB being XDR-TB. However, the high rates of drug-resistant TB in some neighbouring areas remain an important source of concern, especially in view of the increasingly frequent population movement. There was also evidence of increased clustering of both MDR-TB and XDR-TB locally, highlighting a need to strengthen the management and control of drug-resistant TB in Hong Kong.

However, with the high rates of TB in the past seven decades, one-third of our population (similar to the global average) is estimated to have been infected by TB, and reactivation from this huge pool of latent infection is now accounting for the majority of TB cases in Hong Kong. With the limitations of currently available diagnostic and treatment tools for latent TB infection, screening and treatment of such latent infection are mainly targeted at certain risk groups (e.g. the HIV-infected, silicosis patients and close contacts of smear-positive index cases). While adopting such a targeted strategy helps to maximize the cost-effectiveness and minimize the risk vs benefit ratio of the preventive treatment, the highly restricted coverage naturally limits its overall programme impact on the TB trends within our community. Intensified researches and innovations are therefore required to realize major breakthroughs in this critical area. The in-service guidelines for the targeted screening and treatment for latent TB infection have been continuously updated. While tuberculin skin test remained the regular diagnostic tool for latent TB infection, the new interferon gamma interferon release assays were deployed in situations where interference

by the widespread BCG vaccination would likely pose an unacceptable noise. Subject to availability of drugs, the shorter weekly rifapentine plus isoniazid regimen was also selectively offered especially for older subjects with latent tuberculosis infection. Symptom surveillance and chest x-ray examination continued to be used as screening tools for active TB disease among lower risk contacts.

Collaborative efforts continued to be made in the evaluation of new diagnostic tools and drugs/regimens to meet the new challenges in TB control. Conventional culture for TB takes a long turn over time of weeks to months, and this may delay the diagnosis and affect the management/public health control for some TB cases, especially for those with more extensive forms of drug resistance. New molecular tools allow rapid diagnosis of TB and early detection of drug resistance. To facilitate the proper management of our patients, real-time DNA amplification assays for sputum/other clinical specimens for *Mycobacterium tuberculosis* complex were employed on a highly selective basis to allow rapid diagnosis of TB, especially among sputum smear-negative patients. They were also used to allow rapid differentiation of TB from non-tuberculous mycobacteria among smear-positive patients with atypical clinical and/or radiological presentation. In 2014, there was increased utilization of rapid molecular diagnostic tools for the detection of MDR- and XDR-TB to facilitate the timely implementation of effective treatment and public health measures. Genotypic tests for rifampicin, isoniazid, fluoroquinolone and second-line injectable resistance were performed where appropriate to inform the initial choice of drugs, followed by culture and drug susceptibility testing, which were increasingly carried out in liquid culture for faster results.

Controlling the infection at source by effective treatment remains the key strategy in TB control, even for drug-resistant TB. Apart from the more established classes of second-line drugs, linezolid was increasingly utilized to reinforce the definitive treatment regimen for difficult MDR-TB and XDR-TB cases. Statutory isolation order was also utilized in highly selected cases to maximize case-holding and minimize community transmission risk. Statutory provision has been made for a health officer to prohibit, by order in writing, an XDR-TB patient from leaving Hong Kong after inclusion of XDR-TB as one of the specified diseases under the Prevention and Control of Disease Regulation (CAP 599A) of the Prevention and Control of Disease Ordinance (CAP 599) in 2008. Orders continued to be made in 2014 to prohibit all known cases of XDR-TB patients from leaving Hong Kong, and XDR-TB patients intercepted at the border would be sent to an infectious disease hospital or other designated places for assessment. Staff members of the TBCS were also actively deployed in the local preparation to guard against the major epidemic of Ebola virus in Africa as well as the continuing occurrence of Middle East Respiratory Syndrome in the

Middle East.

In line with our previous engagement in the milestone Hong Kong Chest Service/British Medical Research Council TB trials that helped to establish the standard 6-month short-course regimen, the Hong Kong Tuberculosis Service also joined the Tuberculosis Trial Consortium (TBTC) in 2009 as one of the new study sites for the development and evaluation of new TB treatment regimens. In 2014, recruitment into TBTC study 33, a phase IV clinical trial comparing self-administered therapy against directly observed therapy among patients undergoing treatment with the twelve weekly doses of isoniazid and rifapentine for latent TB infection was successfully completed, and preparation was made for the rolling out of TBTC study 31, a randomized, open-label, controlled phase 3 clinical trial rifapentine-containing treatment shortening regimens for pulmonary tuberculosis. It is hoped that some of these pilot and research activities will translate into effective, safe, and affordable tools suitable for large-scale implementation to control, and ultimately eliminate, this major killer in the history of mankind.

In commemoration of its 10th anniversary, the Centre for Health Protection (CHP) of the Department of Health organised the CHP Symposium 2014 from 24 to 25 October 2014 to provide a forum for public health practitioners and partners in the Asia-Pacific region to learn, share and exchange experience and views on disease prevention and control. Staff members of the TB&CS continued to take an active part in various local and international conferences on TB and other lung diseases. A number of scientific papers were published by the TB&CS in collaboration with other investigators/authors from different sectors in 2014.¹⁻⁴ Besides contributing to the body of scientific literature, they also helped to provide some of the necessary data to inform our local TB control programme as well as the management of various respiratory diseases. An exhibition was held by the Hong Kong Tuberculosis, Chest and Heart Diseases Association to commemorate World TB day at The Westwood, Western District from 22 to 23 March 2014, with the support from the Department of Health and the Hospital Authority. The exhibition promoted public awareness on TB and helped to mobilize community support in the ongoing efforts on the control of TB in Hong Kong.

During the year, there were a total of 83 613 attendees in TB&CS as compared to 85 437 in 2013, and the total attendance was 696 296 in comparison with 722 504 in 2013. Among the 83 613 patients, 19 835 patients were new attendants, of whom 30.5% were found free of any chest diseases. The diagnoses among other new patients included active pulmonary tuberculosis (11.4%), active tuberculosis of other forms (4.4%), inactive tuberculosis (3.4%), bronchitis not specified as acute or chronic (10.7%), acute respiratory infection (3.7%), pneumonia (0.0%), malignant neoplasm of trachea and bronchus (1.2%),

bronchiectasis (1.6%), asthma (0.5%) and emphysema (0.1%). Among all the attendance, 2 799 hospital admissions were arranged.

Part 1: Tuberculosis

The number of tuberculosis notifications in 2014 was 4 705, making a notification rate of 65.0 per 100 000 population. The corresponding figures in 2013 were 4 664 and 64.9 respectively.

The number of tuberculosis deaths was 187 in 2014 as compared with 178 in 2013. The corresponding tuberculosis mortality rates were 2.6 and 2.5 per 100 000 population in 2014 and 2013.

Tuberculosis stayed outside the top ten causes of death in 2014. Tuberculosis deaths accounted for 0.4% of the total registered deaths in Hong Kong. The average age of tuberculosis deaths was 76.0.

In 2014, 98.8% of the newborns were given direct BCG vaccination at birth. The BCG revaccination programme for primary school children was stopped since the school year starting from September 2000.

HIV testing was done among tuberculosis patients of the TB&CS on a voluntary basis after counselling and consent. The positive rate remained low. On the other hand, unlinked anonymous screening (UAS) was no longer considered necessary and surveillance of HIV among TB patients mainly depends on voluntary HIV testing.

Part 2: Pneumoconiosis

The Pneumoconiosis (Compensation) Ordinance (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. Compensation was paid out in the form of a lump sum according to the assessed degree of incapacity and the expected degree of further deterioration. The Ordinance was amended in 1993 to replace the lump sum payment with monthly payment. Reassessment at 2-yearly interval was also introduced at the same time to update the degree of incapacity for adjustment of the monthly compensation. Previously compensated post-1981 pneumoconiotics could apply for reassessment for compensation for additional incapacity. Further amendments were

made in 1996. A flat-rate compensation for pain, suffering, and loss of amenities was payable to all post-1981 pneumoconiotics who had applied for reassessment under the revised scheme, irrespective of whether there was additional degree of incapacity over previous lump-sum compensation. The 1996 amendment also allowed the Pneumoconiosis Medical Board (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 and became the Pneumoconiosis and Mesothelioma (Compensation) Ordinance.

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

The Pneumoconiosis Clinic continued to provide a full range of outpatient services to patients with suspected or confirmed pneumoconiosis 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 5 726 in 2014 compared with 6 432 in 2013. In 2014, 141 cases with suspected pneumoconiosis or mesothelioma were examined by the Board under the Ordinance, and 84 new cases (including 68 cases of silicosis, 2 cases of asbestosis and 14 cases of mesothelioma) were confirmed by the Board. Up to the end of 2014, a total of 4 828 patients had been compensated.

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Part 1

TUBERCULOSIS

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APPENDIX 1

**TB Notifications & Death Rate of Tuberculosis (All Forms)
1947 - 2014**

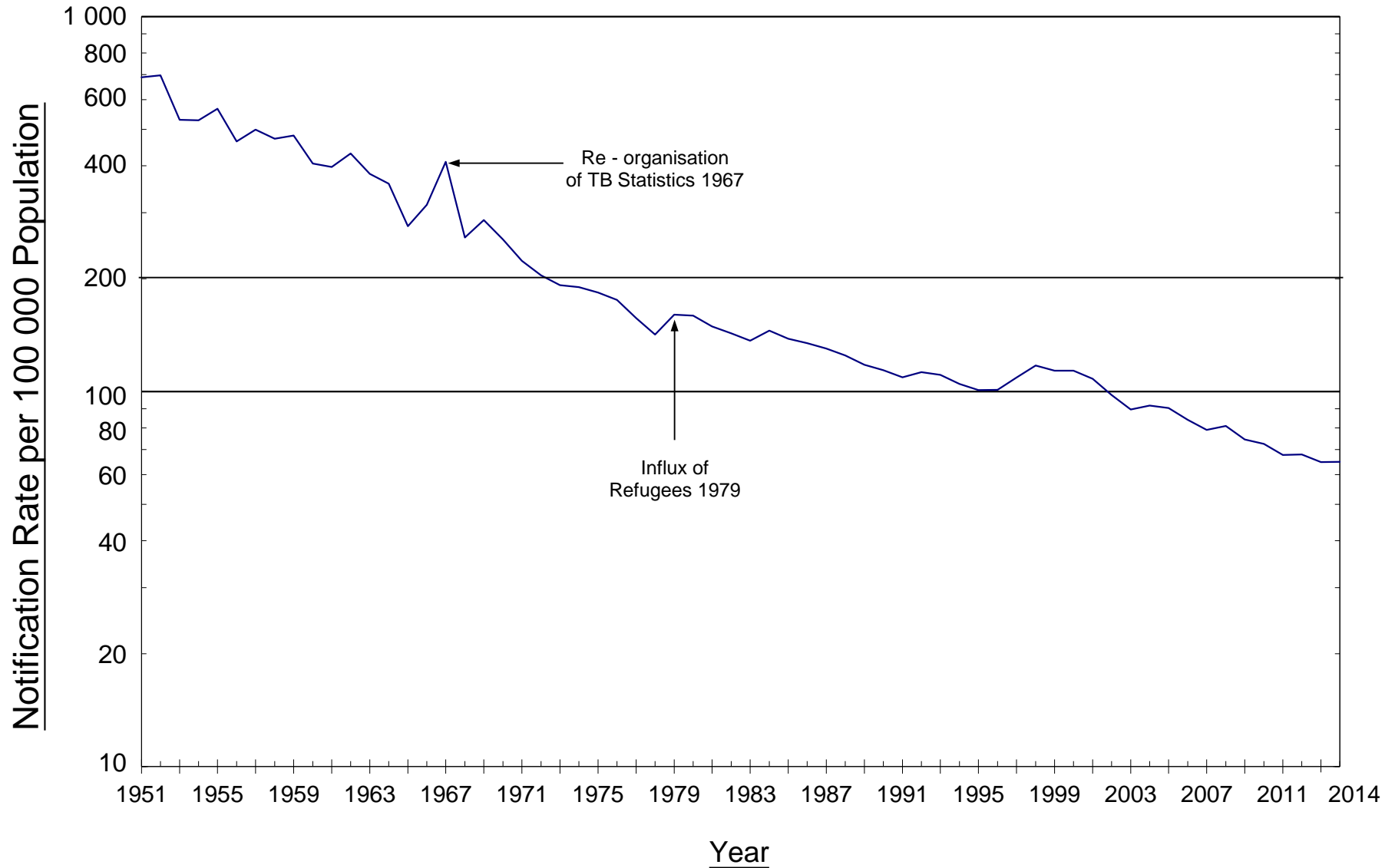
Year	TB Notifications		Notification Rate per 100 000 Pop	TB Deaths	Death Rate per 100 000 Pop	Ratio (Notifications/ Deaths)	Deaths ----- Notifications x 100%
1947	4 855		277.4	1 861	106.3	2.61	38.33
1948	6 279		348.8	1 961	108.9	3.20	31.23
1949	7 510		404.4	2 611	140.6	2.88	34.77
1950	9 067		405.3	3 263	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)	89	396	6.7	16.51	6.06
1994	6 319	(230)	87	409	6.8	15.45	6.47
1995	6 212	(175)	102	418	6.8	14.86	6.73
1996	6 501	(88)	162	292	4.5	22.26	4.49
1997	7 072	(34)	156	252	3.9	28.06	3.56
1998	7 673	(7)	169	270	4.1	28.42	3.52
1999	7 512	(5)	166	312	4.7	24.08	4.15
2000	7 578	(7)	152	299	4.5	25.34	3.95
2001	7 262	(0)	192	311	4.6	23.35	4.28
2002	6 602	(0)	186	267	4.0	24.73	4.04
2003	6 024	(0)	177	275	4.1	21.91	4.57
2004	6 226	(0)	110	286	4.2	21.77	4.59
2005	6 160	(0)	77	271	4.0	22.73	4.40
2006	5 766	(0)	58	294	4.3	19.61	5.10
2007	5 463	(0)	56	231	3.3	23.65	4.23
2008	5 635	(0)	67	229	3.3	24.61	4.06
2009	5 193	(0)	68	204	2.9	25.46	3.93
2010	5 093	(0)	80	191	2.7	26.66	3.75
2011	4 794	(0)	81	187	2.6	25.64	3.90
2012	4 858	(0)	100	199	2.8	24.41	4.10
2013	4 664	(0)	92	178	2.5	26.20	3.82
2014	4 705	(0)	85	187	2.6	25.16	3.97

* 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.

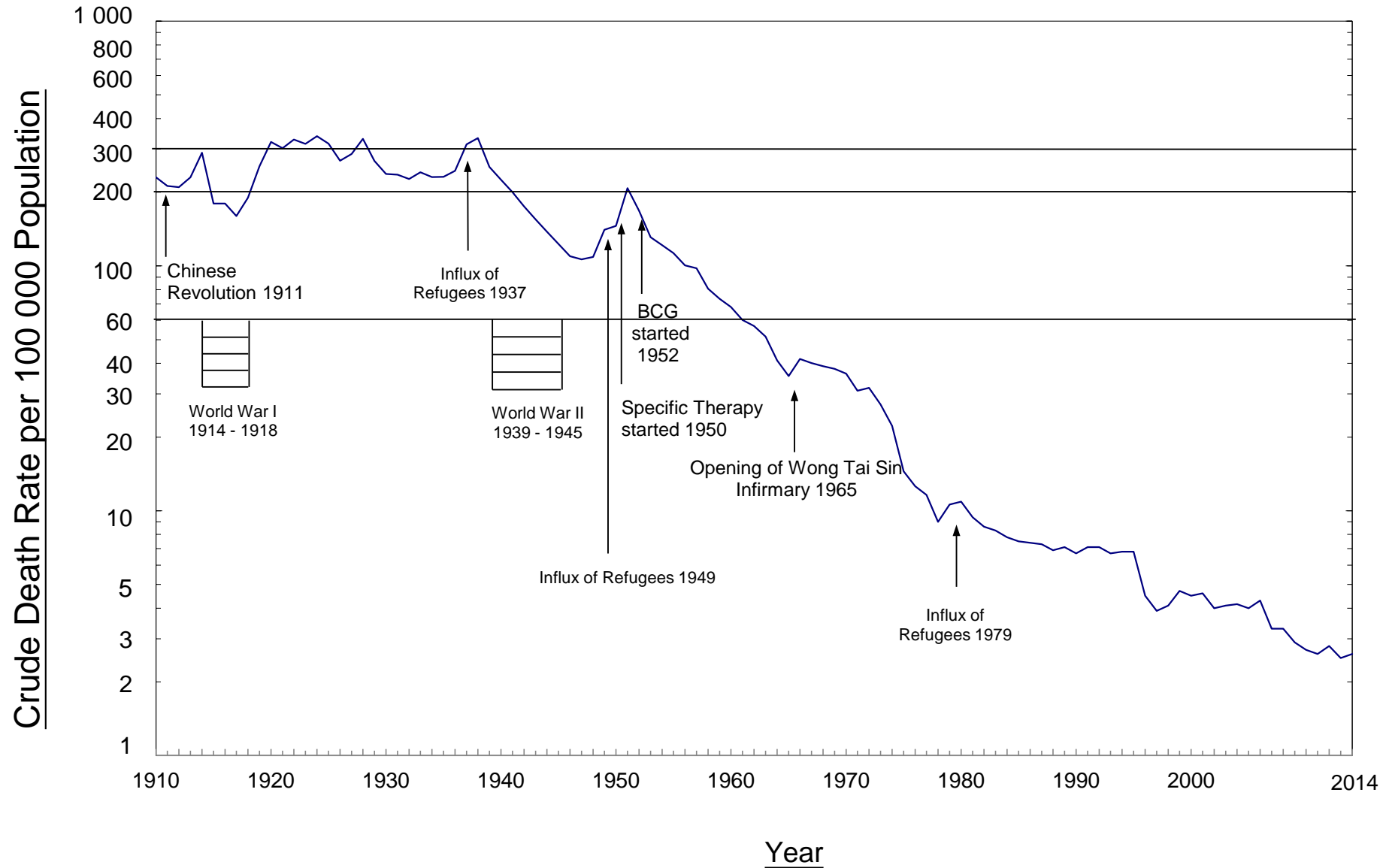
APPENDIX 2

TB Notification Rate (All Forms) 1951-2014



APPENDIX 3

Crude Death Rate due to Tuberculosis (All Forms) 1910-2014



APPENDIX 4 (a)**Tuberculosis Notifications (All Forms) & Rate by Age & Sex 2014**

Age Group	Tuberculosis Notifications (All Forms)			Tuberculosis Notifications Rate (per 100 000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	0	1	1	1.45	2.33	1.88
1	2	2	4			
2	0	0	0			
3	0	0	0			
4	0	0	0			
5-9	1	0	1	0.74	0.00	0.38
10-14	9	4	13	6.36	2.99	4.72
15-19	71	48	119	35.91	25.70	30.95
20-24	85	100	185	38.00	44.05	41.05
25-29	103	117	220	45.94	40.11	42.64
30-34	108	134	242	46.35	38.49	41.65
35-39	104	142	246	45.84	42.63	43.93
40-44	141	122	263	58.85	35.89	45.38
45-49	138	151	289	53.43	45.65	49.06
50-54	227	119	346	73.18	34.12	52.50
55-59	300	140	440	102.88	46.78	74.46
60-64	291	112	403	127.80	48.07	87.48
65-69	239	85	324	146.54	52.02	99.23
70-74	265	67	332	241.35	65.69	156.75
75-79	311	86	397	310.69	78.61	189.50
80-84	287	117	404	390.48	127.73	244.70
85 & over	316	160	476	625.74	156.10	311.11
Total	2 998	1 707	4 705	89.62	43.81	64.97

Appendix 4 (b)

Pulmonary TB Notifications by Age & Sex 2014**

Age Group	Pulmonary TB			Bacteriologically *			Smear		
	M	F	T	M	F	T	M	F	T
Under 1	1	0	1	1	0	1	0	0	0
1	2	1	3	2	0	2	1	0	1
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	1	0	1	0	0	0	0	0	0
10-14	8	4	12	6	5	11	3	2	5
15-19	57	29	86	45	23	68	25	10	35
20-24	105	48	153	77	38	115	34	13	47
25-29	122	57	179	103	34	137	37	24	61
30-34	124	60	184	98	44	142	47	21	68
35-39	133	68	201	107	49	156	49	35	84
40-44	137	74	211	114	42	156	45	15	60
45-49	174	68	242	118	65	183	50	24	74
50-54	181	95	276	144	57	201	71	29	100
55-59	245	114	359	192	69	261	93	32	125
60-64	216	109	325	158	87	245	91	29	120
65-69	181	78	259	134	58	192	61	42	103
70-74	164	98	262	122	69	191	66	32	98
75-79	216	98	314	151	73	224	73	39	112
80-84	208	113	321	166	79	245	88	35	123
85 & over	254	115	369	192	81	273	107	31	138
Total	2 529	1 229	3 758	1 930	873	2 803	941	413	1 354

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

Appendix 4(c)

Rate of Pulmonary TB Notifications by Age & Sex 2014**

(Rate per 100 000 Population)

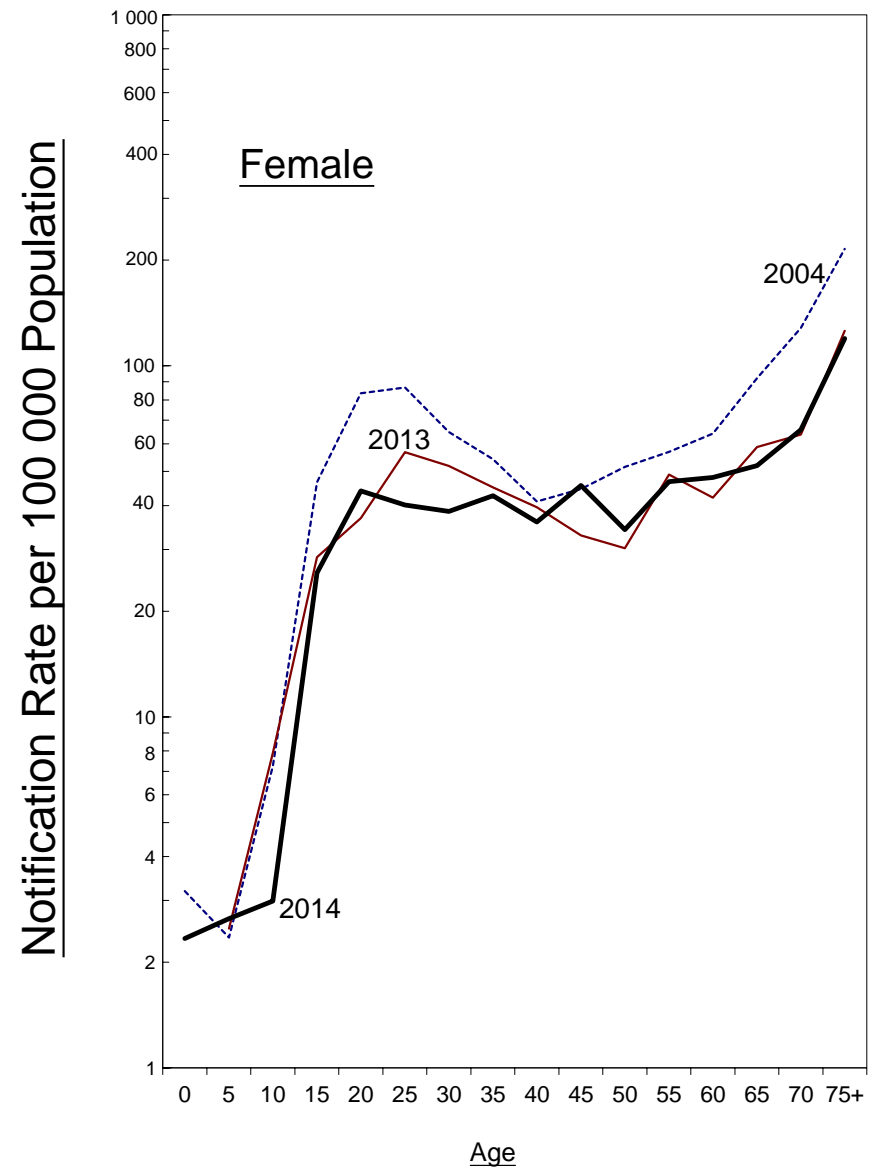
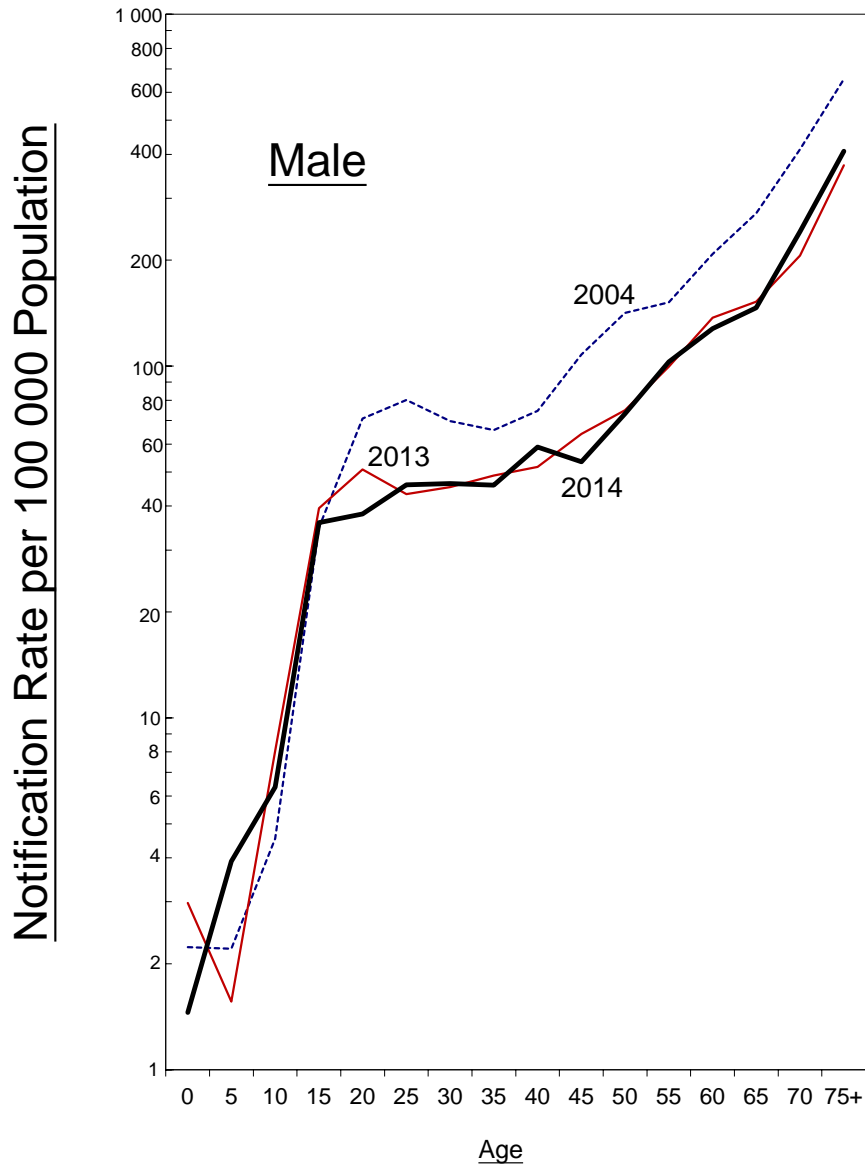
Age Group	Pulmonary TB			Bacteriologically * Positive Pulmonary TB			Smear Positive Pulmonary TB		
	M	F	T	M	F	T	M	F	T
0-4	2.2	0.8	1.5	2.2	0.0	1.1	0.7	0.0	0.4
5-9	0.7	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
10-14	5.7	3.0	4.4	4.2	3.7	4.0	2.1	1.5	1.8
15-19	28.8	15.5	22.4	22.8	12.3	17.7	12.6	5.4	9.1
20-24	46.9	21.1	33.9	34.4	16.7	25.5	15.2	5.7	10.4
25-29	54.4	19.5	34.7	45.9	11.7	26.6	16.5	8.2	11.8
30-34	53.2	17.2	31.7	42.1	12.6	24.4	20.2	6.0	11.7
35-39	58.6	20.4	35.9	47.2	14.7	27.9	21.6	10.5	15.0
40-44	57.2	21.8	36.4	47.6	12.4	26.9	18.8	4.4	10.4
45-49	67.4	20.6	41.1	45.7	19.6	31.1	19.4	7.3	12.6
50-54	58.3	27.2	41.9	46.4	16.3	30.5	22.9	8.3	15.2
55-59	84.0	38.1	60.8	65.8	23.1	44.2	31.9	10.7	21.2
60-64	94.9	46.8	70.5	69.4	37.3	53.2	40.0	12.4	26.0
65-69	111.0	47.7	79.3	82.2	35.5	58.8	37.4	25.7	31.5
70-74	149.4	96.1	123.7	111.1	67.6	90.2	60.1	31.4	46.3
75-79	215.8	89.6	149.9	150.8	66.7	106.9	72.9	35.6	53.5
80-84	283.0	123.4	194.4	225.9	86.2	148.4	119.7	38.2	74.5
85 & over	503.0	112.2	241.2	380.2	79.0	178.4	211.9	30.2	90.2
Total	75.6	31.5	51.9	57.7	22.4	38.7	28.1	10.6	18.7

** Pulmonary TB with or without extrapulmonary TB

* Either smear or culture positive

APPENDIX 5

TB Notification Rate by Age & Sex 2004, 2013 & 2014



Appendix 6

Notifications of Tuberculosis by Type by Age & Sex 2014

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	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	0	0	0	0	1	1	0	0	0	1	1	2
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	1	0	1
10-14	7	2	9	0	0	0	0	0	0	0	0	0	2	2	4
15-19	58	41	99	1	1	2	1	1	2	0	0	0	11	5	16
20-24	67	65	132	0	3	3	2	0	2	2	0	2	14	32	46
25-29	72	71	143	0	1	1	1	2	3	2	1	3	28	42	70
30-34	85	81	166	0	0	0	1	2	3	1	3	4	21	48	69
35-39	84	72	156	0	2	2	0	3	3	0	0	0	20	64	84
40-44	104	74	178	2	0	2	1	1	2	2	2	4	32	46	78
45-49	100	97	197	3	1	4	1	2	3	3	1	4	31	50	81
50-54	179	63	242	0	2	2	0	0	0	2	0	2	46	54	100
55-59	258	84	342	1	1	2	2	0	2	5	4	9	34	51	85
60-64	242	66	308	1	0	1	3	0	3	6	4	10	39	42	81
65-69	196	54	250	3	0	3	1	2	3	2	1	3	37	28	65
70-74	214	41	255	0	0	0	0	0	0	1	4	5	50	22	72
75-79	242	53	295	1	3	4	3	0	3	6	6	12	59	24	83
80-84	232	86	318	4	2	6	1	0	1	3	3	6	47	26	73
85 & over	256	112	368	4	3	7	2	1	3	0	5	5	54	39	93
Total	2 397	1 063	3 460	20	19	39 (a)	19	15	34 (b)	35	34	69 (c)	527	576	1 103 (d)*

* Including

TB lymph node	388
TB urogenital system	67
TB peritonitis, intestines, mesenteric, appendicitis	75
TB pleuritis, pleural effusion	269
TB laryngitis	5
TB skin	39
Unspecified	33

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

- (a) All miliary TB cases has coexisting pulmonary TB; also include 3 cases with coexisting TB of other extrapulmonary sites.
- (b) Including 2 cases with coexisting pulmonary TB; also include 2 cases with coexisting pulmonary TB and TB of other extrapulmonary sites, and 3 cases with coexisting TB of other extrapulmonary sites.
- (c) Including 7 cases with coexisting pulmonary TB; also include 2 cases with coexisting pulmonary TB and TB of other extrapulmonary sites, and 2 cases with coexisting TB of other extrapulmonary sites.
- (d) Including 227 cases with coexisting pulmonary TB.

Pulmonary TB only, without extrapulmonary site involvement

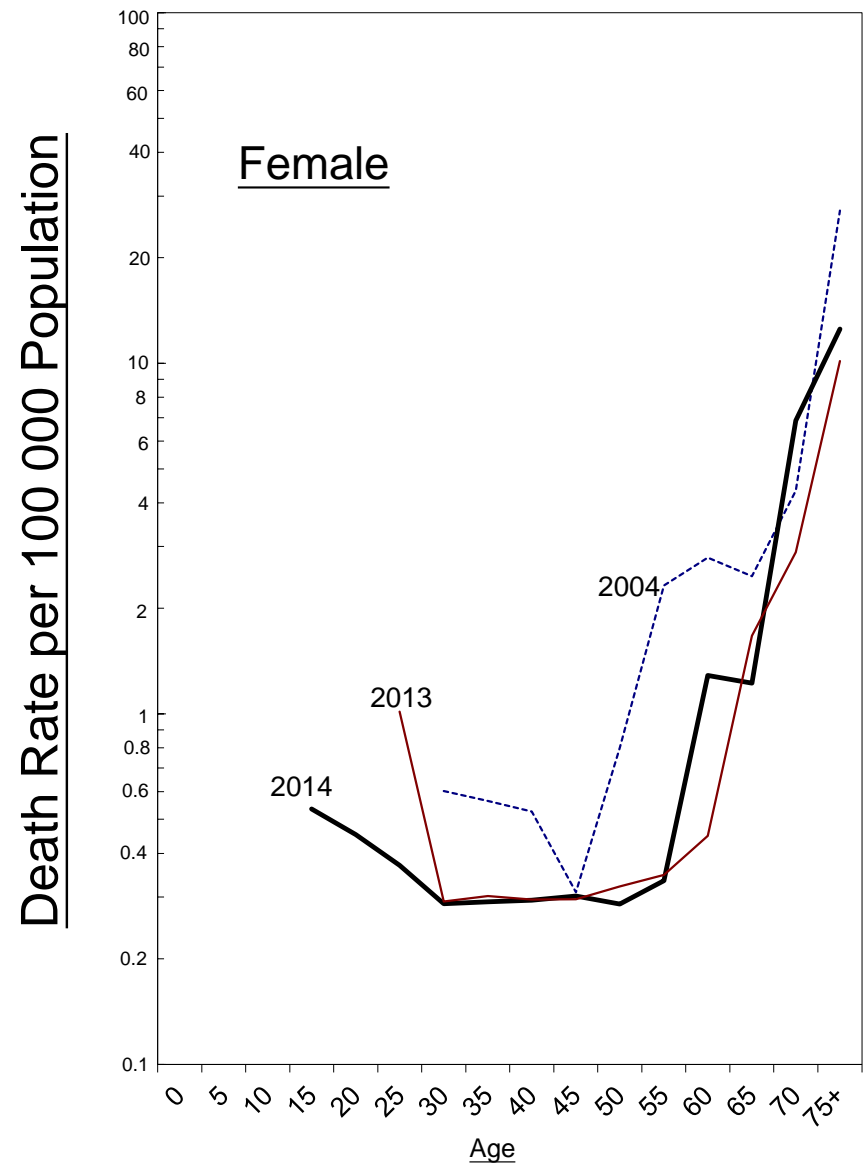
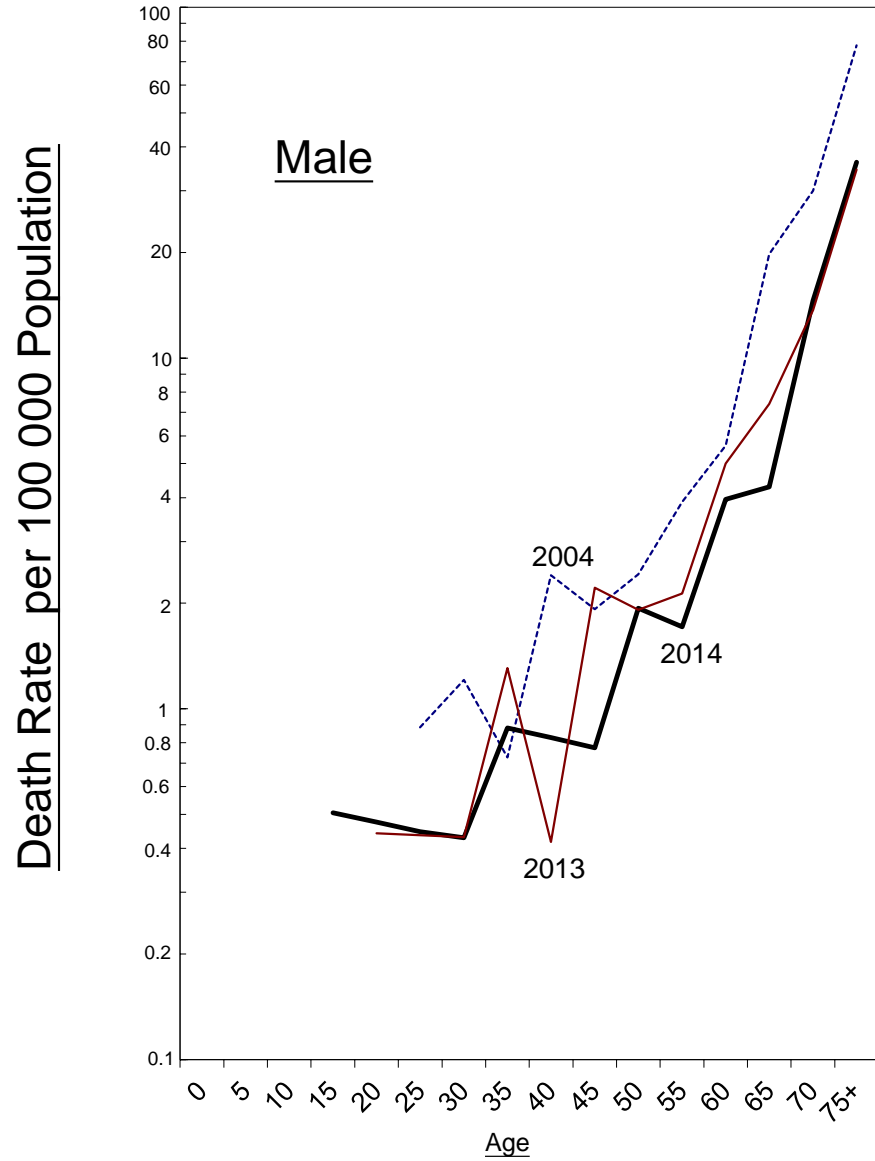
APPENDIX 7

TB Death (All Forms) & Death Rate by Age & Sex 2014

Age Group	Tuberculosis Death (All Forms)			Death Rate (per 100 000 population)		
	Male	Female	Total	Male	Female	Total
Under 1	0	0	0	0.00	0.00	0.00
1	0	0	0			
2	0	0	0			
3	0	0	0			
4	0	0	0			
5-9	0	0	0	0.00	0.00	0.00
10-14	0	0	0	0.00	0.00	0.00
15-19	1	1	2	0.51	0.54	0.52
20-24	0	0	0	0.00	0.00	0.00
25-29	1	0	1	0.45	0.00	0.19
30-34	1	1	2	0.43	0.29	0.34
35-39	2	0	2	0.88	0.00	0.36
40-44	0	1	1	0.00	0.29	0.17
45-49	2	1	3	0.77	0.30	0.51
50-54	6	1	7	1.93	0.29	1.06
55-59	5	1	6	1.71	0.33	1.02
60-64	9	3	12	3.95	1.29	2.60
65-69	7	2	9	4.29	1.22	2.76
70-74	16	7	23	14.57	6.86	10.86
75-79	23	4	27	22.98	3.66	12.89
80-84	23	11	34	31.29	12.01	20.59
85 & over	35	23	58	69.31	22.44	37.91
Total	131	56	187	3.92	1.44	2.58

APPENDIX 8

TB Mortality Rate by Age & Sex 2004, 2013 & 2014



Appendix 9

TB Deaths by Type by Age & Sex 2014

Age Group	Pulmonary only #			Miliary			Meninges			Bones & Joints			Others		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Under 1	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	1	1	0	0	0	1	0	1	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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0
35-39	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
45-49	1	1	2	1	0	1	0	0	0	0	0	0	0	0	0
50-54	5	1	6	1	0	1	0	0	0	0	0	0	0	0	0
55-59	3	1	4	2	0	2	0	0	0	0	0	0	0	0	0
60-64	7	3	10	1	0	1	1	0	1	0	0	0	0	0	0
65-69	7	2	9	0	0	0	0	0	0	0	0	0	0	0	0
70-74	14	5	19	0	1	1	0	0	0	0	1	1	2	0	2
75-79	20	2	22	0	1	1	1	0	1	1	0	1	1	1	2
80-84	22	8	30	0	1	1	0	1	1	0	0	0	1	1	2
85 & over	35	21	56	0	2	2	0	0	0	0	0	0	0	0	0
Total	117	47	164	6	5	11	3	1	4	1	1	2	4	2	6 *

* Breakdown of Deaths from other forms of TB:-	Number
Tuberculosis of genitourinary system	1
Tuberculosis of intestines, peritoneum & mesenteric glands	5
Total	<u>6</u>

Pulmonary TB only, without extrapulmonary site involvement.

Appendix 10

Tuberculosis Mortality 1950 - 2014

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

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 2014

Rank	Causes of Death	Detailed List No.	2014		
		ICD 10th Revision	Male	Female	Total
	All Causes		25 378	20 328	45 710 (4)
1	Malignant neoplasms	C00-C97	8 223	5 580	13 803
2	Pneumonia	J12-J18	4 038	3 464	7 502
3	Diseases of heart	I00-I09, I11 I13, I20-I51	3 510	2 895	6 405
4	Cerebrovascular diseases	I60-I69	1 717	1 619	3 336
5	External causes of morbidity and mortality #	V01-Y89	1 175	659	1 834
6	Chronic lower respiratory diseases *	J40-J47	1 310	432	1 742
7	Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	813	871	1 684
8	Dementia	F01-F03	445	667	1 112
9	Septicaemia	A40-A41	383	501	884
10	Diabetes mellitus	E10-E14	186	204	390
	Tuberculosis (including late effects of tuberculosis)		131	56	187
	All other causes	Residues of all causes	3 447	3 380	6 831 (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
2004 - 2014**

Origin	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
East Kowloon Chest Clinic	121	132	86	121	129	100	99	105	101	83	83
Kowloon Chest Clinic	330	287	231	220	184	171	165	122	154	167	127
Sai Ying Pun Chest Clinic	148	112	92	108	86	69	80	71	89	79	70
Shaukiwan Chest Clinic	138	111	104	128	105	80	72	74	65	74	66
Shaukiwan Pneumoconiosis	29	10	15	13	13	16	6	9	10	2	9
Shek Kip Mei Chest Clinic	157	140	96	111	127	92	87	90	101	95	80
South Kwai Chung Chest Clinic	261	282	224	187	200	158	166	146	158	122	127
Tai Po Chest Clinic	112	101	92	79	81	63	71	86	82	93	64
Wanchai Chest Clinic	223	214	191	169	168	170	143	118	110	113	95
Yan Oi Chest Clinic	290	263	238	165	179	172	152	173	144	146	104
Yaumatei Chest Clinic	203	249	204	151	137	139	131	128	132	112	101
Yuen Chau Kok Chest Clinic	181	148	136	122	116	124	131	112	108	110	98
Yung Fung Shee Chest Clinic	178	174	148	120	147	118	131	112	116	86	92
Castle Peak Hospital (Chest Clinic)	5	3	3	4	5	0	0	0	2	0	0
Cheung Chau Chest Clinic	2	3	1	1	2	1	1	1	1	0	0
Sai Kung Chest Clinic	7	4	9	5	9	1	3	6	4	4	2
Sheung Shui Chest Clinic	54	64	61	53	45	42	63	33	21	30	33
Tung Chung Chest Clinic	16	11	15	12	9	7	11	13	9	11	11
Yuen Long Chest Clinic	80	93	69	64	67	73	80	48	39	66	51
Sub-total	2 535	2 401	2 015	1 833	1 809	1 596	1 592	1 447	1 446	1 393	1 213
Grantham Hospital	257	165	176	215	209	214	180	163	138	148	140
Haven of Hope Hospital	137	127	124	124	87	103	65	80	68	77	95
Kowloon Hospital	205	113	142	108	120	84	108	92	97	64	74
Ruttonjee Hospital	263	256	264	218	165	183	170	176	165	127	140
Wong Tai Sin Hospital	189	184	140	90	104	82	105	57	58	86	69
Other Govt. Institutions (a)	87	84	60	66	78	54	64	62	54	51	61
Other H.A. Hospitals	2 301	2 543	2 538	2 530	2 648	2 472	2 425	2 364	2 497	2 377	2 578
Private Practitioners	136	156	164	90	83	57	101	100	109	118	129
Private Hospitals	116	131	143	189	332	348	283	253	226	223	206
Total	6 226	6 160	5 766	5 463	5 635	5 193	5 093	4 794	4 858	4 664	4 705
% of cases from Chest Clinics among the total	40.7	39.0	34.9	33.6	32.1	30.7	31.3	30.2	29.8	29.9	25.8
% from Chest Hospitals (b)	16.9	13.7	14.7	13.8	12.2	12.8	12.3	11.8	10.8	10.8	11.0
% from Other Public Hospitals	38.4	42.6	45.1	47.5	48.4	48.6	48.9	50.6	52.5	52.1	56.1
% from Private Sector	4.0	4.7	5.3	5.1	7.4	7.8	7.5	7.4	6.9	7.3	7.1

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" 2014

Name of Hospital	No. of TB Notification
Alice Ho Miu Ling Nethersole Hospital	88
Caritas Medical Centre	149
Cheshire Home, Chung Hom Kok	1
Hong Kong Buddhist Hospital	4
Kwong Wah Hospital	164
North District Hospital	144
North Lantau Hospital	1
Our Lady of Maryknoll Hospital	15
Pamela Youde Nethersole Eastern Hospital	166
Pok Oi Hospital	61
Prince of Wales Hospital	312
Princess Margaret Hospital	255
Queen Elizabeth Hospital	289
Queen Mary Hospital	134
Shatin Hospital	11
Tai Po Hospital	6
The Duchess of Kent Children's Hospital	1
Tseung Kwan O Hospital	120
Tuen Mun Hospital	264
Tung Wah Eastern Hospital	7
Tung Wah Group of Hospitals Fung Yiu King Hospital	1
Tung Wah Hospital	6
United Christian Hospital	260
Yan Chai Hospital	119
Total	2 578

Appendix 13

Tuberculosis Notifications & Notification Rates

by District Council District 2014

District Council District	Notification	Notification Rate (per 100 000 pop.)
<u>Hong Kong Island</u>	777	61.4
Central & Western	136	54.0
Wanchai	102	67.1
Eastern	355	60.7
Southern	184	66.3
<u>Kowloon</u>	1 626	74.1
Kowloon City	251	61.4
Kwun Tong	462	71.6
Sham Shui Po	359	90.9
Wong Tai Sin	327	76.2
Yau Tsim Mong	227	71.6
<u>NT (East)</u>	1 105	59.2
Islands	72	48.8
Northern	204	66.2
Sai Kung/Tseung Kwan O	237	52.5
Shatin	432	66.2
Tai Po	160	52.3
<u>NT (West)</u>	1 126	58.8
Kwai Tsing	372	72.9
Tsuen Wan	152	49.8
Tuen Mun	281	56.5
Yuen Long	321	53.4
Marine	0	0.0
Unknown	8	0.0
Others	63	0.0
Total	4 705	65.0

Appendix 14

Establishment & Strength of TB & Chest Service

As at 1.12.2014

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	21
Senior Nursing Officer	1	1
Nursing Officer	15	11
Registered Nurse	75	80
Enrolled Nurse	74	72
Senior Dispenser	9	9
Dispenser	2	3
Executive Officer I	1	1
Statistical Officer II	3	3
Personal Secretary I	1	1
Clerical Officer	16	15
Assistant Clerical Officer	20	21
Clerical Assistant	54	54
Office Assistant	9	8
Workman II	45	55
Senior Radiographer	3	3
Radiographer I	8	8
Radiographer II	21	20
Radiographic Technician	4	4
Darkroom Technician	10	8

Appendix 15
Total Attendances at Chest Clinics
2004 - 2014

Clinic/Hospital	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
East Kowloon Chest Clinic	58 535	61 835	56 737	63 191	59 670	56 566	58 167	55 678	49 894	51 368	52 449
Kowloon Chest Clinic	86 502	77 337	73 627	67 093	62 017	56 658	56 523	47 693	50 666	52 766	52 423
Sai Ying Pun Chest Clinic	46 974	45 159	42 034	42 770	40 126	36 036	34 502	36 441	36 877	33 892	33 274
Shaukiwan Chest Clinic	50 828	50 699	49 667	48 207	50 618	45 028	41 263	41 804	40 600	42 335	44 417
Shaukiwan Pneumoconiosis	8 098	9 144	8 866	8 359	8 501	8 187	7 719	6 869	6 576	6 137	5 433
Shek Kip Mei Chest Clinic	60 382	60 789	57 848	58 679	52 161	54 933	49 216	49 500	47 853	49 164	51 852
South Kwai Chung Chest Clinic	75 487	80 015	79 455	78 238	81 441	82 044	81 923	75 752	78 785	75 062	73 740
Tai Po Chest Clinic (Full Time)	30 879	35 347	35 728	34 769	33 297	35 492	36 215	37 628	39 318	41 316	32 443
Tung Chung (Full Time)	1 928	-	-	-	-	-	-	-	-	-	-
Wanchai Chest Clinic	60 406	57 906	58 545	56 790	50 465	50 461	49 609	48 893	46 777	47 901	49 276
Yan Oi Chest Clinic	70 168	72 078	72 144	70 643	66 058	63 411	67 564	63 333	67 804	64 184	60 278
Yaumatei Chest Clinic	70 294	80 708	72 180	69 549	68 587	70 439	68 633	68 164	62 688	61 905	60 937
Yuen Chau Kok Chest Clinic	56 322	59 328	57 680	55 454	57 211	60 481	58 027	65 627	59 542	67 573	60 396
Yung Fung Shee Chest Clinic	71 269	78 279	72 570	73 944	71 767	74 196	80 444	73 038	74 204	75 140	67 274
Castle Peak Hospital	373	317	241	240	192	146	149	145	146	124	126
Cheung Chau Chest Clinic	2 032	2 066	1 589	2 318	1 411	869	1 206	1 286	1 349	1 356	1 273
Sai Kung Chest Clinic	2 495	2 382	2 542	2 280	1 885	1 745	2 277	1 861	1 546	1 542	1 371
Sheung Shui Chest Clinic	23 211	22 601	21 765	22 333	21 909	22 468	22 303	21 775	17 495	15 308	16 827
Tung Chung (Part Time)	2 802	5 173	4 447	4 086	4 263	5 137	4 433	4 447	4 248	4 303	4 091
Yuen Long Chest Clinic	31 054	33 056	29 344	27 960	29 979	29 935	30 729	30 201	27 413	29 929	27 377
Hei Ling Chau ATC	1 670	585	472	282	290	344	303	202	190	240	162
Lai Chi Kok Reception Centre	723	479	356	519	412	379	303	330	365	279	250
Shek Pik Prison Hospital	211	141	157	188	232	201	186	94	140	192	184
Stanley Prison Hospital	7 459	527	603	665	796	719	687	688	529	488	443
Total	820 102	835 951	798 597	788 557	763 288	755 875	752 381	731 449	715 005	722 504	696 296

Appendix 16

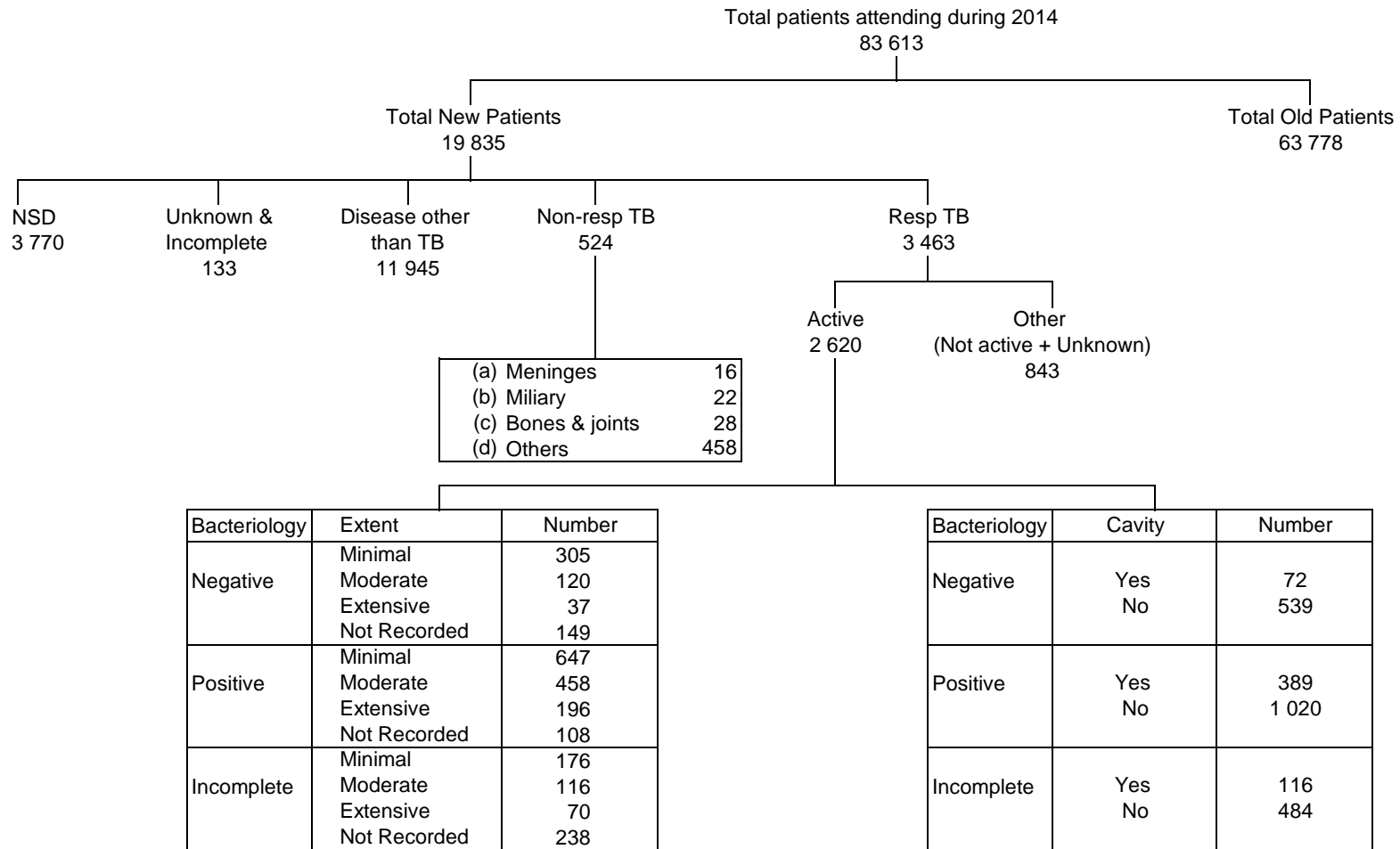
No. of Doctor Sessions, Cases Seen by Doctor and Patient/Doctor Session 2014

Clinic/Hospital	Doctor Sessions	Cases Seen by Doctor	Patient/Doctor Session
<u>Full Time Clinics</u>			
East Kowloon	581	12 651	22
Kowloon	827	17 723	21
Pneumoconiosis	350	5 445	16
Sai Ying Pun	607	10 568	17
Shaukeiwan	569	11 676	21
Shek Kip Mei	579	12 225	21
South Kwai Chung	1 056	23 159	22
Tai Po	533	8 542	16
Wanchai	747	15 881	21
Yan Oi	841	19 790	24
Yaumatei	1 011	15 254	15
Yuen Chau Kok	825	16 164	20
Yung Fung Shee	662	16 035	24
Sub-total	9 188	185 113	20
<u>Part Time Clinics</u>			
Castle Peak	22	126	6
Cheung Chau	23	278	12
Sai Kung	49	541	11
Sheung Shui	298	3 980	13
Tung Chung	146	1 845	13
Yuen Long	396	7 124	18
Sub-total	934	13 894	15
<u>Institutions Correctional Services Department</u>			
Hei Ling Chau	14	162	12
Lai Chi Kok Reception Center	51	212	4
Shek Pik	13	184	14
Stanley Prison	25	433	17
Sub-total	103	991	10
Total	10 225	199 998	20

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

Appendix 17

Flow Chart of Patients Attending Chest Clinics 2014 *



* A total of 83 613 patients attended, comprising 63 778 old cases and 19 835 new cases. Among new cases, 3 463 had respiratory TB with 2 620 being active, 524 had non-respiratory TB, 11 945 had diseases other than TB, 133 had unknown and incomplete diagnoses, and 3 770 had NSD (no specific diagnosis). Of the 524 new cases with non-respiratory TB, 16 had TB affecting meninges, 22 had miliary TB, 28 had TB affecting bones and joints, and 458 had TB affecting other sites.

Among the 2 620 new cases with active respiratory TB, in terms of bacteriology (negative, positive, or incomplete) and cavity, 72 were negative with cavity, 539 were negative without cavity, 389 were positive with cavity, 1 020 were positive without cavity, 116 were incomplete with cavity, and 484 were incomplete without cavity. In terms of bacteriology and extent of disease (minimal, moderate, extensive or not recorded), 305 were negative with extent minimal, 120 were negative with extent moderate, 37 were negative with extent extensive, 149 were negative with extent not recorded, 647 were positive with extent minimal, 458 were positive with extent moderate, 196 were positive with extent extensive, 108 were positive with extent not recorded, 176 were incomplete with extent minimal, 116 were incomplete with extent moderate, and 70 were incomplete with extent extensive, 238 were incomplete with extent not recorded.

Appendix 18

Classification of Patients of First Attendance with New Case Card Completed By Clinics According to International Classification of Diseases Code 2014

Code		Classification	Total
ICD 9	ICD 10		
010	A15.7, A16.7	Primary Tuberculosis Infection	0
011	A15.0-15.3, A16.0-16.3	Pulmonary Tuberculosis	2 254
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	23
014	A18.3	Tuberculosis of Intestines	56
015	A18.0	Tuberculosis of Bones & Joints	29
016	A18.1	Tuberculosis of Genito-urinary System	39
017	A18.2, A18.4-18.8	Tuberculosis of Other Organs	369
018	A19.0-19.2, A19.8-19.9	Miliary Tuberculosis	22
137	B90.0-90.2, B90.8-90.9	Late effects of Tuberculosis	668
160-165	C30-C39, C34.0-34.3, C34.8-34.9	Malignant Neoplasm of Respiratory System	241
212	D14.0-14.4	Benign Neoplasm of Respiratory System	1
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	725
470-478	J30-39, J30.0-30.4, J39.9	Other Diseases of Upper Resp Tract	44
480-486	J09-J18, J12.9, J15.0-15.2, J15.5-15.9	Pneumonia	8
487	J09, J10.0-10.1, J10.8, J11.0-11.1, J11.8	Influenza	11
490-491	J40, J41.0-41.1, J41.8, J42	Bronchitis, (not specified as acute or chronic) & chronic brochitis	2 123
492	J43, J43.0-43.2, J43.8-43.9	Emphysema	17
493	J45, J45.0-45.1, J45.8-45.9, J46	Asthma	90
494	J47	Bronchiectasis	326
495-496	J44, J44.0-44.1, J44.8-44.9	Others	155
501	J61	Asbestosis	0
502	J62, J62.0, J62.8	Silicosis	24
505	J64	Pneumoconiosis, unspecified	3
506-508	J63	Others	0
510	J86	Pyothorax (Empyema)	1
511	J90	Pleurisy	45
512	J93, J93.0-93.1, J93.8-93.9	Pneumothorax	13
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	2 430
V71	Z00, Z01.6, Z02, Z02.1-02.2, Z02.6-02.9, Z11.1, Z71.1	N.S.D.	3 627
		Diseases Other than TB & Resp System	6 166
Total			19 835

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

2012-2014

Extent *	2012		2013		2014	
	No.	%	No.	%	No.	%
1. Minimal	1 211	42.4	1 221	44.9	1 128	43.1
2. Moderate	765	26.8	682	25.1	694	26.5
3. Extensive	305	10.7	234	8.6	303	11.6
4. Not Recorded	574	20.1	584	21.5	495	18.9
Total	2 855	100.0	2 721	100.0	2 620	100.0
No. of first attenders	21 058		20 644		19 835	
% of active TB	13.6		13.2		13.2	

- * 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 2014

	Number	%
Smear +	896	34.2
Smear - Culture +	701	26.8
Smear - Culture -	553	21.1
Incomplete	470	17.9
Total	2 620	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 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	6.98	6.98	13.95	25.58	16.28	2.33	9.30	6.98	27.91	43
	Previously treated cases	66.67	66.67	66.67	33.33	0.00	0.00	66.67	66.67	66.67	3
	Overall	10.87	10.87	17.39	26.09	15.22	2.17	13.04	10.87	30.43	46
20 - 39	New cases	0.87	0.87	4.78	8.26	7.83	1.74	0.87	0.87	10.43	230
	Previously treated cases	11.11	11.11	22.22	11.11	11.11	0.00	11.11	11.11	22.22	9
	Overall	1.26	1.26	5.44	8.37	7.95	1.67	1.26	1.26	10.88	239
40 - 59	New cases	0.81	1.08	6.18	9.14	10.75	2.42	0.54	0.81	13.71	372
	Previously treated cases	10.81	8.11	16.22	24.32	24.32	2.70	8.11	5.41	25.14	37
	Overall	1.71	1.71	7.09	10.51	11.98	2.44	1.22	1.22	15.65	409
60 up	New cases	0.58	0.39	3.89	7.78	6.23	2.53	0.39	0.39	9.14	514
	Previously treated cases	1.18	0.00	8.24	5.88	5.88	4.71	0.00	0.00	10.59	85
	Overall	0.67	0.33	4.51	7.51	6.18	2.84	0.33	0.33	9.35	599
All	New cases	0.95	0.95	5.18	8.97	8.37	2.33	0.86	0.86	11.56	1 159
	Previously treated cases	5.97	4.48	12.69	11.94	11.19	3.73	4.48	3.73	19.40	134
	Overall	1.47	1.31	5.96	9.28	8.66	2.47	1.24	1.16	12.37	1 293

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 2014:

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	1 159	100	134	100	1 293	100
Susceptible to all 4 drugs	1 025	88.44	108	80.60	1 133	87.63
Any resistance	134	11.56	26	19.40	160	12.37
H	60	5.18	17	12.69	77	5.96
R	11	0.95	6	4.48	17	1.31
E	11	0.95	8	5.97	19	1.47
S	104	8.97	16	11.94	120	9.28
Mono-resistance	97	8.37	15	11.19	112	8.66
H	23	1.98	6	4.48	29	2.24
R	1	0.09	1	0.75	2	0.15
E	2	0.17	1	0.75	3	0.23
S	71	6.13	7	5.22	78	6.03
Multidrug resistance	10	0.86	5	3.73	15	1.16
H+R	1	0.09	0	0.00	1	0.08
H+R+E	0	0.00	1	0.75	1	0.08
H+R+S	4	0.35	0	0.00	4	0.31
H+R+E+S	5	0.43	4	2.99	9	0.70
Other patterns	27	2.33	6	4.48	33	2.55
H+E	3	0.26	1	0.75	4	0.31
H+S	23	1.98	4	2.99	27	2.09
H+E+S	1	0.09	1	0.75	2	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	1 025	88.44	108	80.60	1 133	87.63
1 drug	97	8.37	15	11.19	112	8.66
2 drugs	27	2.33	5	3.73	32	2.47
3 drugs	5	0.43	2	1.49	7	0.54
4 drugs	5	0.43	4	2.99	9	0.70

APPENDIX 19 (c1)

Rate of Drug-resistant Tuberculosis

Among cases (mainly cases seen at chest clinics) registered during the period January to December 2013 (Data from Programme Forms)

Age Group	Category	% resistance to				* % resistance to			MDR-TB	# Total % resistance	Total no. of cases analysed
		E	R	H	S	1 drug	2 drugs	≥ 3 drugs			
0 - 19	New cases	0.00	1.96	4.90	19.61	19.61	1.96	0.98	0.98	22.55	102
	Previously treated cases	0.00	0.00	0.00	12.50	12.50	0.00	0.00	0.00	12.50	8
	Overall	0.00	1.82	4.55	19.09	19.09	1.82	0.91	0.91	21.82	110
20 - 39	New cases	0.75	1.12	3.18	7.29	7.10	1.68	0.56	0.93	9.35	535
	Previously treated cases	2.44	4.88	9.76	17.07	9.76	7.32	2.44	4.88	19.51	41
	Overall	0.87	1.39	3.65	7.99	7.29	2.08	0.69	1.22	10.07	576
40 - 59	New cases	0.55	1.24	5.53	8.85	8.44	2.77	0.69	0.69	11.89	723
	Previously treated cases	1.27	3.80	7.59	13.92	10.13	3.80	2.53	2.53	16.46	79
	Overall	0.62	1.50	5.74	9.35	8.60	2.87	0.87	0.87	12.34	802
60 up	New cases	0.47	0.76	4.17	6.91	7.39	1.61	0.47	0.57	9.47	1 056
	Previously treated cases	0.72	1.44	5.42	8.66	9.03	1.44	1.44	1.44	11.91	277
	Overall	0.53	0.90	4.43	7.28	7.73	1.58	0.68	0.75	9.98	1 333
All	New cases	0.54	1.03	4.39	8.22	8.15	1.99	0.58	0.70	10.72	2 416
	Previously treated cases	0.99	2.22	6.17	10.62	9.38	2.47	1.73	1.98	13.58	405
	Overall	0.60	1.21	4.64	8.47	8.33	2.06	0.74	0.89	11.13	2 821

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 2013:

	New case		Previously treated cases		Combined	
	N	%	N	%	N	%
Total number of strains tested	2 416	100	405	100	2 821	100
Susceptible to all 4 drugs	2 157	89.28	350	86.42	2 507	88.87
Any resistance	259	10.72	55	13.58	314	11.13
H	106	4.39	25	6.17	131	4.64
R	25	1.03	9	2.22	34	1.21
E	13	0.54	4	0.99	17	0.60
S	196	8.11	43	10.62	239	8.47
Monoresistance	197	8.15	38	9.38	235	8.33
H	44	1.82	8	1.98	52	1.84
R	8	0.33	1	0.25	9	0.32
E	1	0.04		0.00	1	0.04
S	144	5.96	29	7.16	173	6.13
Multidrug resistance	17	0.70	8	1.98	25	0.89
H+R	4	0.17	1	0.25	5	0.18
H+R+E	3	0.12	2	0.49	5	0.18
H+R+S	5	0.21	3	0.74	8	0.28
H+R+E+S	5	0.21	2	0.49	7	0.25
Other patterns	45	1.86	9	2.22	54	1.91
H+E	3	0.12	0	0.00	3	0.11
H+S	41	1.70	9	2.22	50	1.77
H+E+S	1	0.04	0	0.00	1	0.04
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	2 157	89.28	350	86.42	2 507	88.87
1 drug	197	8.15	38	9.38	235	8.33
2 drugs	48	1.99	10	2.47	58	2.06
3 drugs	9	0.37	5	1.23	14	0.50
4 drugs	5	0.21	2	0.49	7	0.25

Appendix 19 (d1)

Trend of anti-TB drug resistance (1998-2014) (Data from Programme Forms)

New cases

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 (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	0.95
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	0.95
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	5.18
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	8.97
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	0.86
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	11.56

Previously treated cases

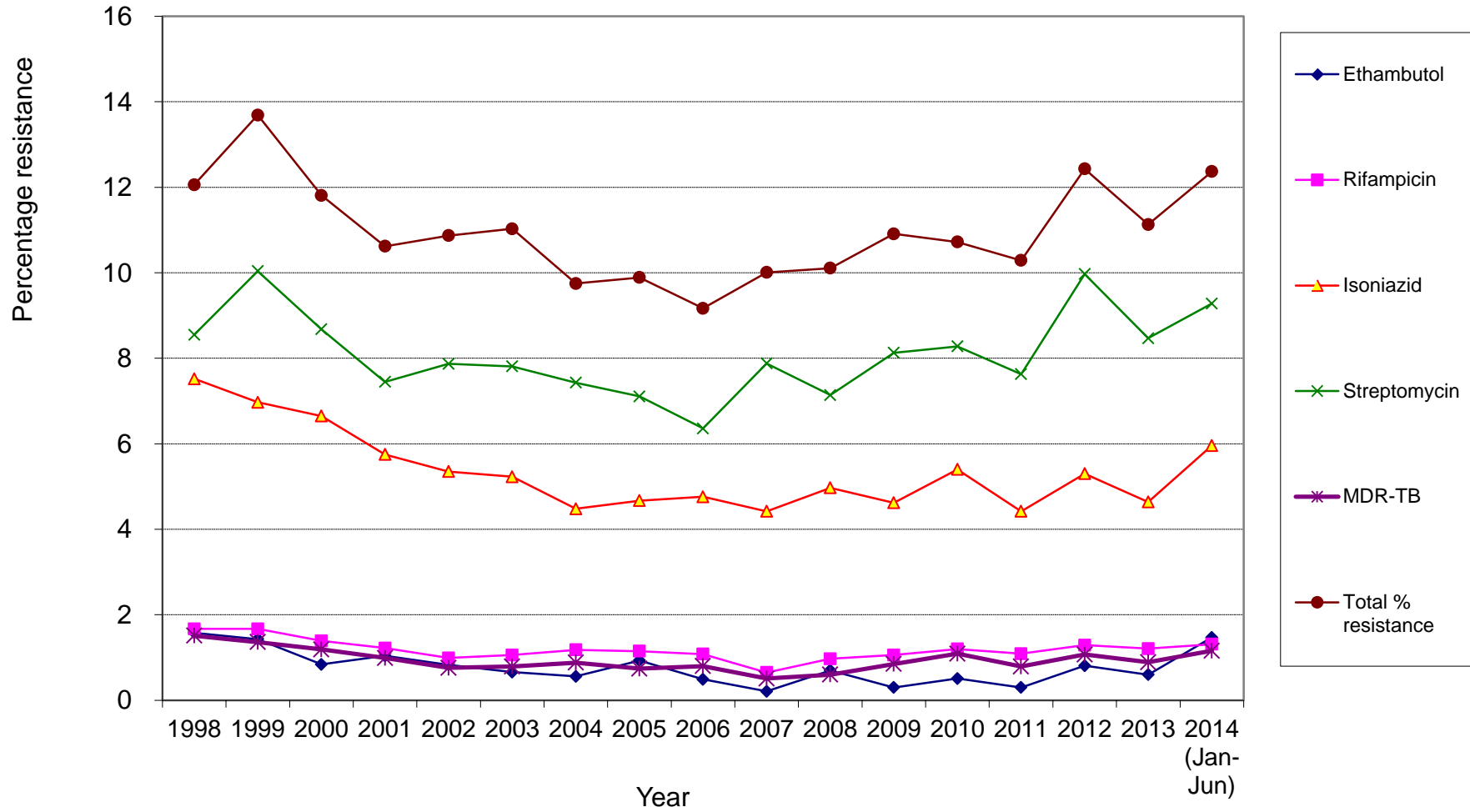
(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 (Jan-Jun)
Ethambutol	3.51	3.16	2.68	1.85	2.04	2.19	2.14	3.92	1.61	0.90	2.65	0.47	2.56	0.00	1.70	0.99	5.97
Rifampicin	4.61	6.09	5.98	3.71	4.59	3.41	4.29	3.64	2.90	2.10	3.53	1.73	4.47	2.84	4.08	2.22	4.48
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	12.69
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	11.94
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	3.73
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	19.40

Overall

(Percentages)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 (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	1.47
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	1.31
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	5.96
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	9.28
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	1.16
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	12.37

Appendix 19 (d2)

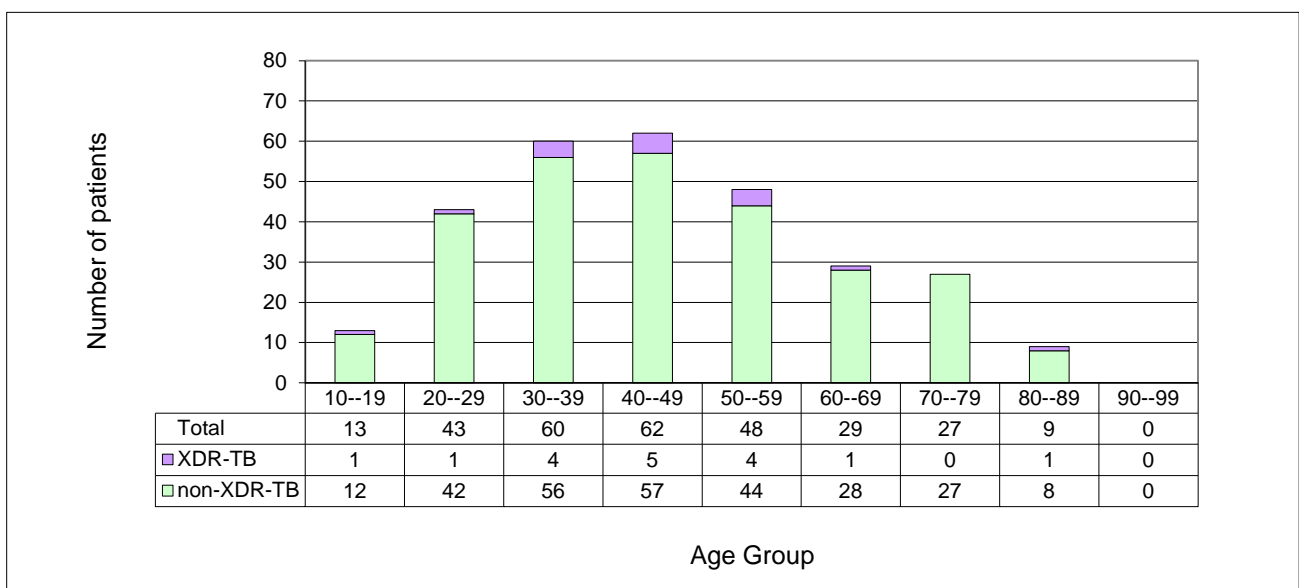
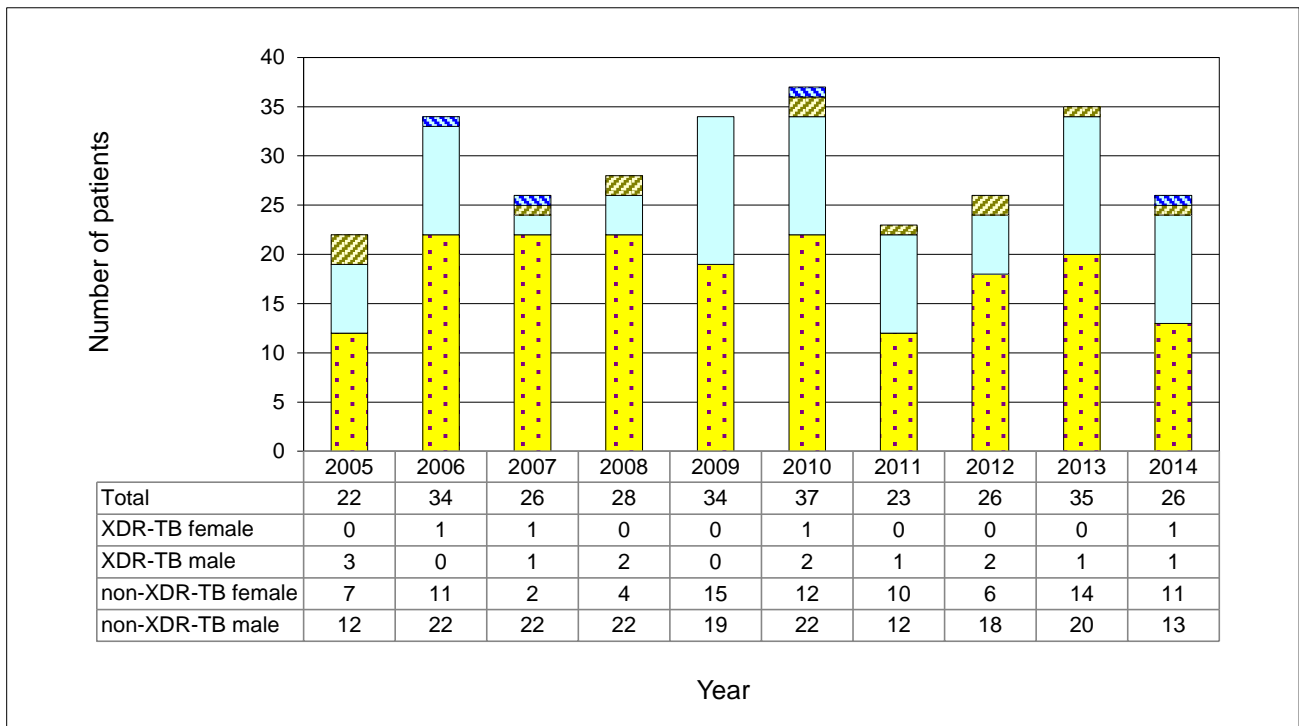
Trend of anti-TB drug resistance (1998-2014) (Overall) (Data from Programme Forms)



Appendix 19 (e)

MDR-TB and XDR-TB by Sex and Year (Upper Graph) and by Age (Lower Graph) (2005-2014)

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 2014

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							
<u>Full Time Clinics</u>																												
East Kowloon	166	121	2	10	109	59	1	34	177	1	92.5	43	9	0	12	0	2	0	1	0	0	1	0.4	186	7	82	0	
Kowloon	198	146	17	18	111	49	9	33	212	2	86.9	43	21	0	15	0	7	1	10	0	0	3	1.1	183	0	51	0	
South Kwai Chung	200	149	3	11	189	53	6	45	223	6	85.9	38	18	0	19	1	10	1	3	0	1	4	1.6	230	2	9	0	
Sai Ying Pun	89	60	5	8	110	37	1	31	121	2	84.0	28	12	0	12	2	10	0	3	0	0	0	0.0	87	0	48	1	
Shaueiwan	140	115	5	12	83	34	12	57	122	3	88.6	21	14	0	9	1	3	2	2	1	0	4	2.5	138	0	48	0	
Shek Kip Mei	106	107	7	8	138	37	4	58	144	4	84.9	31	14	0	17	0	6	7	7	1	1	0	0.8	109	0	95	12	
Tai Po	161	81	1	2	61	19	3	38	140	2	89.9	0	7	0	8	2	5	0	2	0	0	1	0.5	117	0	0	0	
Wanchai	133	110	6	3	80	42	9	67	121	5	86.2	26	12	0	2	1	17	1	1	0	4	0	1.8	108	2	18	0	
Yan Oi	123	139	4	7	135	55	7	65	190	2	85.9	46	13	0	18	1	9	2	6	0	0	6	2.0	98	0	97	0	
Yaumatei	179	112	6	6	124	54	7	25	161	2	79.1	36	16	0	14	3	16	0	0	1	5	8	6.0	187	0	52	10	
Yuen Chau Kok	208	146	6	5	102	27	3	66	187	2	85.2	21	13	0	26	0	10	1	5	0	0	1	0.3	159	0	26	1	
Yung Fung Shee	217	177	7	8	136	46	9	55	245	7	89.3	62	15	0	8	2	9	3	3	0	1	6	2.1	166	1	69	0	
Sub-total	1 920	1 463	69	98	1 378	512	71	574	2 043	38	86.5	395	164	0	160	13	104	18	43	3	12	34	1.6	1 768	12	595	24	
<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	1	0	0	0	1	2	0	0	1	0	100.0	0	2	0	0	0	0	0	0	0	0	0	0.0	1	0	0	0	
Cheung Chau	3	0	0	0	1	5	0	0	4	0	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	5	0	1	0	
Sai Kung	11	5	0	0	2	1	0	2	9	0	91.7	1	1	0	1	0	0	0	0	0	0	0	0.0	5	0	1	0	
Sheung Shui	75	52	2	4	67	8	1	20	74	0	87.0	10	4	0	5	1	3	0	1	0	1	3	3.7	85	0	65	0	
Tung Chung	22	15	0	2	11	4	0	8	21	1	90.6	1	1	0	1	0	1	0	0	0	0	0	0.0	20	0	12	0	
Yuen Long	166	89	4	2	75	20	2	21	144	1	80.1	9	9	0	15	1	3	2	2	0	0	19	9.2	128	0	130	3	
Sub-total	278	161	6	8	157	40	3	51	253	2	83.7	21	17	0	22	2	7	2	3	0	1	22	6.3	244	0	209	3	
<u>Institutions Correctional Services Department</u>																												
Hei Ling Chau	1	5	1	0	0	0	0	0	0	0	0.0	2	3	1	0	0	0	0	0	0	0	0	0.0	1	0	0	0	
Stanley Prison	6	20	0	0	0	0	0	16	0	0	100.0	0	0	0	0	0	0	0	0	0	0	0	0.0	10	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	7	25	1	0	0	0	0	16	0	0	100.0	2	3	1	0	0	0	0	0	0	0	0	0.0	11	0	0	0	
Total	2 205	1 649	76	106	1 535	552	74	641	2 296	40	86.3	418	184	1	182	15	111	20	46	3	13	56	2.1	2 023	12	804	27	

Appendix 20 (b)
Treatment Return 2014

Name of Clinic/Hospital	No. put on Rx b/f	Other Regimen																									
		Bought in					Treatment completed					Transfer out to		Interrup	Drop out					Complete defaulter				No. still	Unsup	Incomp	No. def.
		1	2	3	4	5	<6M	at6M	>6M	NTM	%	hosp.	other cc	Rx temp	Died	Rx by GP	Leave HK	Def. >1x	AMA	<2M	>2M <3M	>3M	%	onRx c/f	Rx	super. Rx	>2M <3M
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z		
Full Time Clinics																											
East Kowloon	60	12	2	2	39	13	2	3	43	0	78.0	11	1	0	9	0	1	0	2	0	0	1	1.7	55	5	21	0
Kowloon	23	5	2	3	30	9	3	1	22	1	85.2	7	0	0	3	0	0	0	0	0	0	0	0.0	35	0	14	0
South Kwai Chung	95	17	2	1	65	13	2	0	53	4	65.4	12	3	0	20	1	1	0	2	0	0	0	0.0	95	1	8	0
Sai Ying Pun	51	1	4	0	25	6	1	0	16	1	72.7	9	0	1	2	0	1	0	1	0	0	1	4.5	54	0	16	1
Shaukeiwan	26	2	1	1	24	8	1	1	22	4	63.9	6	2	0	7	1	0	0	0	0	0	1	2.8	17	0	16	0
Shek Kip Mei	90	3	0	1	25	6	0	0	14	3	73.7	4	1	0	1	0	0	1	1	0	0	0	0.0	100	0	22	3
Tai Po	25	12	4	2	14	4	1	0	14	1	51.9	0	0	0	8	1	0	1	2	0	0	1	3.7	32	0	0	0
Wanchai	20	7	0	3	12	5	1	1	7	4	50.0	2	1	1	1	0	2	0	0	1	0	6.3	26	2	5	0	
Yan Oi	124	10	3	0	28	8	0	3	12	3	60.0	6	2	0	6	0	1	0	0	0	0	0	0.0	140	0	3	0
Yaumatei	33	8	3	5	24	11	2	1	26	1	67.5	7	6	0	9	0	0	0	1	0	1	1	5.0	29	0	18	0
Yuen Chau Kok	49	20	3	1	33	7	1	4	29	4	76.7	11	3	0	4	0	1	0	1	0	0	0	0.0	55	0	16	0
Yung Fung Shee	48	3	1	4	9	2	0	0	15	5	62.5	0	0	0	4	0	0	0	0	0	0	0	0.0	43	0	2	0
Sub-total	644	100	25	23	328	92	14	14	273	31	68.5	75	19	2	74	3	7	2	10	0	2	5	1.7	681	8	141	4
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	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	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0	0	0
Sheung Shui	24	1	0	1	6	0	0	0	13	3	68.4	0	0	0	3	0	0	0	0	0	0	0	0.0	13	0	3	0
Tung Chung	4	2	0	2	0	0	1	0	1	0	33.3	0	0	0	1	1	0	0	0	0	0	0	0.0	4	0	3	0
Yuen Long	15	4	4	0	12	2	0	0	3	7	18.8	2	1	0	5	0	0	0	0	0	0	1	6.3	18	0	9	0
Sub-total	43	7	4	3	18	2	1	0	17	10	44.7	2	1	0	9	1	0	0	0	0	0	1	2.6	35	0	15	0
Institutions Correctional Services Department																											
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	687	107	29	26	346	94	15	14	290	41	66.5	77	20	2	83	4	7	2	10	0	2	6	1.8	716	8	156	4

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. Rx	No. Def. >2m, <3m
												hospital	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.

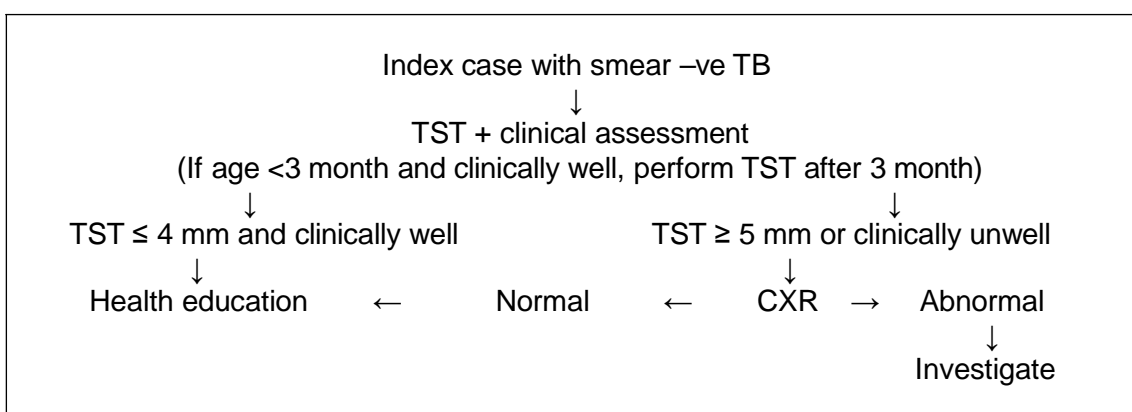
Appendix 21 (a)

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)

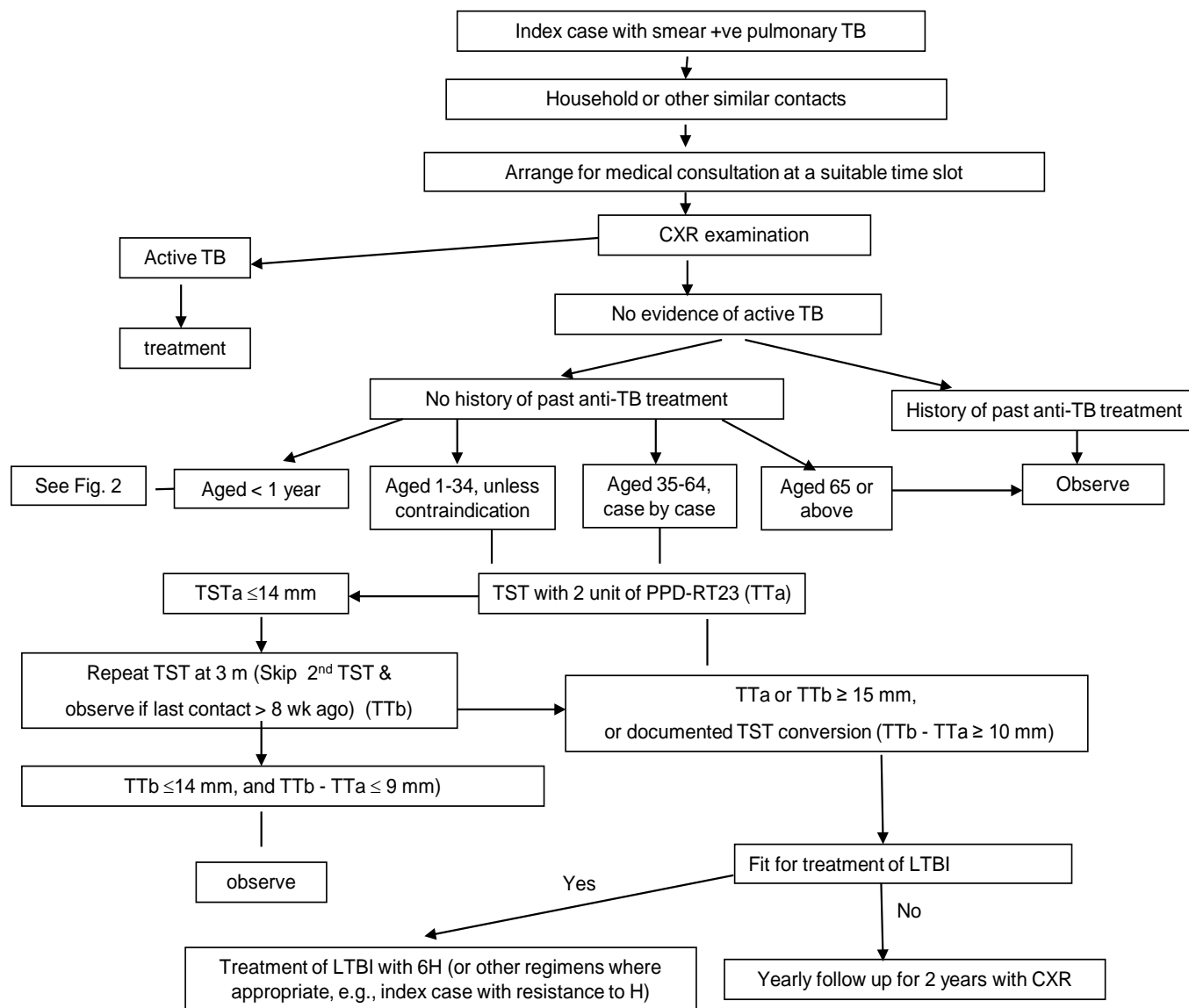


Figure 1: General schema for targeted screening of household contacts of smear-positive pulmonary TB patients

* 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.

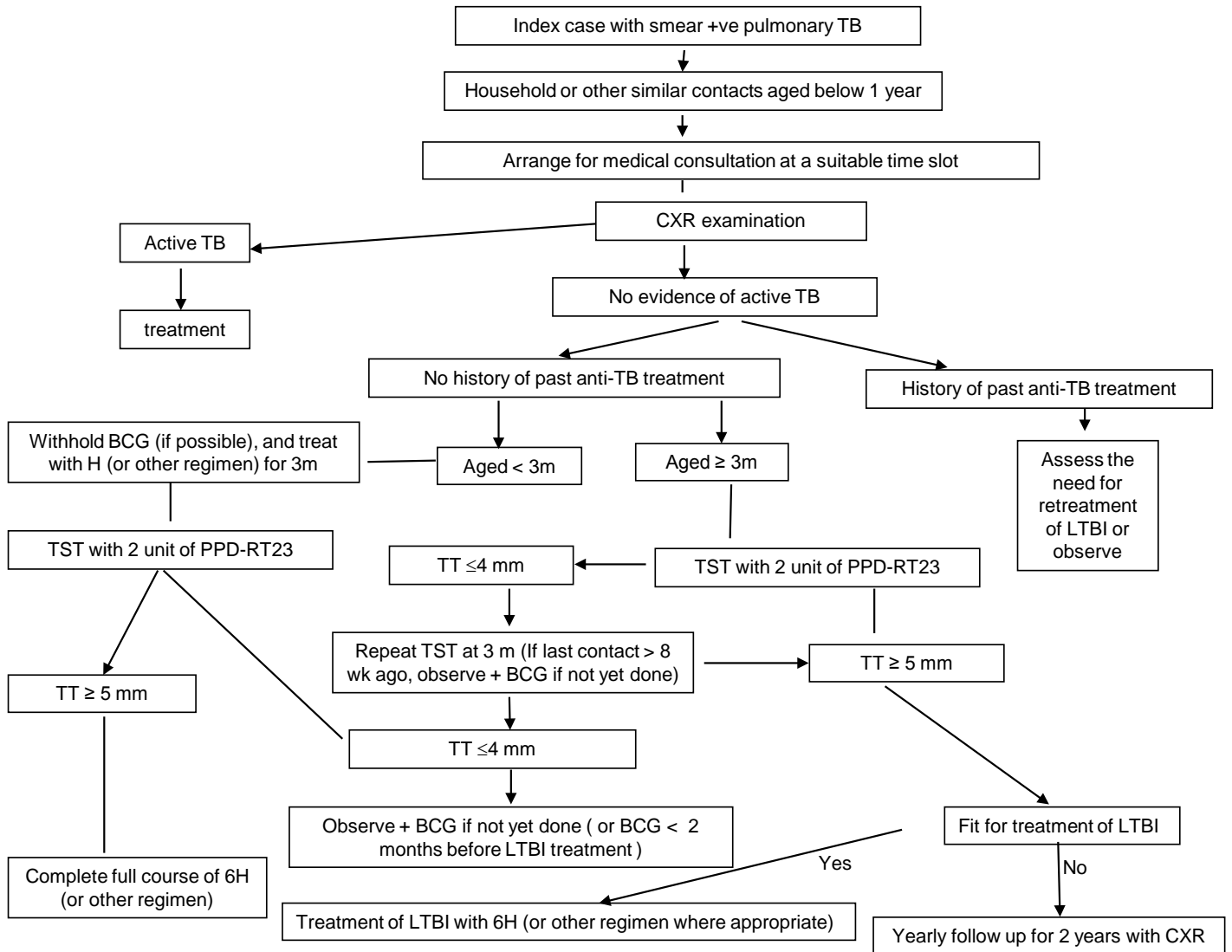


Figure 2: Targeted screening of household contacts aged below one year

* 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 2014

Particulars	Smear Positive Index Cases	Smear Negative Index Cases	Total
No. of patients (new & old) listed	1 255	3 303	4 558
No. of contacts listed	2 982	7 596	10 578
Number of contacts x-rayed	2 991 (100.00%)	7 470 (100.00%)	10 461 (100.00%)
<u>Results</u>			
(a) NSD & Unknown	2 703 (90.37%)	6 868 (91.94%)	9 571 (91.49%)
(b) Disease other than TB	174 (5.82%)	350 (4.69%)	524 (5.01%)
(c) Inactive respiratory TB	58 (1.94%)	151 (2.02%)	209 (2.00%)
(d) Active respiratory TB			
A (radiologically)	16 (0.53%)	11 (0.15%)	27 (0.26%)
B (bacteriologically)	9 (0.30%)	10 (0.13%)	19 (0.18%)
C (incomplete)	3 (0.10%)	4 (0.05%)	7 (0.07%)
(e) Non-respiratory TB	2 (0.07%)	8 (0.11%)	10 (0.10%)
(f) Result not yet known	26 (0.87%)	68 (0.91%)	94 (0.90%)

Appendix 22 (a)

Scheme for BCG Administration in Hong Kong 2014

<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 2014

Institution		No. of Live-births	BCG Vaccination	% Vaccinated
Hospital under HA management	P.Y. Nethersole East	2 786	2 511	90.1
	Queen Mary	3 854	3 735	96.9
Private Hospital	Canossa	788	777	98.6
	H.K. Adventist	535	518	96.8
	H.K. Sanatorium	3 388	3 380	99.8
	Matilda International	1 223	1 074	87.8
	St. Paul's	1 620	1 604	99.0
Total (HK Island)		14 194	13 599	95.8
Hospital under HA management	Kwong Wah	5 447	5 408	99.3
	Queen Elizabeth	6 420	6 418	100.0 *
	United Christian	4 415	4 392	99.5
Private Hospital	H.K. Baptist	2 570	2 533	98.6
	St. Teresa's	5 398	5 312	98.4
	Precious Blood	654	643	98.3
Total (Kowloon)		24 904	24 706	99.2
Hospital under HA management	Alice H.M.L. Nethersole	-	-	-
	Prince of Wales	6 897	6 839	99.2
	Princess Margaret	4 789	4 830	100.9 *
	Tuen Mun	5 591	5 547	99.2
Private Hospital	T.W. Adventist	1 283	1 281	99.8
	Shatin Int'l Medical Ctr Union	4 637	4 572	98.6
Total (NT Areas)		23 197	23 069	99.4
Mother & Child Health Centre		-	197	-
Grand Total		62 295	61 571	98.8

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 2014

Hospital		No. of TB Beds
Hospital Authority	Grantham Hospital	98
	Kowloon Hospital	133
	Ruttonjee Hospital	132
	Haven of Hope Hospital	129
	Wong Tai Sin Hospital	97
	Total (Hospital Authority)	589
Custody	Stanley Prison Hospital	20
Grand Total (2014)		609
Grand Total (2013)		611
Grand Total (2012)		650

Appendix 24

Annual Admissions to Hospitals from Government Chest Clinics 2003 - 2014

Year	Total Admissions
2003	4 603
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

Admissions by Clinic	Year 2014
East Kowloon	281
Kowloon	162
Sai Ying Pun	251
Shaukeiwan	178
Shaukeiwan Pneumoconiosis	53
Shek Kip Mei	103
South Kwai Chung	459
Tai Po	41
Tung Chung	22
Wanchai	181
Yan Oi	410
Yaumatei	167
Yuen Chau Kok	161
Yung Fung Shee	183
Cheung Chau	9
NT Unit	138
Total	2 799

Appendix 25

HIV Surveillance Among TB Patients

Provider-initiated HIV Antibody Testing Among TB Patients
in Government Chest Clinics (2005 – 2014)

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%

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

<u>Period</u>	<u>Category</u>	<u>Sample</u>	<u>Number Tested (No. +ve) (% +ve)</u>	
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 (1993 – 2014)

Year	Number
1993	0
1994	1
1995	2
1996	2
1997	10
1998	39
1999	57
2000	39
2001	41
2002	29
2003	30
2004	42
2005	30
2006	18
2007	16
2008	25
2009	18
2010	11
2011	17
2012	15
2013	7
2014	7

'Confirmed' Cases of TB in Health Care Staff Notified
to Labour Department (2014) by Age and Job Title

Age Group	Doctor	Nurse	Other Allied Health Professional	Other Supporting Staff	Total
20 – 24		3			3
25 – 29					0
30 – 34					0
35 – 39					0
40 – 44	1				1
45 – 49				1	1
50 – 54	1				1
55 – 59					0
60 – 64		1			1
65 – 69					0
70 – 74					0
Total	2	4	0	1	7

Appendix 27
Cohorts of TB Patients

Treatment outcomes for TB cases registered in 2013 calendar year (number of patients)

	Number of cases registered in 2013 *		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)	4 600	100.00%	3 066	66.65%	0	0.00%	747	16.24%	156	3.39%	631	13.72%
Previously treated patients (excluding relapse cases) ***	29	100.00%	9	31.03%	0	0.00%	1	3.45%	11	37.93%	8	27.59%
HIV-positive TB cases, all types	21	100.00%	13	61.90%	0	0.00%	0	0.00%	4	19.05%	4	19.05%

NB:

* Excludes cases moved to second-line treatment (i.e., excluding rifampicin-resistant cases).

** "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 2012 calendar year (number of patients)

	Number of cases started on second-line TB treatment in 2012		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%	6	25.00%	1	4.17%	2	8.33%
All confirmed XDR-TB cases *****	2	100.00%	1	50.00%	0	0.00%	1	50.00%	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 1956-2014
- 2 Age Distribution of Pneumoconiosis Cases 2014
- 3 Occupation Distribution of Confirmed Pneumoconiosis 2014
- 4 Pneumoconiosis Patients by Duration of Exposure to Dust 2014
- 5 Pneumoconiosis Patients by Degree of Incapacity 2014
- 6 Confirmed Pneumoconiosis Patients Classified by Radiological Appearance 2014
- 7 History of Tuberculosis (TB) among Patients with Pneumoconiosis Confirmed in 2014
- 8 Confirmed Pneumoconiosis Patients by Other Particulars 2014

Appendix 1

**New Cases of Suspected Pneumoconiosis/Mesothelioma attending
the Pneumoconiosis Clinic in Hong Kong 1956 - 2014**

Year	Number of New Cases Undergoing Assessment							
	Government Workers	Non-government Workers	Total	(b)	(e)	Cumulative Total	Cumulative Total Compensated	
							R1	R2
1956	1	-	1			1		
1957	4	4	8			9		
1958	9	13	22			31		
1959	5	7	12			43		
1960	9	6	15			58		
1961	8	-	8			66		
1962	3	1	4			70		
1963	9	5	14			84		
1964	21	17	38			122		
1965	9	4	13			135		
1966	7	9	16			151		
1967	3	6	9			160		
1968	4	2	6			166		
1969	4	10	14			180		
1970	22	36	58			238		
1971	9	18	27			265		
1972	9	29	38			303		
1973	3	39	42			345		
1974	-	97	97			442		
1975	5	84	89			531		
1976	15	252	267			798		
1977	3	216	219			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 (c)	(2)	(14)	9 176	1 494 (d)	4 828

- 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, 70 of these 141 assessment cases in 2014 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 70 cases.
 - (d) Under Revised Ordinance 1993 : 584 out of 1 494 pneumoconiotics had joined the pneumoconiosis ex-gratia scheme up to the year 2014. 83 living pneumoconiotics were each receiving a monthly ex-gratia payment of \$5,010.00 in 2014.
 - (e) The figures in this column denote the number of patients with Mesothelioma confirmed by the Board.

Appendix 2

Age Distribution of Pneumoconiosis Cases 2014

Age	Number of Cases	%
25 - 29	-	-
30 - 34	-	-
35 - 39	-	-
40 - 44	1	1
45 - 49	1	1
50 - 54	8	11
55 - 59	18	27
60 - 64	20	29
65 - 69	7	10
70 - 74	7	10
75+	8	11
Total	70	100

Appendix 3

Occupation Distribution of Confirmed Pneumoconiosis 2014

Type of Occupation	Number of Cases	%
Construction	43	62
Construction/Quarry	3	4
Others	24	34
Total	70	100

Appendix 4

Pneumoconiosis Patients by Duration of Exposure to Dust 2014

Duration	Number of Cases	%
<5 years	-	-
5 - 9	1	1
10 - 14	2	3
15 - 19	6	9
20 - 24	10	14
25 - 29	13	19
30+	36	51
Unknown	2	3
Total	70	100

Appendix 5

Pneumoconiosis Patients by Degree of Incapacity 2014

Degree of Incapacity (%)	No. of New Cases Compensated under Compensation Ordinance
5	24
10	21
15	7
20	7
25	2
30	-
35	2
40	1
45	-
50	2
55	1
60	-
65	1
70	-
75	-
80	-
100	-
N. A.	2
Total	70

Appendix 6

Confirmed Pneumoconiosis Patients Classified by Radiological Appearance 2014

Type of Opacity	Profusion			Sub-Total
	1	2	3	
<u>Small opacities</u>				
<u>Rounded</u>				
p (up to 1.5 mm diameter)	26	-	-	26
q (1.5 to 3.0 mm diameter)	29	5	-	34
r (3.0 to 10.0 mm diameter)	-	1	-	1
<u>Irregular</u>				
s (fine irregular or linear)	4	-	-	4
t (medium irregular)	1	-	-	1
u (coarse irregular)	2	-	-	2
Sub-total	62	6	-	68
<u>Combined opacities</u>	-	-	-	-
<u>N. A.</u>	-	-	-	2
Total				70

3 out of the 70 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)	1
B (Single or multiple opacities with combined area < the equivalent of right upper zone)	2
C (Single or multiple opacities with combined area > the equivalent of right upper zone)	-
Total	3

Appendix 7

History of Tuberculosis (TB) among Patients with Pneumoconiosis Confirmed in 2014

History of TB		Number of Cases	%
History of TB	Bacteriological Positive	15	22
	Bacteriological Negative	3	4
	Not Available	2	3
No History of TB		50	71
Total		70	100

Appendix 8

Confirmed Pneumoconiosis Patients by Other Particulars 2014

Characteristics		Number of Cases	%
Smoking	Smoker/Ex-smoker	52	74
	Non-smoker	16	23
	Unknown	2	3
	Total	70	100
Still exposed to dust when seen by the Pneumoconiosis Clinic	Yes	17	24
	No	51	73
	Unknown	2	3
	Total	70	100
General Condition	Good	62	89
	Fair	6	8
	Poor	-	-
	Died	2	3
	Total	70	100

Part 3

ANNEX

Part 3 – Annex : Contents

Annex No.

- 1(a) Treatment Outcomes up to 2 year of the 2011 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 (2010-2014)
- 2(c) TB Notification and Rates (All Cases) by Age & Sex (2010-2014)
- 3 Trend of Age-specific TB Notification Rates (1970-2014)
- 4(a)-4(d) TB-HIV Registry
- 5 HBsAg Seroprevalence Survey Among TB Patients Seen At Chest Clinics
- 6 Crude and Standardised Death Rate and Notification Rate 1981-2014

Annex 1 (a)

Treatment Outcomes up to 2 year of the 2011 Cohort of TB Patients

A total of 4 794 cases of TB were notified in the year 2011. Among them, 3 831 were ever seen at chest clinics (ES) while 963 were never seen at chest clinics (NS). They are categorised as follows:

Categories		ES	%	NS	%	ES/NS	%
(A)	New pulmonary, smear positive	1 061	27.7	35	3.6	1 096	22.9
(B)	New pulmonary, smear negative	1 597	41.7	44	4.6	1 641	34.2
(C)	New pulmonary, smear not done/ unknown	127	3.3	14	1.5	141	2.9
(D)	New extra-pulmonary	623	16.3	6	0.6	629	13.1
(E)	Relapse pulmonary, smear positive	124	3.2	23	2.4	147	3.1
(F)	Pulmonary smear-positive retreatment after failure or default	10	0.3	2	0.2	12	0.3
(G)	Other retreatment cases (not included in E and F) [i.e., including relapses (pulmonary, smear negative or unknown or not done; and extrapulmonary) and retreatment after failure or default (pulmonary, smear negative or unknown or not done; and extrapulmonary)]	289	7.5	839	87.1	1 128	23.5
Total		3 831	100.0	963	100.0	4 794	100.0

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

Annex 1 (b)	Various age groups (0-19), (20-39), (40-59), (60+), and all age groups
	for (i) ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 09
	(ii) ES (cases ever seen at chest clinics) - sheet 01 to 03
Annex 1 (c)	(iii) NS (cases never seen at chest clinics) - sheet 01 to 03
	Pulmonary pretreatment smear positive, pretreatment culture positive, and MDR-TB cases
Annex 1 (d)	for ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 08
	New pulmonary smear positive and retreatment pulmonary smear positive cases
Annex 1 (e)	for ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 02
	Treatment defaulters (outcome at 2 year = defaulting)
Annex 1 (f)	for ES/NS (cases ever or never seen at chest clinics) - sheet 01 to 05
	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 2011

Discussion

Annex 1 (b) – Various age groups

Among the total of 4 794 patients, 157 (3.3%) were aged between 0 and 19, 1 050 (21.9%) between 20 and 39, 1 310 (27.3%) between 40 and 59, and 2 277 (47.5%) above 60. 64.5% were male. 40.5%, 22.2%, and 14.0% were never smokers, ex-smokers, and current smokers respectively. 74.1% were permanent local residents while 74.1% were of Chinese ethnicity. Most of them (70.5%) presented because of symptoms. 9.0% presented as incidental finding to pre-employment, pre-immigration, other body check or incidental to other illness, while 1.5% were diagnosed through contact tracing.

68.9% of patients had pulmonary TB, 18.0% had extra-pulmonary TB and 13.1% had both. TB pleura and TB lymph node accounted for 11.0% and 8.4% of the site of involvement respectively. Among pulmonary TB patients, 39.9% had pretreatment sputum smear +ve, 67.9% had pretreatment culture +ve and 17.0% had cavitory lesion on their chest radiographs.

With regard to co-morbidity factors for TB, 13.2% of TB patients had diabetes mellitus, 5.9% of patients had coexisting malignancy, 1.8% of patients were immuno-suppressed because of either steroid or cytotoxic therapy. HIV infection was reported for 0.7% of cases. 4.3% of all TB patients were reported to be hepatitis B carrier while 0.5% had chronic active hepatitis.

57.9% of patients were on 6 months short course chemotherapy for TB or other standard regimen based on HREZS. Treatment side effect was reported in 38.3% of patients. 12.0% were GI side effects, 13.1% were skin rash, 4.2% had transient rise in liver enzyme and 8.3% had frank hepatitis.

Among the 3 831 patients ever seen in chest clinic, 75.8% received >90% DOT in initial 2 months, while 65.7% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 20.9%, 75.3% and 85.8% respectively. Death rates at corresponding periods were 5.6%, 7.3% and 7.6% respectively.

Among the 963 patients never seen in chest clinic, 1.5% received >90% DOT in initial 2 months, while 1.5% received >90% DOT in subsequent 4 months. Treatment completion/cure rates at 6 months, 12 months and 24 months were: 0.6%, 25.0% and 25.0% respectively. Death rates at corresponding periods were 0.2%, 53.2% and 53.2% 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, 1 401 were pretreatment smear +ve, 2 671 were pretreatment culture +ve, and 18 were MDR-TB patients.

In the initial 2 months, over 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 76.4% for smear +ve patients and 77.8% for MDRTB patients. Culture conversion rate at 2 months were 85.9% for culture +ve patients and 66.7% for MDR-TB patients.

Treatment success rates for smear +ve patients at 6 months, 12 months and 24 months were 16.1%, 66.9% and 77.6% respectively. Those for culture +ve patients were 18.6%, 63.9% and 73.0% respectively. Those for MDR-TB patients were 0.0%, 0.0% and 50.0% respectively. 2 out of 18 (11.1%) 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 19.6%, 75.6% and 86.7% respectively. The corresponding treatment success rates for retreatment pulmonary smear +ve patients were 3.3%, 35.4% and 44.9% respectively.

Annex 1 (e) – Treatment defaulters

There were 208 treatment defaulters at 24 months in the 2011 cohort. Around 28.8%, 31.7%, and 35.1% are in each of the age groups 20 to 39, 40 to 59, and 60+ respectively. 20.7% worked full time, 3.8% part time, 13.9% retired, and 23.1% were unemployed. 83.2% were new case, 12.0% were relapse, 4.8% were retreatment after default cases, and 0.0% were retreatment after failure of previous treatment cases. 40.9% had pretreatment smear +ve and 15.9% had cavitory lesions on the chest radiograph. 34.6% of patients lost contact after default and 12.0% of patients were retreated after default.

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

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Female	63	40.1	605	57.6	468	35.7	566	24.9	1 702	35.5
Male	94	59.9	445	42.4	842	64.3	1 711	75.1	3 092	64.5
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Marital status

Single	133	84.7	524	49.9	176	13.4	102	4.5	935	19.5
Married	1	0.6	353	33.6	848	64.7	1 432	62.9	2 634	54.9
Separated	0	0.0	7	0.7	18	1.4	21	0.9	46	1.0
Divorce	0	0.0	11	1.0	66	5.0	29	1.3	106	2.2
Widowed	0	0.0	3	0.3	13	1.0	59	2.6	75	1.6
Not recorded	23	14.6	152	14.5	189	14.4	634	27.8	998	20.8
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Smoking status

Never	113	72.0	595	56.7	539	41.1	696	30.6	1 943	40.5
Ex-smoker	6	3.8	118	11.2	270	20.6	671	29.5	1 065	22.2
Current smoker	9	5.7	163	15.5	274	20.9	226	9.9	672	14.0
Not recorded	29	18.5	174	16.6	227	17.3	684	30.0	1 114	23.2
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Institution-related

Yes	107	68.2	145	13.8	93	7.1	216	9.5	561	11.7
No	27	17.2	760	72.4	1 048	80.0	1 465	64.3	3 300	68.8
Not recorded	23	14.6	145	13.8	169	12.9	596	26.2	933	19.5
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Institution

Client	78	-	66	-	42	-	181	-	367	-
Staff	0	-	32	-	29	-	3	-	64	-

Institution type

Old age home	33	-	21	-	19	-	186	-	259	-
School	83	-	64	-	17	-	129	-	293	-
Hospital	1	-	18	-	14	-	1	-	34	-
Handicapped	0	-	11	-	21	-	5	-	37	-
Prison	0	-	23	-	22	-	4	-	49	-
Others	3	-	14	-	9	-	4	-	30	-

Living situation

Street-sleeper	0	0.0	1	0.1	3	0.2	1	0.0	5	0.1
Cubicle bed space	0	0.0	0	0.0	2	0.2	7	0.3	9	0.2
Institution	2	1.3	30	2.9	38	2.9	185	8.1	255	5.3
Work quarter	0	0.0	23	2.2	8	0.6	0	0.0	31	0.6
Alone (not above)	1	0.6	52	5.0	120	9.2	195	8.6	368	7.7
With friends	1	0.6	35	3.3	15	1.1	11	0.5	62	1.3
With family	129	82.2	726	69.1	934	71.3	1 262	55.4	3 051	63.6
Not recorded	24	15.3	183	17.4	190	14.5	616	27.1	1 013	21.1

Residential status

Permanent resident	125	79.6	687	65.4	1 077	82.2	1 664	73.1	3 553	74.1
Chinese immigrant	6	3.8	51	4.9	20	1.5	10	0.4	87	1.8
Imported worker	1	0.6	131	12.5	26	2.0	0	0.0	158	3.3
Tourist - 2 way permit Chinese	0	0.0	6	0.6	1	0.1	0	0.0	7	0.1
Other tourist	1	0.6	5	0.5	1	0.1	1	0.0	8	0.2
Vietnamese	0	0.0	1	0.1	1	0.1	0	0.0	2	0.0
Illegal immigrants	0	0.0	10	1.0	7	0.5	4	0.2	21	0.4
Not recorded	24	15.3	159	15.1	177	13.5	598	26.3	958	20.0
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	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	96	61.1	512	48.8	650	49.6	388	17.0	1 646	34.3
Mainland China	28	17.8	212	20.2	408	31.1	1 199	52.7	1 847	38.5
Others	9	5.7	195	18.6	82	6.3	84	3.7	370	7.7
Not recorded	24	15.3	131	12.5	170	13.0	606	26.6	931	19.4
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Ethnicity

Chinese	124	79.0	712	67.8	1 066	81.4	1 650	72.5	3 552	74.1
Other Asian	8	5.1	187	17.8	63	4.8	33	1.4	291	6.1
Caucasian	0	0.0	1	0.1	5	0.4	1	0.0	7	0.1
Others	1	0.6	5	0.5	2	0.2	0	0.0	8	0.2
Not recorded	24	15.3	145	13.8	174	13.3	593	26.0	936	19.5
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Previous BCG history

Yes	108	68.8	630	60.0	476	36.3	155	6.8	1 369	28.6
No	8	5.1	82	7.8	191	14.6	647	28.4	928	19.4
Unknown	41	26.1	338	32.2	643	49.1	1 475	64.8	2 497	52.1
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

BCG scar

Yes	95	-	597	-	470	-	161	-	1 323	-
No	34	-	276	-	605	-	1 360	-	2 275	-

Evidence of previous BCG

BCG history +ve or scar +ve	110	70.1	671	63.9	544	41.5	195	8.6	1 520	31.7
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Employment status

Full-time	8	5.1	557	53.0	596	45.5	132	5.8	1 293	27.0
Part-time	3	1.9	33	3.1	61	4.7	25	1.1	122	2.5
Retired	0	0.0	0	0.0	88	6.7	1 192	52.3	1 280	26.7
Unemployed	14	8.9	167	15.9	233	17.8	65	2.9	479	10.0
Housewife	1	0.6	86	8.2	143	10.9	255	11.2	485	10.1
Student	107	68.2	61	5.8	1	0.1	0	0.0	169	3.5
Not recorded	24	15.3	146	13.9	188	14.4	608	26.7	966	20.2
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Occupation

Blue collar	5	3.2	236	22.5	386	29.5	122	5.4	749	15.6
White collar	2	1.3	196	18.7	151	11.5	20	0.9	369	7.7
Medical	0	0.0	5	0.5	0	0.0	0	0.0	5	0.1
Nursing	0	0.0	12	1.1	6	0.5	0	0.0	18	0.4
Paramedical	0	0.0	3	0.3	0	0.0	0	0.0	3	0.1
Supporting health staff	0	0.0	2	0.2	11	0.8	0	0.0	13	0.3
Not applicable	72	45.9	264	25.1	414	31.6	1 405	61.7	2 155	45.0
Not recorded	78	49.7	332	31.6	342	26.1	730	32.1	1 482	30.9
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

First presentation

Private doctor	28	17.8	228	21.7	218	16.6	127	5.6	601	12.5
Private hospital	1	0.6	22	2.1	20	1.5	11	0.5	54	1.1
GOPC	4	2.5	27	2.6	67	5.1	76	3.3	174	3.6
Chest Clinic	13	8.3	66	6.3	102	7.8	176	7.7	357	7.4
Other DH Clinic	2	1.3	23	2.2	18	1.4	25	1.1	68	1.4
HA Clinic	3	1.9	43	4.1	54	4.1	61	2.7	161	3.4
HA Hospital	79	50.3	479	45.6	642	49.0	1 202	52.8	2 402	50.1
Mainland	1	0.6	21	2.0	21	1.6	26	1.1	69	1.4
Overseas	1	0.6	11	1.0	2	0.2	2	0.1	16	0.3
Not recorded	25	15.9	130	12.4	166	12.7	571	25.1	892	18.6
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	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	114	72.6	816	77.7	1 022	78.0	1 525	67.0	3 477	72.5
N	18	11.5	105	10.0	123	9.4	179	7.9	425	8.9
Not recorded	25	15.9	129	12.3	165	12.6	573	25.2	892	18.6
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Chest symptoms	87	-	575	-	755	-	1 193	-	2 610	-
Systemic symptoms	24	-	142	-	160	-	259	-	585	-
Other site-specific symptoms	24	-	216	-	222	-	238	-	700	-

Reason for presentation

Symptom	113	72.0	804	76.6	999	76.3	1 466	64.4	3 382	70.5
Contact screening	8	5.1	28	2.7	22	1.7	12	0.5	70	1.5
Pre-employment	4	2.5	30	2.9	9	0.7	4	0.2	47	1.0
Pre-emigration	0	0.0	5	0.5	2	0.2	2	0.1	9	0.2
Other body check	5	3.2	38	3.6	44	3.4	70	3.1	157	3.3
Incidental to other illness	1	0.6	10	1.0	62	4.7	141	6.2	214	4.5
Others	0	0.0	1	0.1	0	0.0	3	0.1	4	0.1
Not recorded	26	16.6	134	12.8	172	13.1	579	25.4	911	19.0
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Contact with TB patients

Yes	22	14.0	81	7.7	76	5.8	48	2.1	227	4.7
No	111	70.7	838	79.8	1 069	81.6	1 648	72.4	3 666	76.5
Not recorded	24	15.3	131	12.5	165	12.6	581	25.5	901	18.8
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Contact type

Household	21	-	60	-	61	-	35	-	177	-
Work	0	-	9	-	7	-	0	-	16	-
Casual	0	-	8	-	5	-	6	-	19	-

Time of contact

Within 2 year	13	-	35	-	32	-	12	-	92	-
Over 2 year	8	-	28	-	35	-	26	-	97	-

Previous chemoprophylaxis

Yes	0	-	3	-	3	-	3	-	9	-
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Reason for chemoprophylaxis

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

Disease Classification

Pulmonary TB only	105	66.9	640	61.0	893	68.2	1 664	73.1	3 302	68.9
Extrapulmonary TB only	36	22.9	237	22.6	249	19.0	340	14.9	862	18.0
Both	16	10.2	173	16.5	168	12.8	273	12.0	630	13.1
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	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	14	8.9	123	11.7	130	9.9	261	11.5	528	11.0
Lymph node	20	12.7	159	15.1	121	9.2	102	4.5	402	8.4
Meninges	4	2.5	8	0.8	7	0.5	8	0.4	27	0.6
Miliary	1	0.6	12	1.1	7	0.5	9	0.4	29	0.6
Abdomen	0	0.0	18	1.7	25	1.9	24	1.1	67	1.4
Bone and joint (not spine)	0	0.0	2	0.2	10	0.8	24	1.1	36	0.8
Spine	1	0.6	3	0.3	7	0.5	16	0.7	27	0.6
Genito-urinary tract	0	0.0	6	0.6	21	1.6	21	0.9	48	1.0
Naso/oro-pharynx	0	0.0	8	0.8	9	0.7	3	0.1	20	0.4
Larynx	0	0.0	2	0.2	3	0.2	0	0.0	5	0.1
Pericardium	0	0.0	1	0.1	4	0.3	6	0.3	11	0.2
Skin	0	0.0	16	1.5	10	0.8	12	0.5	38	0.8
Other sites	2	1.3	15	1.4	19	1.5	15	0.7	51	1.1

Case category

New case	153	97.5	1 005	95.7	1 187	90.6	1 996	87.7	4 341	90.6
Relapse	4	2.5	38	3.6	110	8.4	276	12.1	428	8.9
Treatment after default	0	0.0	6	0.6	13	1.0	5	0.2	24	0.5
Failure of previous treatment	0	0.0	1	0.1	0	0.0	0	0.0	1	0.0
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	46	38.0	323	39.7	470	44.3	730	37.7	1 569	39.9
Pretreatment culture +ve	74	61.2	502	61.7	720	67.9	1 375	71.0	2 671	67.9
Extent = 1	49	40.5	383	47.1	474	44.7	715	36.9	1 621	41.2
Extent=1 & cavity=N	41	33.9	319	39.2	420	39.6	659	34.0	1 439	36.6
Extent=1 & cavity=Y	8	6.6	64	7.9	54	5.1	56	2.9	182	4.6
Extent = 2	30	24.8	178	21.9	259	24.4	423	21.8	890	22.6
Extent=2 & cavity=N	18	14.9	107	13.2	141	13.3	322	16.6	588	15.0
Extent=2 & cavity=Y	12	9.9	71	8.7	118	11.1	101	5.2	302	7.7
Extent=3	15	12.4	81	10.0	122	11.5	194	10.0	412	10.5
Extent=3 & cavity=N	5	4.1	30	3.7	59	5.6	137	7.1	231	5.9
Extent=3 & cavity=Y	10	8.3	51	6.3	63	5.9	57	2.9	181	4.6
Extent=not specified	27	22.3	171	21.0	206	19.4	605	31.2	1 009	25.7
Extent=ns & cavity=N	27	22.3	170	20.9	204	19.2	603	31.1	1 004	25.5
Extent=ns & cavity=Y	0	0.0	1	0.1	2	0.2	2	0.1	5	0.1
Cavity=N	91	75.2	626	77.0	824	77.7	1 721	88.8	3 262	83.0
Cavity=Y	30	24.8	187	23.0	237	22.3	216	11.2	670	17.0

Mode of diagnosis

Bacteriological	98	62.4	672	64.0	922	70.4	1 719	75.5	3 411	71.2
Histological	14	8.9	130	12.4	155	11.8	177	7.8	476	9.9
Clinical-radiological	24	15.3	149	14.2	113	8.6	158	6.9	444	9.3
Clinical only	3	1.9	9	0.9	7	0.5	2	0.1	21	0.4
Not recorded	18	11.5	90	8.6	113	8.6	221	9.7	442	9.2
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Histology

Typical (with caseation)	7	-	40	-	53	-	35	-	135	-
Granulomatous inflammation	7	-	124	-	157	-	176	-	464	-
Other	2	-	29	-	28	-	28	-	87	-

Ziehl-Neelsen staining

Positive	9	-	80	-	111	-	102	-	302	-
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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	2	1.3	60	5.7	358	27.3	860	37.8	1 280	26.7
Diabetes mellitus	2	1.3	18	1.7	199	15.2	413	18.1	632	13.2
Lung cancer	0	0.0	0	0.0	21	1.6	51	2.2	72	1.5
Other malignancies	0	0.0	6	0.6	48	3.7	155	6.8	209	4.4
On cytotoxic drugs	0	0.0	1	0.1	9	0.7	14	0.6	24	0.5
On steroid	0	0.0	8	0.8	21	1.6	32	1.4	61	1.3
Chronic renal failure	0	0.0	1	0.1	11	0.8	28	1.2	40	0.8
HIV	0	0.0	9	0.9	18	1.4	5	0.2	32	0.7
Silicosis	0	0.0	0	0.0	7	0.5	18	0.8	25	0.5
Alcoholism	0	0.0	5	0.5	30	2.3	31	1.4	66	1.4
Drug abuser	0	0.0	13	1.2	18	1.4	11	0.5	42	0.9
Gastrectomy	0	0.0	0	0.0	6	0.5	16	0.7	22	0.5
General debilitation	0	0.0	2	0.2	4	0.3	241	10.6	247	5.2
Others	0	0.0	3	0.3	12	0.9	24	1.1	39	0.8

Factors affecting treatment choices

Yes	2	1.3	61	5.8	240	18.3	593	26.0	896	18.7
Hepatitis-B carrier	0	0.0	26	2.5	99	7.6	82	3.6	207	4.3
Chronic active hepatitis	0	0.0	2	0.2	11	0.8	10	0.4	23	0.5
Impaired renal function	0	0.0	3	0.3	12	0.9	87	3.8	102	2.1
Chronic renal failure	0	0.0	2	0.2	6	0.5	14	0.6	22	0.5
Impaired vision	1	0.6	15	1.4	70	5.3	334	14.7	420	8.8
Impaired hearing	0	0.0	1	0.1	7	0.5	43	1.9	51	1.1
Known drug reaction	0	0.0	1	0.1	2	0.2	6	0.3	9	0.2
Known drug resistance	0	0.0	2	0.2	3	0.2	1	0.0	6	0.1
Gout	0	0.0	0	0.0	5	0.4	57	2.5	62	1.3
Idiopathic thromb. purpura	0	0.0	1	0.1	1	0.1	3	0.1	5	0.1
Others	1	0.6	11	1.0	35	2.7	76	3.3	123	2.6

6-month short course treatment

Yes	37	23.6	202	19.2	177	13.5	169	7.4	585	12.2
2HRZE+4HR	34	21.7	178	17.0	142	10.8	137	6.0	491	10.2
2HRZS+4HR	1	0.6	0	0.0	2	0.2	3	0.1	6	0.1

Other standard regimen based on HRZES

Yes	81	51.6	538	51.2	685	52.3	888	39.0	2 192	45.7
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Treatment side effects

Yes	48	30.6	342	32.6	553	42.2	894	39.3	1 837	38.3
GI upset	22	14.0	100	9.5	172	13.1	282	12.4	576	12.0
Skin rash	16	10.2	133	12.7	185	14.1	294	12.9	628	13.1
Visual	2	1.3	16	1.5	56	4.3	69	3.0	143	3.0
Transient rise liver enzyme	5	3.2	41	3.9	68	5.2	89	3.9	203	4.2
Hepatitis	8	5.1	68	6.5	124	9.5	196	8.6	396	8.3
Vestibular	2	1.3	9	0.9	10	0.8	15	0.7	36	0.8
Arthropathy	1	0.6	9	0.9	26	2.0	54	2.4	90	1.9
Fever-chill	1	0.6	12	1.1	13	1.0	13	0.6	39	0.8
Dizziness	1	0.6	7	0.7	21	1.6	34	1.5	63	1.3
Thrombocytopenia	0	0.0	3	0.3	12	0.9	33	1.4	48	1.0
Leucopenia	0	0.0	2	0.2	1	0.1	9	0.4	12	0.3
Flush face	0	0.0	1	0.1	3	0.2	2	0.1	6	0.1
Others	2	1.3	28	2.7	54	4.1	84	3.7	168	3.5

Consequence of side effects

Rx temporarily withheld	25	15.9	193	18.4	329	25.1	596	26.2	1 143	23.8
Desensitiation or drug trial	16	10.2	139	13.2	220	16.8	444	19.5	819	17.1
Change in dosage/frequency	1	0.6	39	3.7	79	6.0	139	6.1	258	5.4
Change of drugs	12	7.6	131	12.5	249	19.0	489	21.5	881	18.4

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

Age group	0 to 19		20 to 39		40 to 59		60+		All	
	N	%	N	%	N	%	N	%	N	%
Treatment supervision										
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)										
>90%	98	62.4	643	61.2	839	64.0	1 339	58.8	2 919	60.9
>75%	16	10.2	113	10.8	118	9.0	80	3.5	327	6.8
>50%	5	3.2	64	6.1	77	5.9	74	3.2	220	4.6
>25%	5	3.2	22	2.1	39	3.0	26	1.1	92	1.9
≤25%	5	3.2	22	2.1	27	2.1	37	1.6	91	1.9
Not recorded	28	17.8	186	17.7	210	16.0	721	31.7	1 145	23.9
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)										
>90%	74	47.1	520	49.5	718	54.8	1 218	53.5	2 530	52.8
>75%	24	15.3	125	11.9	142	10.8	97	4.3	388	8.1
>50%	11	7.0	97	9.2	100	7.6	57	2.5	265	5.5
>25%	7	4.5	28	2.7	45	3.4	35	1.5	115	2.4
≤25%	11	7.0	39	3.7	51	3.9	36	1.6	137	2.9
Not recorded	30	19.1	241	23.0	254	19.4	834	36.6	1 359	28.3
Under supervision by relatives (initial 2 months)										
>90%	2	1.3	2	0.2	2	0.2	3	0.1	9	0.2
>75%	0	0.0	2	0.2	2	0.2	2	0.1	6	0.1
>50%	0	0.0	1	0.1	3	0.2	3	0.1	7	0.1
>25%	0	0.0	3	0.3	0	0.0	0	0.0	3	0.1
≤25%	88	56.1	571	54.4	699	53.4	1 029	45.2	2 387	49.8
Not recorded	67	42.7	471	44.9	604	46.1	1 240	54.5	2 382	49.7
Under supervision by relatives (subsequent 4 months)										
>90%	4	2.5	6	0.6	2	0.2	3	0.1	15	0.3
>75%	0	0.0	3	0.3	2	0.2	3	0.1	8	0.2
>50%	0	0.0	0	0.0	3	0.2	2	0.1	5	0.1
>25%	0	0.0	2	0.2	3	0.2	0	0.0	5	0.1
≤25%	83	52.9	531	50.6	667	50.9	957	42.0	2 238	46.7
Not recorded	70	44.6	508	48.4	633	48.3	1 312	57.6	2 523	52.6
Supplied for unsupervised treatment (initial 2 months)										
<5%	82	52.2	537	51.1	681	52.0	1 101	48.4	2 401	50.1
<10%	8	5.1	56	5.3	61	4.7	59	2.6	184	3.8
<15%	11	7.0	46	4.4	38	2.9	27	1.2	122	2.5
<25%	3	1.9	53	5.0	66	5.0	32	1.4	154	3.2
<50%	3	1.9	37	3.5	53	4.0	49	2.2	142	3.0
≥50%	3	1.9	21	2.0	44	3.4	45	2.0	113	2.4
Not recorded	47	29.9	300	28.6	367	28.0	964	42.3	1 678	35.0
Supplied for unsupervised treatment (subsequent 4 months)										
<5%	64	40.8	431	41.0	555	42.4	964	42.3	2 014	42.0
<10%	14	8.9	73	7.0	88	6.7	78	3.4	253	5.3
<15%	7	4.5	45	4.3	53	4.0	38	1.7	143	3.0
<25%	9	5.7	76	7.2	72	5.5	37	1.6	194	4.0
<50%	7	4.5	53	5.0	82	6.3	44	1.9	186	3.9
≥50%	9	5.7	44	4.2	72	5.5	66	2.9	191	4.0
Not recorded	47	29.9	328	31.2	388	29.6	1 050	46.1	1 813	37.8
Defaulted (initial 2 months)										
<5%	108	68.8	714	68.0	948	72.4	1 370	60.2	3 140	65.5
<10%	4	2.5	26	2.5	25	1.9	18	0.8	73	1.5
<15%	1	0.6	16	1.5	10	0.8	11	0.5	38	0.8
<25%	4	2.5	16	1.5	15	1.1	14	0.6	49	1.0
<50%	6	3.8	16	1.5	17	1.3	14	0.6	53	1.1
≥50%	1	0.6	9	0.9	13	1.0	13	0.6	36	0.8
Not recorded	33	21.0	253	24.1	282	21.5	837	36.8	1 405	29.3
Defaulted (subsequent 4 months)										
<5%	89	56.7	623	59.3	891	68.0	1 262	55.4	2 865	59.8
<10%	5	3.2	44	4.2	34	2.6	23	1.0	106	2.2
<15%	8	5.1	21	2.0	18	1.4	11	0.5	58	1.2
<25%	8	5.1	26	2.5	11	0.8	9	0.4	54	1.1
<50%	6	3.8	21	2.0	11	0.8	16	0.7	54	1.1
≥50%	4	2.5	19	1.8	20	1.5	7	0.3	50	1.0
Not recorded	37	23.6	296	28.2	325	24.8	949	41.7	1 607	33.5

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	45	28.7	246	23.4	248	18.9	269	11.8	808	16.9
Still on treatment	79	50.3	545	51.9	794	60.6	1 117	49.1	2 535	52.9
Died	0	0.0	0	0.0	21	1.6	194	8.5	215	4.5
Transferred	7	4.5	84	8.0	27	2.1	29	1.3	147	3.1
Defaulted	3	1.9	30	2.9	33	2.5	36	1.6	102	2.1
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	1	0.1	5	0.4	3	0.1	9	0.2
Not recorded	23	14.6	144	13.7	182	13.9	629	27.6	978	20.4
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Among those cured/ treatment completed

Bacteriological conversion	29	64.4	139	56.5	166	66.9	189	70.3	523	64.7
Radiological improvement	39	86.7	220	89.4	207	83.5	214	79.6	680	84.2
Other clinical improvement	9	20.0	58	23.6	41	16.5	40	14.9	148	18.3
No evidence of response	1	2.2	3	1.2	4	1.6	11	4.1	19	2.4

Among those still on treatment

Reasons for still on treatment:

Retreatment case	1	1.3	20	3.7	63	7.9	113	10.1	197	7.8
Extrapulmonary disease	32	40.5	244	44.8	272	34.3	249	22.3	797	31.4
Extensive disease	28	35.4	125	22.9	150	18.9	182	16.3	485	19.1
Interrupted treatment	11	13.9	112	20.6	172	21.7	329	29.5	624	24.6
Drug resistance	2	2.5	21	3.9	37	4.7	56	5.0	116	4.6
Poor response	6	7.6	39	7.2	70	8.8	68	6.1	183	7.2
Others	16	20.3	110	20.2	275	34.6	499	44.7	900	35.5

Among those died - causes of death:

TB-related cause	0	-	0	-	2	9.5	36	18.6	38	17.7
Not TB-related	0	-	0	-	15	71.4	115	59.3	130	60.5
Unknown	0	-	0	-	4	19.0	41	21.1	45	20.9

Among those transferred, new sources of care:

GP	0	0.0	6	7.1	3	11.1	4	13.8	13	8.8
Chest Clinic	0	0.0	0	0.0	0	0.0	1	3.4	1	0.7
Hospital	3	42.9	3	3.6	6	22.2	8	27.6	20	13.6
Outside HK	3	42.9	73	86.9	17	63.0	15	51.7	108	73.5
Not recorded	1	14.3	2	2.4	1	3.7	1	3.4	5	3.4

Among those defaulted

Never found	2	66.7	27	90.0	21	63.6	19	52.8	69	67.6
Retreated after default	1	33.3	0	0.0	4	12.1	2	5.6	7	6.9
Treatment stopped by doctor	0	0.0	1	3.3	6	18.2	8	22.2	15	14.7
Not recorded	0	0.0	2	6.7	2	6.1	7	19.4	11	10.8

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

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

Outcome at 12 months

Cured/ treatment completed	132	84.1	800	76.2	978	74.7	1 216	53.4	3 126	65.2
Still on treatment	12	7.6	72	6.9	137	10.5	221	9.7	442	9.2
Died	0	0.0	7	0.7	78	6.0	708	31.1	793	16.5
Transferred	4	2.5	108	10.3	33	2.5	23	1.0	168	3.5
Defaulted	7	4.5	57	5.4	61	4.7	68	3.0	193	4.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	2	1.3	4	0.4	21	1.6	33	1.4	60	1.3
Not recorded	0	0.0	2	0.2	2	0.2	8	0.4	12	0.3
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Among those cured/ treatment completed

Bacteriological conversion	65	49.2	405	50.6	558	57.1	752	61.8	1 780	56.9
Radiological improvement	88	66.7	571	71.4	698	71.4	898	73.8	2 255	72.1
Other clinical improvement	36	27.3	273	34.1	294	30.1	287	23.6	890	28.5
No evidence of response	1	0.8	9	1.1	12	1.2	28	2.3	50	1.6
After treatment completed:										
No relapse	90	68.2	580	72.5	776	79.3	959	78.9	2 405	76.9
Loss to follow up	12	9.1	74	9.3	41	4.2	44	3.6	171	5.5
Died	0	0.0	0	0.0	3	0.3	20	1.6	23	0.7
<i>TB-related</i>	0		0		2		0		2	
<i>Not TB-related</i>	0		0		1		15		16	
<i>Unknown</i>	0		0		0		4		4	
Relapse	0	0.0	0	0.0	0	0.0	3	0.2	3	0.1
<i>Bacteriological</i>	0		0		0		3		3	
<i>Histological</i>	0		0		0		0		0	
<i>Clinico-radiological</i>	0		0		0		0		0	
Not recorded	30	22.7	146	18.3	158	16.2	190	15.6	524	16.8

Among those still on treatment

Reasons for still on treatment:

Retreatment case	2	16.7	8	11.1	5	3.6	14	6.3	29	6.6
Extrapulmonary disease	4	33.3	29	40.3	34	24.8	41	18.6	108	24.4
Extensive disease	1	8.3	12	16.7	26	19.0	30	13.6	69	15.6
Interrupted treatment	2	16.7	32	44.4	65	47.4	113	51.1	212	48.0
Drug resistance	1	8.3	9	12.5	15	10.9	27	12.2	52	11.8
Poor response	3	25.0	9	12.5	17	12.4	13	5.9	42	9.5
Others	3	25.0	20	27.8	47	34.3	107	48.4	177	40.0

Among those died - causes of death:

TB-related cause	0	-	0	0.0	2	2.6	37	5.2	39	4.9
Not TB-related	0	-	0	0.0	20	25.6	148	20.9	168	21.2
Unknown	0	-	0	0.0	5	6.4	59	8.3	64	8.1

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	1	25.0	0	0.0	0	0.0	0	0.0	1	0.6
Outside HK	1	25.0	59	54.6	14	42.4	9	39.1	83	49.4
Not recorded	2	50.0	49	45.4	19	57.6	14	60.9	84	50.0

Among those defaulted

Never found	3	42.9	30	52.6	16	26.2	13	19.1	62	32.1
Retreated after default	0	0.0	1	1.8	8	13.1	3	4.4	12	6.2
Treatment stopped by doctor	1	14.3	2	3.5	7	11.5	7	10.3	17	8.8
Not recorded	3	42.9	24	42.1	30	49.2	45	66.2	96	49.7

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	141	89.8	871	83.0	1 107	84.5	1 410	61.9	3 529	73.6
Still on treatment	2	1.3	3	0.3	1	0.1	4	0.2	10	0.2
Died	0	0.0	7	0.7	81	6.2	717	31.5	805	16.8
Transferred	3	1.9	102	9.7	30	2.3	22	1.0	157	3.3
Defaulted	9	5.7	60	5.7	66	5.0	73	3.2	208	4.3
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	2	1.3	4	0.4	21	1.6	33	1.4	60	1.3
Not recorded	0	0.0	3	0.3	4	0.3	18	0.8	25	0.5
Total	157	100.0	1 050	100.0	1 310	100.0	2 277	100.0	4 794	100.0

Among those cured/ treatment completed

Bacteriological conversion	74	52.5	463	53.2	667	60.3	925	65.6	2 129	60.3
Radiological improvement	103	73.0	636	73.0	821	74.2	1 095	77.7	2 655	75.2
Other clinical improvement	42	29.8	348	40.0	409	36.9	402	28.5	1 201	34.0
No evidence of response	0	0.0	12	1.4	9	0.8	26	1.8	47	1.3
After treatment completed:										
No relapse	87	61.7	589	67.6	879	79.4	1 075	76.2	2 630	74.5
Loss to follow up	28	19.9	167	19.2	99	8.9	129	9.1	423	12.0
Died	0	0.0	0	0.0	8	0.7	72	5.1	80	2.3
<i>TB-related</i>	0		0		0		1		1	
<i>Not TB-related</i>	0		0		6		43		49	
<i>Unknown</i>	0		0		2		27		29	
Relapse	1	0.7	3	0.3	10	0.9	8	0.6	22	0.6
<i>Bacteriological</i>	1		3		5		5		14	
<i>Histological</i>	0		1		5		1		7	
<i>Clinico-radiological</i>	0		0		0		1		1	
<i>Clinical only</i>	0		0		0		1		1	
Not recorded	25	17.7	112	12.9	111	10.0	126	8.9	374	10.6

Among those still on treatment

Reasons for still on treatment:

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

Among those died - causes of death:

TB-related cause	0	-	0	0.0	3	3.7	37	5.2	40	5.0
Not TB-related	0	-	0	0.0	21	25.9	155	21.6	176	21.9
Unknown	0	-	0	0.0	6	7.4	61	8.5	67	8.3

Among those transferred, new sources of care:

GP	0	0.0	1	1.0	1	3.3	0	0.0	2	1.3
Chest Clinic	0	0.0	1	1.0	0	0.0	0	0.0	1	0.6
Hospital	1	33.3	0	0.0	1	3.3	2	9.1	4	2.5
Outside HK	2	66.7	58	56.9	11	36.7	9	40.9	80	51.0
Not recorded	0	0.0	42	41.2	17	56.7	11	50.0	70	44.6

Among those defaulted

Never found	4	44.4	35	58.3	18	27.3	15	20.5	72	34.6
Retreated after default	1	11.1	6	10.0	10	15.2	8	11.0	25	12.0
Treatment stopped by doctor	1	11.1	2	3.3	9	13.6	9	12.3	21	10.1
Not recorded	3	33.3	17	28.3	29	43.9	41	56.2	90	43.3

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	50	37.6	525	57.8	404	35.6	396	23.9	1 375	35.9
Male	83	62.4	383	42.2	731	64.4	1 259	76.1	2 456	64.1
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	100.0

First presentation

Private doctor	27	20.3	227	25.0	216	19.0	123	7.4	593	15.5
Private hospital	1	0.8	22	2.4	20	1.8	10	0.6	53	1.4
GOPC	4	3.0	26	2.9	65	5.7	74	4.5	169	4.4
Chest Clinic	13	9.8	64	7.0	99	8.7	173	10.5	349	9.1
Other DH Clinic	2	1.5	12	1.3	15	1.3	23	1.4	52	1.4
HA Clinic	3	2.3	43	4.7	54	4.8	59	3.6	159	4.2
HA Hospital	79	59.4	475	52.3	635	55.9	1 154	69.7	2 343	61.2
Mainland	1	0.8	21	2.3	21	1.9	24	1.5	67	1.7
Overseas	1	0.8	10	1.1	2	0.2	2	0.1	15	0.4
Not recorded	2	1.5	8	0.9	8	0.7	13	0.8	31	0.8
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	100.0

Symptomatic on presentation

Y	113	85.0	801	88.2	1 006	88.6	1 470	88.8	3 390	88.5
N	18	13.5	100	11.0	122	10.7	171	10.3	411	10.7
Not recorded	2	1.5	7	0.8	7	0.6	14	0.8	30	0.8
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	100.0

Chest symptoms	87	-	565	-	743	-	1 146	-	2 541	-
Systemic symptoms	24	-	139	-	158	-	256	-	577	-
Other site-specific symptoms	23	-	215	-	221	-	238	-	697	-

Reason for presentation

Symptom	112	84.2	791	87.1	985	86.8	1 407	85.0	3 295	86.0
Contact screening	8	6.0	26	2.9	21	1.9	11	0.7	66	1.7
Pre-employment	4	3.0	30	3.3	9	0.8	4	0.2	47	1.2
Pre-emigration	0	0.0	5	0.6	2	0.2	2	0.1	9	0.2
Other body check	5	3.8	33	3.6	43	3.8	70	4.2	151	3.9
Incidental to other illness	1	0.8	10	1.1	61	5.4	138	8.3	210	5.5
Others	0	0.0	1	0.1	0	0.0	3	0.2	4	0.1
Not recorded	3	2.3	12	1.3	14	1.2	20	1.2	49	1.3
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	100.0

Disease Classification

Pulmonary TB only	91	68.4	546	60.1	763	67.2	1 168	70.6	2 568	67.0
Extrapulmonary TB only	28	21.1	203	22.4	214	18.9	244	14.7	689	18.0
Both	14	10.5	159	17.5	158	13.9	243	14.7	574	15.0
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	100.0

6-month short course treatment

Yes	37	27.8	199	21.9	176	15.5	169	10.2	581	15.2
2HRZE+4HR	34	25.6	175	19.3	141	12.4	137	8.3	487	12.7
2HRZS+4HR	1	0.8	0	0.0	2	0.2	3	0.2	6	0.2

Other standard regimen based on HRZES

Yes	81	60.9	534	58.8	681	60.0	886	53.5	2 182	57.0
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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%	98	73.7	637	70.2	834	73.5	1 336	80.7	2 905	75.8
>75%	16	12.0	113	12.4	118	10.4	80	4.8	327	8.5
>50%	5	3.8	64	7.0	77	6.8	74	4.5	220	5.7
>25%	5	3.8	22	2.4	39	3.4	26	1.6	92	2.4
≤25%	5	3.8	21	2.3	27	2.4	37	2.2	90	2.3
Not recorded	4	3.0	51	5.6	40	3.5	102	6.2	197	5.1

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

>90%	74	55.6	514	56.6	713	62.8	1 215	73.4	2 516	65.7
>75%	24	18.0	125	13.8	142	12.5	97	5.9	388	10.1
>50%	11	8.3	97	10.7	100	8.8	57	3.4	265	6.9
>25%	7	5.3	28	3.1	45	4.0	35	2.1	115	3.0
≤25%	11	8.3	38	4.2	51	4.5	36	2.2	136	3.5
Not recorded	6	4.5	106	11.7	84	7.4	215	13.0	411	10.7

Under supervision by relatives (initial 2 months)

>90%	2	1.5	2	0.2	2	0.2	3	0.2	9	0.2
>75%	0	0.0	2	0.2	2	0.2	2	0.1	6	0.2
>50%	0	0.0	1	0.1	3	0.3	3	0.2	7	0.2
>25%	0	0.0	3	0.3	0	0.0	0	0.0	3	0.1
≤25%	88	66.2	571	62.9	699	61.6	1 029	62.2	2 387	62.3
Not recorded	43	32.3	329	36.2	429	37.8	618	37.3	1 419	37.0

Under supervision by relatives (subsequent 4 months)

>90%	4	3.0	6	0.7	2	0.2	3	0.2	15	0.4
>75%	0	0.0	3	0.3	2	0.2	3	0.2	8	0.2
>50%	0	0.0	0	0.0	3	0.3	2	0.1	5	0.1
>25%	0	0.0	2	0.2	3	0.3	0	0.0	5	0.1
≤25%	83	62.4	531	58.5	667	58.8	957	57.8	2 238	58.4
Not recorded	46	34.6	366	40.3	458	40.4	690	41.7	1 560	40.7

Supplied for unsupervised treatment (initial 2 months)

<5%	82	61.7	537	59.1	681	60.0	1 101	66.5	2 401	62.7
<10%	8	6.0	56	6.2	61	5.4	59	3.6	184	4.8
<15%	11	8.3	46	5.1	38	3.3	27	1.6	122	3.2
<25%	3	2.3	53	5.8	66	5.8	32	1.9	154	4.0
<50%	3	2.3	37	4.1	53	4.7	49	3.0	142	3.7
≥50%	3	2.3	21	2.3	44	3.9	44	2.7	112	2.9
Not recorded	23	17.3	158	17.4	192	16.9	343	20.7	716	18.7

Supplied for unsupervised treatment (subsequent 4 months)

<5%	64	48.1	431	47.5	555	48.9	964	58.2	2 014	52.6
<10%	14	10.5	73	8.0	88	7.8	78	4.7	253	6.6
<15%	7	5.3	45	5.0	53	4.7	38	2.3	143	3.7
<25%	9	6.8	76	8.4	72	6.3	37	2.2	194	5.1
<50%	7	5.3	53	5.8	82	7.2	44	2.7	186	4.9
≥50%	9	6.8	44	4.8	72	6.3	65	3.9	190	5.0
Not recorded	23	17.3	186	20.5	213	18.8	429	25.9	851	22.2

Defaulted (initial 2 months)

<5%	108	81.2	714	78.6	948	83.5	1 370	82.8	3 140	82.0
<10%	4	3.0	26	2.9	25	2.2	18	1.1	73	1.9
<15%	1	0.8	16	1.8	10	0.9	11	0.7	38	1.0
<25%	4	3.0	16	1.8	15	1.3	14	0.8	49	1.3
<50%	6	4.5	16	1.8	17	1.5	14	0.8	53	1.4
≥50%	1	0.8	9	1.0	13	1.1	13	0.8	36	0.9
Not recorded	9	6.8	111	12.2	107	9.4	215	13.0	442	11.5

Defaulted (subsequent 4 months)

<5%	89	66.9	623	68.6	891	78.5	1 262	76.3	2 865	74.8
<10%	5	3.8	44	4.8	34	3.0	23	1.4	106	2.8
<15%	8	6.0	21	2.3	18	1.6	11	0.7	58	1.5
<25%	8	6.0	26	2.9	11	1.0	9	0.5	54	1.4
<50%	6	4.5	21	2.3	11	1.0	16	1.0	54	1.4
≥50%	4	3.0	19	2.1	20	1.8	7	0.4	50	1.3
Not recorded	13	9.8	154	17.0	150	13.2	327	19.8	644	16.8

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

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

Outcome at 6 months

Cured/ treatment completed	45	33.8	243	26.8	247	21.8	267	16.1	802	20.9
Still on treatment	79	59.4	540	59.5	790	69.6	1 116	67.4	2 525	65.9
Died	0	0.0	0	0.0	21	1.9	192	11.6	213	5.6
Transferred	6	4.5	82	9.0	27	2.4	28	1.7	143	3.7
Defaulted	3	2.3	30	3.3	33	2.9	35	2.1	101	2.6
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	1	0.1	5	0.4	2	0.1	8	0.2
Not recorded	0	0.0	12	1.3	12	1.1	15	0.9	39	1.0
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	100.0

Outcome at 12 months

Cured/ treatment completed	113	85.0	723	79.6	907	79.9	1 142	69.0	2 885	75.3
Still on treatment	12	9.0	71	7.8	137	12.1	215	13.0	435	11.4
Died	0	0.0	1	0.1	31	2.7	249	15.0	281	7.3
Transferred	4	3.0	71	7.8	16	1.4	12	0.7	103	2.7
Defaulted	4	3.0	41	4.5	38	3.3	32	1.9	115	3.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	1	0.1	6	0.5	5	0.3	12	0.3
Not recorded	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	100.0

Outcome at 24 months

Cured/ treatment completed	122	91.7	794	87.4	1 036	91.3	1 336	80.7	3 288	85.8
Still on treatment	2	1.5	3	0.3	1	0.1	4	0.2	10	0.3
Died	0	0.0	1	0.1	34	3.0	258	15.6	293	7.6
Transferred	3	2.3	64	7.0	13	1.1	11	0.7	91	2.4
Defaulted	6	4.5	45	5.0	43	3.8	37	2.2	131	3.4
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	1	0.1	6	0.5	5	0.3	12	0.3
Not recorded	0	0.0	0	0.0	2	0.2	4	0.2	6	0.2
Total	133	100.0	908	100.0	1 135	100.0	1 655	100.0	3 831	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	13	54.2	80	56.3	64	36.6	170	27.3	327	34.0
Male	11	45.8	62	43.7	111	63.4	452	72.7	636	66.0
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

First presentation

Private doctor	1	4.2	1	0.7	2	1.1	4	0.6	8	0.8
Private hospital	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
GOPC	0	0.0	1	0.7	2	1.1	2	0.3	5	0.5
Chest Clinic	0	0.0	2	1.4	3	1.7	3	0.5	8	0.8
Other DH Clinic	0	0.0	11	7.7	3	1.7	2	0.3	16	1.7
HA Clinic	0	0.0	0	0.0	0	0.0	2	0.3	2	0.2
HA Hospital	0	0.0	4	2.8	7	4.0	48	7.7	59	6.1
Mainland	0	0.0	0	0.0	0	0.0	2	0.3	2	0.2
Overseas	0	0.0	1	0.7	0	0.0	0	0.0	1	0.1
Not recorded	23	95.8	122	85.9	158	90.3	558	89.7	861	89.4
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

Symptomatic on presentation

Y	1	4.2	15	10.6	16	9.1	55	8.8	87	9.0
N	0	0.0	5	3.5	1	0.6	8	1.3	14	1.5
Not recorded	23	95.8	122	85.9	158	90.3	559	89.9	862	89.5
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

Chest symptoms	0	-	10	-	12	-	47	-	69	-
Systemic symptoms	0	-	3	-	2	-	3	-	8	-
Other site-specific symptoms	1	-	1	-	1	-	0	-	3	-

Reason for presentation

Symptom	1	4.2	13	9.2	14	8.0	59	9.5	87	9.0
Contact screening	0	0.0	2	1.4	1	0.6	1	0.2	4	0.4
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	5	3.5	1	0.6	0	0.0	6	0.6
Incidental to other illness	0	0.0	0	0.0	1	0.6	3	0.5	4	0.4
Others	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not recorded	23	95.8	122	85.9	158	90.3	559	89.9	862	89.5
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

Disease Classification

Pulmonary TB only	14	58.3	94	66.2	130	74.3	496	79.7	734	76.2
Extrapulmonary TB only	8	33.3	34	23.9	35	20.0	96	15.4	173	18.0
Both	2	8.3	14	9.9	10	5.7	30	4.8	56	5.8
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

6-month short course treatment

Yes	0	0.0	3	2.1	1	0.6	0	0.0	4	0.4
2HRZE+4HR	0	0.0	3	2.1	1	0.6	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	4	2.8	4	2.3	2	0.3	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	6	4.2	5	2.9	3	0.5	14	1.5
>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	1	0.7	0	0.0	0	0.0	1	0.1
Not recorded	24	100.0	135	95.1	170	97.1	619	99.5	948	98.4

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

>90%	0	0.0	6	4.2	5	2.9	3	0.5	14	1.5
>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	1	0.7	0	0.0	0	0.0	1	0.1
Not recorded	24	100.0	135	95.1	170	97.1	619	99.5	948	98.4

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	0	0.0	0	0.0	0	0.0
Not recorded	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

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	24	100.0	142	100.0	175	100.0	622	100.0	963	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	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	1	0.2	1	0.1
Not recorded	24	100.0	142	100.0	175	100.0	621	99.8	962	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	0	0.0	1	0.2	1	0.1
Not recorded	24	100.0	142	100.0	175	100.0	621	99.8	962	99.9

Defaulted (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	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	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

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	24	100.0	142	100.0	175	100.0	622	100.0	963	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	2.1	1	0.6	2	0.3	6	0.6
Still on treatment	0	0.0	5	3.5	4	2.3	1	0.2	10	1.0
Died	0	0.0	0	0.0	0	0.0	2	0.3	2	0.2
Transferred	1	4.2	2	1.4	0	0.0	1	0.2	4	0.4
Defaulted	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
Not recorded	23	95.8	132	93.0	170	97.1	614	98.7	939	97.5
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

Outcome at 12 months

Cured/ treatment completed	19	79.2	77	54.2	71	40.6	74	11.9	241	25.0
Still on treatment	0	0.0	1	0.7	0	0.0	6	1.0	7	0.7
Died	0	0.0	6	4.2	47	26.9	459	73.8	512	53.2
Transferred	0	0.0	37	26.1	17	9.7	11	1.8	65	6.7
Defaulted	3	12.5	16	11.3	23	13.1	36	5.8	78	8.1
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	2	8.3	3	2.1	15	8.6	28	4.5	48	5.0
Not recorded	0	0.0	2	1.4	2	1.1	8	1.3	12	1.2
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	100.0

Outcome at 24 months

Cured/ treatment completed	19	79.2	77	54.2	71	40.6	74	11.9	241	25.0
Still on treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Died	0	0.0	6	4.2	47	26.9	459	73.8	512	53.2
Transferred	0	0.0	38	26.8	17	9.7	11	1.8	66	6.9
Defaulted	3	12.5	15	10.6	23	13.1	36	5.8	77	8.0
Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Revised dx/ others	2	8.3	3	2.1	15	8.6	28	4.5	48	5.0
Not recorded	0	0.0	3	2.1	2	1.1	14	2.3	19	2.0
Total	24	100.0	142	100.0	175	100.0	622	100.0	963	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	1 210	86.4	2 204	82.5	17	94.4
No	191	13.6	467	17.5	1	5.6
Total	1 401	100.0	2 671	100.0	18	100.0

Age group

0 to 19	44	3.1	74	2.8	0	0.0
Female	17		27		0	
Male	27		47		0	
20 to 39	298	21.3	502	18.8	5	27.8
Female	164		273		2	
Male	134		229		3	
40 to 59	436	31.1	720	27.0	9	50.0
Female	112		193		5	
Male	324		527		4	
60+	623	44.5	1 375	51.5	4	22.2
Female	122		273		1	
Male	501		1 102		3	
Total	1 401	100.0	2 671	100.0	18	100.0
Female	415	29.6	766	28.7	8	44.4
Male	986	70.4	1 905	71.3	10	55.6

Marital status

Single	293	20.9	507	19.0	4	22.2
Married	841	60.0	1 550	58.0	10	55.6
Separated	20	1.4	33	1.2	1	5.6
Divorce	27	1.9	57	2.1	1	5.6
Widowed	26	1.9	45	1.7	2	11.1
Not recorded	194	13.8	479	17.9	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Smoking status

Never	516	36.8	965	36.1	10	55.6
Ex-smoker	383	27.3	714	26.7	3	16.7
Current smoker	270	19.3	448	16.8	3	16.7
Not recorded	232	16.6	544	20.4	2	11.1
Total	1 401	100.0	2 671	100.0	18	100.0

Institution-related

Yes	153	10.9	301	11.3	2	11.1
No	1 073	76.6	1 922	72.0	16	88.9
Not recorded	175	12.5	448	16.8	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Institution

Client	106	-	212	-	2	-
Staff	15	-	26	-	0	-

Institution type

Old age home	69	-	150	-	0	-
School	78	-	171	-	1	-
Hospital	7	-	10	-	0	-
Handicapped	5	-	13	-	0	-
Prison	19	-	31	-	1	-
Others	7	-	15	-	0	-

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

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

Living situation

Street-sleeper	3	0.2	4	0.1	0	0.0
Cubicle bed space	4	0.3	7	0.3	0	0.0
Institution	61	4.4	139	5.2	2	11.1
Work quarter	3	0.2	9	0.3	1	5.6
Alone (not above)	133	9.5	233	8.7	2	11.1
With friends	17	1.2	31	1.2	0	0.0
With family	965	68.9	1 751	65.6	13	72.2
Not recorded	215	15.3	497	18.6	0	0.0

Residential status

Permanent resident	1 138	81.2	2 073	77.6	13	72.2
Chinese immigrant	23	1.6	45	1.7	3	16.7
Imported worker	43	3.1	66	2.5	2	11.1
Tourist - 2 way permit Chinese	2	0.1	4	0.1	0	0.0
Other tourist	1	0.1	4	0.1	0	0.0
Vietnamese	1	0.1	2	0.1	0	0.0
Illegal immigrants	4	0.3	11	0.4	0	0.0
Not recorded	189	13.5	466	17.4	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Place of birth

Hong Kong	535	38.2	915	34.3	7	38.9
Mainland China	571	40.8	1 114	41.7	8	44.4
Others	116	8.3	182	6.8	3	16.7
Not recorded	179	12.8	460	17.2	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Ethnicity

Chinese	1 134	80.9	2 072	77.6	15	83.3
Other Asian	84	6.0	134	5.0	3	16.7
Caucasian	0	0.0	3	0.1	0	0.0
Others	3	0.2	5	0.2	0	0.0
Not recorded	180	12.8	457	17.1	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Previous BCG history

Yes	424	30.3	712	26.7	10	55.6
No	299	21.3	565	21.2	1	5.6
Unknown	678	48.4	1 394	52.2	7	38.9
Total	1 401	100.0	2 671	100.0	18	100.0

BCG scar

Yes	413	-	702	-	9	-
No	722	-	1 354	-	6	-

Employment status

Full-time	411	29.3	694	26.0	6	33.3
Part-time	33	2.4	72	2.7	0	0.0
Retired	403	28.8	829	31.0	4	22.2
Unemployed	183	13.1	282	10.6	4	22.2
Housewife	129	9.2	234	8.8	2	11.1
Student	54	3.9	92	3.4	1	5.6
Not recorded	188	13.4	468	17.5	1	5.6
Total	1 401	100.0	2 671	100.0	18	100.0

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

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

Occupation

Blue collar	253	18.1	436	16.3	4	22.2
White collar	113	8.1	176	6.6	3	16.7
Medical	2	0.1	2	0.1	0	0.0
Nursing	1	0.1	5	0.2	0	0.0
Paramedical	1	0.1	1	0.0	0	0.0
Supporting health staff	4	0.3	5	0.2	0	0.0
Not applicable	694	49.5	1 308	49.0	9	50.0
Not recorded	333	23.8	738	27.6	2	11.1
Total	1 401	100.0	2 671	100.0	18	100.0

First presentation

Private doctor	224	16.0	338	12.7	4	22.2
Private hospital	15	1.1	23	0.9	0	0.0
GOPC	78	5.6	119	4.5	1	5.6
Chest Clinic	81	5.8	209	7.8	4	22.2
Other DH Clinic	14	1.0	34	1.3	1	5.6
HA Clinic	29	2.1	64	2.4	0	0.0
HA Hospital	774	55.2	1 426	53.4	8	44.4
Mainland	20	1.4	31	1.2	0	0.0
Overseas	1	0.1	3	0.1	0	0.0
Not recorded	165	11.8	424	15.9	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Symptomatic on presentation

Y	1 163	83.0	2 019	75.6	16	88.9
N	72	5.1	229	8.6	2	11.1
Not recorded	166	11.8	423	15.8	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Chest symptoms	1 058	-	1 799	-	14	-
Systemic symptoms	236	-	368	-	3	-
Other site-specific symptoms	52	-	124	-	1	-

Reason for presentation

Symptom	1 142	81.5	1 955	73.2	15	83.3
Contact screening	7	0.5	35	1.3	0	0.0
Pre-employment	8	0.6	22	0.8	0	0.0
Pre-emigration	0	0.0	2	0.1	0	0.0
Other body check	26	1.9	85	3.2	3	16.7
Incidental to other illness	44	3.1	132	4.9	0	0.0
Others	0	0.0	2	0.1	0	0.0
Not recorded	174	12.4	438	16.4	0	0.0
Total	1 401	100.0	2 671	100.0	18	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	47	3.4	116	4.3	0	0.0
No	1 188	84.8	2 130	79.7	0	0.0
Not recorded	166	11.8	425	15.9	18	100.0
Total	1 401	100.0	2 671	100.0	18	100.0
Contact type						
Household	38	-	93	-	0	-
Work	2	-	5	-	0	-
Casual	3	-	8	-	0	-
Time of contact						
Within 2 year	13	-	42	-	0	-
Over 2 year	28	-	52	-	0	-
Previous chemoprophylaxis						
Yes	1	-	5	-	0	-
Reason for chemoprophylaxis						
Contact	0	-	3	-	0	-
Silicosis	0	-	1	-	0	-
HIV	0	-	0	-	0	-
Old scar on CXR	0	-	0	-	0	-
Others	0	-	0	-	0	-
Disease Classification						
Pulmonary TB only	1 294	92.4	2 409	90.2	17	94.4
Both pulm & extrapulm	107	7.6	262	9.8	1	5.6
Total	1 401	100.0	2 671	100.0	18	100.0
Case category						
New case	1 242	88.7	2 405	90.0	12	66.7
Relapse	147	10.5	251	9.4	5	27.8
Treatment after default	11	0.8	14	0.5	0	0.0
Failure of previous treatment	1	0.1	1	0.0	1	5.6
Total	1 401	100.0	2 671	100.0	18	100.0
Disease characteristics (pulmonary cases)						
Extent = 1	433	30.9	1 072	40.1	8	44.4
Extent=1 & cavity=N	333	23.8	924	34.6	7	38.9
Extent=1 & cavity=Y	100	7.1	148	5.5	1	5.6
Extent = 2	482	34.4	719	26.9	4	22.2
Extent=2 & cavity=N	279	19.9	466	17.4	4	22.2
Extent=2 & cavity=Y	203	14.5	253	9.5	0	0.0
Extent=3	268	19.1	354	13.3	6	33.3
Extent=3 & cavity=N	119	8.5	185	6.9	2	11.1
Extent=3 & cavity=Y	149	10.6	169	6.3	4	22.2
Extent=not specified	218	15.6	526	19.7	8	44.4
Extent=ns & cavity=N	215	15.3	523	19.6	7	38.9
Extent=ns & cavity=Y	3	0.2	3	0.1	1	5.6
Cavity=N	946	67.5	2 098	78.5	13	72.2
Cavity=Y	455	32.5	573	21.5	5	27.8
6-month short course treatment						
Yes	139	9.9	344	12.9	0	0.0
2HRZE+4HR	112	8.0	290	10.9	0	0.0
2HRZS+4HR	0	0.0	4	0.1	0	0.0
Other standard regimen based on HRZES						
Yes	760	54.2	1 256	47.0	2	11.1

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%	959	68.5	1 704	63.8	13	72.2
>75%	100	7.1	187	7.0	1	5.6
>50%	68	4.9	121	4.5	2	11.1
>25%	24	1.7	54	2.0	0	0.0
≤25%	23	1.6	43	1.6	1	5.6
Not recorded	227	16.2	562	21.0	1	5.6

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

>90%	831	59.3	1 477	55.3	9	50.0
>75%	124	8.9	213	8.0	1	5.6
>50%	84	6.0	154	5.8	2	11.1
>25%	40	2.9	70	2.6	0	0.0
≤25%	44	3.1	74	2.8	4	22.2
Not recorded	278	19.8	683	25.6	2	11.1

Under supervision by relatives (initial 2 months)

>90%	1	0.1	2	0.1	0	0.0
>75%	1	0.1	1	0.0	0	0.0
>50%	1	0.1	3	0.1	0	0.0
>25%	1	0.1	2	0.1	0	0.0
≤25%	770	55.0	1 373	51.4	10	55.6
Not recorded	627	44.8	1 290	48.3	8	44.4

Under supervision by relatives (subsequent 4 months)

>90%	1	0.1	4	0.1	0	0.0
>75%	4	0.3	4	0.1	0	0.0
>50%	1	0.1	2	0.1	0	0.0
>25%	1	0.1	3	0.1	0	0.0
≤25%	736	52.5	1 290	48.3	10	55.6
Not recorded	658	47.0	1 368	51.2	8	44.4

Supplied for unsupervised treatment (initial 2 months)

<5%	792	56.5	1 407	52.7	12	66.7
<10%	57	4.1	100	3.7	0	0.0
<15%	41	2.9	68	2.5	0	0.0
<25%	44	3.1	83	3.1	0	0.0
<50%	42	3.0	83	3.1	1	5.6
≥50%	32	2.3	59	2.2	1	5.6
Not recorded	393	28.1	871	32.6	4	22.2

Supplied for unsupervised treatment (subsequent 4 months)

<5%	671	47.9	1 191	44.6	11	61.1
<10%	83	5.9	141	5.3	1	5.6
<15%	44	3.1	78	2.9	0	0.0
<25%	66	4.7	102	3.8	0	0.0
<50%	56	4.0	108	4.0	1	5.6
≥50%	55	3.9	103	3.9	1	5.6
Not recorded	426	30.4	948	35.5	4	22.2

Defaulted (initial 2 months)

<5%	1 010	72.1	1 810	67.8	14	77.8
<10%	26	1.9	46	1.7	1	5.6
<15%	12	0.9	26	1.0	0	0.0
<25%	15	1.1	28	1.0	1	5.6
<50%	18	1.3	31	1.2	0	0.0
≥50%	12	0.9	22	0.8	0	0.0
Not recorded	308	22.0	708	26.5	2	11.1

Defaulted (subsequent 4 months)

<5%	930	66.4	1 654	61.9	12	66.7
<10%	31	2.2	60	2.2	0	0.0
<15%	24	1.7	36	1.3	0	0.0
<25%	19	1.4	35	1.3	1	5.6
<50%	22	1.6	35	1.3	1	5.6
≥50%	22	1.6	33	1.2	1	5.6
Not recorded	353	25.2	818	30.6	3	16.7

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	225	16.1	497	18.6	0	0.0
Still on treatment	866	61.8	1 431	53.6	12	66.7
Died	57	4.1	144	5.4	3	16.7
Transferred	35	2.5	67	2.5	2	11.1
Defaulted	24	1.7	56	2.1	1	5.6
Failure	0	0.0	0	0.0	0	0.0
Revised dx/ others	1	0.1	1	0.0	0	0.0
Not recorded	193	13.8	475	17.8	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Outcome at 12 months

Cured/ treatment completed	937	66.9	1 706	63.9	0	0.0
Still on treatment	168	12.0	266	10.0	11	61.1
Died	185	13.2	471	17.6	3	16.7
Transferred	39	2.8	74	2.8	1	5.6
Defaulted	58	4.1	112	4.2	3	16.7
Failure	0	0.0	0	0.0	0	0.0
Revised dx/ others	11	0.8	33	1.2	0	0.0
Not recorded	3	0.2	9	0.3	0	0.0
Total	1 401	100.0	2 671	100.0	18	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	1 087	77.6	1 949	73.0	9	50.0
Still on treatment	3	0.2	5	0.2	2	11.1
Died	191	13.6	478	17.9	4	22.2
Transferred	38	2.7	70	2.6	1	5.6
Defaulted	64	4.6	121	4.5	2	11.1
Failure	0	0.0	0	0.0	0	0.0
Revised dx/ others	11	0.8	33	1.2	0	0.0
Not recorded	7	0.5	15	0.6	0	0.0
Total	1 401	100.0	2 671	100.0	18	100.0

Among those cured/ treatment completed

Bacteriological conversion	1 025	94.3	1 825	93.6	8	88.9
Radiological improvement	1 010	92.9	1 762	90.4	9	100.0
Other clinical improvement	233	21.4	427	21.9	0	0.0
No evidence of response	1	0.1	3	0.2	0	0.0

After treatment completed:

No relapse	849	78.1	1 520	78.0	8	88.9
Loss to follow up	138	12.7	242	12.4	1	11.1
Died	20	1.8	47	2.4	0	0.0
<i>TB-related</i>	1		1		0	
<i>Not TB-related</i>	11		31		0	
<i>Unknown</i>	8		14		0	
Relapse	10	0.9	14	0.7	0	0.0
<i>Bacteriological</i>	8		11		0	
<i>Histological</i>	2		3		0	
<i>Clinico-radiological</i>	0		0		0	
<i>Clinical only</i>	1		1			
Not recorded	70	6.4	126	6.5	0	0.0

Among those still on treatment

Reasons for still on treatment:

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

Among those died - causes of death:

TB-related cause	11	5.8	25	5.2	2	-
Not TB-related	46	24.1	117	24.5	2	-
Unknown	26	13.6	44	9.2	0	-

Among those transferred, new sources of care:

GP	0	0.0	0	0.0	0	0.0
Chest Clinic	0	0.0	0	0.0	0	0.0
Hospital	1	2.6	1	1.4	0	0.0
Outside HK	22	57.9	34	48.6	0	0.0
Not recorded	15	39.5	35	50.0	1	100.0

Among those defaulted

Never found	20	31.3	37	30.6	0	0.0
Retreated after default	9	14.1	21	17.4	0	0.0
Treatment stopped by doctor	10	15.6	14	11.6	2	100.0
Not recorded	25	39.1	49	40.5	0	0.0

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

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

Drug susceptibility pattern

Streptomycin - R	98	8.2	171	7.9	14	77.8
Streptomycin - S	1 094	91.8	1 997	92.1	4	22.2

Isoniazid - R	65	5.4	100	4.6	18	100.0
Isoniazid - S	1 128	94.6	2 069	95.4	0	0.0

Rifampicin - R	20	1.7	25	1.2	18	100.0
Rifampicin - S	1 173	98.3	2 145	98.8	0	0.0

Ethambutol - R	6	0.5	7	0.3	4	22.2
Ethambutol - S	1 186	99.5	2 161	99.7	14	77.8

Pyrazinamide - R	6	15.4	7	13.5	6	35.3
Pyrazinamide - S	33	84.6	45	86.5	11	64.7

Ofloxacin - R	5	9.3	5	6.4	3	16.7
Ofloxacin - S	49	90.7	73	93.6	15	83.3

Smear conversion rates

1. Smear at 2 month = N (a)	648				7	
2. Smear at 2 month = P (b)	200				2	
2. Sm 2m (P); Sm 3m (N) (c)	96				0	
2. Sm 2m (P); Sm 3m (P) (d)	62				1	
2. Sm 2m (P); Sm 3m (U) (e)	42				1	
3. Smear at 2 month = U (f)	541				9	
3. Sm 2m (U); Sm 3m (N) (g)	153				4	
3. Sm 2m (U); Sm 3m (P) (h)	25				0	
3. Sm 2m (U); Sm 3m (U) (i)	375				5	

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

76.4		-		77.8	
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Overall percentage of smear conversion at 3m = [(a)+(c)+(g)]/[(a)+(c)+(d)+(g)+(h)]

91.2		-		91.7	
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Culture conversion rates

1. Culture at 2 month = N (a)			1 172		6	
2. Culture at 2 month = P (b)			192		3	
2. Cu 2m (P); Cu 3m (N) (c)			106		0	
2. Cu 2m (P); Cu 3m (P) (d)			24		1	
2. Cu 2m (P); Cu 3m (U) (e)			62		2	
3. Culture at 2 month = U (f)			1 307		9	
3. Cu 2m (U); Cu 3m (N) (g)			344		4	
3. Cu 2m (U); Cu 3m (P) (h)			9		0	
3. Cu 2m (U); Cu 3m (U) (i)			954		5	

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

-		85.9		66.7	
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Overall percentage of culture conversion at 3m = [(a)+(c)+(g)]/[(a)+(c)+(d)+(g)+(h)]

-		98.0		90.9	
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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	1 061	96.8	149	48.9
No	35	3.2	156	51.1
Total	1 096	100.0	305	100.0

Age group

0 to 19	40	3.6	4	1.3
Female	14		3	
Male	26		1	
20 to 39	260	23.7	38	12.5
Female	142		22	
Male	118		16	
40 to 59	357	32.6	79	25.9
Female	95		17	
Male	262		62	
60+	439	40.1	184	60.3
Female	94		28	
Male	345		156	
Total	1 096	100.0	305	100.0
Female	345	31.5	70	23.0
Male	751	68.5	235	77.0

Disease Classification

Pulmonary TB only	1 003	91.5	291	95.4
Both pulmon and extrapulm	93	8.5	14	4.6
Total	1 096	100.0	305	100.0

6-month short course treatment

Yes	134	12.2	5	1.6
2HRZE+4HR	109	9.9	3	1.0
2HRZS+4HR	0	0.0	0	0.0

Other standard regimen based on HRZES

Yes	661	60.3	99	32.5
-----	-----	------	----	------

Outcome at 6 months

Cured/ treatment completed	215	19.6	10	3.3
Still on treatment	756	69.0	110	36.1
Died	44	4.0	13	4.3
Transferred	28	2.6	7	2.3
Defaulted	15	1.4	9	3.0
Failure	0	0.0	0	0.0
Revised dx/ others	0	0.0	1	0.3
Not recorded	38	3.5	155	50.8
Total	1 096	100.0	305	100.0

Outcome at 12 months

Cured/ treatment completed	829	75.6	108	35.4
Still on treatment	132	12.0	36	11.8
Died	81	7.4	104	34.1
Transferred	25	2.3	14	4.6
Defaulted	28	2.6	30	9.8
Failure	0	0.0	0	0.0
Revised dx/ others	1	0.1	10	3.3
Not recorded	0	0.0	3	1.0
Total	1 096	100.0	305	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	950	86.7	137	44.9
Still on treatment	2	0.2	1	0.3
Died	86	7.8	105	34.4
Transferred	23	2.1	15	4.9
Defaulted	33	3.0	31	10.2
Failure	0	0.0	0	0.0
Revised dx/ others	1	0.1	10	3.3
Not recorded	1	0.1	6	2.0
Total	1 096	100.0	305	100.0

Among those cured/ treatment completed

Bacteriological conversion	915	96.3	110	80.3
Radiological improvement	907	95.5	103	75.2
Other clinical improvement	213	22.4	20	14.6
No evidence of response	1	0.1	0	0.0

After treatment completed:

No relapse	755	79.5	94	68.6
Loss to follow up	127	13.4	11	8.0
Died	17	1.8	3	2.2
<i>TB-related</i>	1		0	
<i>Not TB-related</i>	9		2	
<i>Unknown</i>	7		1	
Relapse	10	1.1	0	0.0
<i>Bacteriological</i>	8		0	
<i>Histological</i>	2		0	
<i>Clinico-radiological</i>	0		0	
<i>Clinical only</i>	1		0	
Not recorded	41	4.3	29	21.2

Among those still on treatment

Reasons for still on treatment:

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

Among those died - causes of death:

TB-related cause	8	9.3	3	2.9
Not TB-related	36	41.9	10	9.5
Unknown	21	24.4	5	4.8

Among those transferred, new sources of care:

GP	0	0.0	0	0.0
Chest Clinic	0	0.0	0	0.0
Hospital	0	0.0	1	6.7
Outside HK	19	82.6	3	20.0
Not recorded	4	17.4	11	73.3

Among those defaulted

Never found	15	45.5	5	16.1
Retreated after default	5	15.2	4	12.9
Treatment stopped by doctor	8	24.2	2	6.5
Not recorded	5	15.2	20	64.5

Annex 1 (e) - Treatment defaulters - 01

Ever seen at chest clinics	N	%
Yes	131	63.0
No	77	37.0
Total	208	100.0

Age group

0 to 19	9	4.3
Female	5	
Male	4	
20 to 39	60	28.8
Female	28	
Male	32	
40 to 59	66	31.7
Female	19	
Male	47	
60+	73	35.1
Female	16	
Male	57	
Total	208	100.0
Female	68	32.7
Male	140	67.3

Marital status

Single	39	18.8
Married	84	40.4
Separated	3	1.4
Divorce	11	5.3
Widowed	1	0.5
Not recorded	70	33.7
Total	208	100.0

Smoking status

Never	47	22.6
Ex-smoker	33	15.9
Current smoker	51	24.5
Not recorded	77	37.0
Total	208	100.0

Institution-related

Yes	14	6.7
No	125	60.1
Not recorded	69	33.2
Total	208	100.0

Institution

Client	10	-
Staff	0	-

Institution type

Old age home	4	-
School	5	-
Hospital	0	-
Handicapped	0	-
Prison	9	-
Others	2	-

Annex 1 (e) - Treatment defaulters - 02

Living situation	N	%
Street-sleeper	0	0.0
Cubicle bed space	0	0.0
Institution	10	4.8
Work quarter	2	1.0
Alone (not above)	23	11.1
With friends	4	1.9
With family	101	48.6
Not recorded	68	32.7

Residential status

Permanent resident	115	55.3
Chinese immigrant	4	1.9
Imported worker	16	7.7
Tourist - 2 way permit Chinese	0	0.0
Other tourist	1	0.5
Vietnamese	1	0.5
Illegal immigrants	2	1.0
Not recorded	69	33.2
Total	208	100.0

Place of birth

Hong Kong	44	21.2
Mainland China	69	33.2
Others	27	13.0
Not recorded	68	32.7
Total	208	100.0

Ethnicity

Chinese	115	55.3
Other Asian	25	12.0
Caucasian	0	0.0
Others	0	0.0
Not recorded	68	32.7
Total	208	100.0

Employment status

Full-time	43	20.7
Part-time	8	3.8
Retired	29	13.9
Unemployed	48	23.1
Housewife	10	4.8
Student	1	0.5
Not recorded	69	33.2
Total	208	100.0

Occupation

Blue collar	32	15.4
White collar	6	2.9
Medical	0	0.0
Nursing	0	0.0
Paramedical	0	0.0
Supporting health staff	1	0.5
Not applicable	86	41.3
Not recorded	83	39.9
Total	208	100.0

Annex 1 (e) - Treatment defaulters - 03

First presentation	N	%
Private doctor	22	10.6
Private hospital	0	0.0
GOPC	5	2.4
Chest Clinic	11	5.3
Other DH Clinic	8	3.8
HA Clinic	2	1.0
HA Hospital	92	44.2
Mainland	4	1.9
Overseas	0	0.0
Not recorded	64	30.8
Total	208	100.0

Symptomatic on presentation

Y	129	62.0
N	15	7.2
Not recorded	64	30.8
Total	208	100.0

Chest symptoms	95	-
Systemic symptoms	21	-
Other site-specific symptoms	24	-

Reason for presentation

Symptom	124	59.6
Contact screening	5	2.4
Pre-employment	3	1.4
Pre-emigration	0	0.0
Other body check	4	1.9
Incidental to other illness	7	3.4
Others	1	0.5
Not recorded	64	30.8
Total	208	100.0

Contact with TB patients

Yes	9	4.3
No	134	64.4
Not recorded	65	31.3
Total	208	100.0

Contact type

Household	8	-
Work	0	-
Casual	0	-

Time of contact

Within 2 year	3	-
Over 2 year	3	-

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	77.4
Extrapulmonary TB only	32	15.4
Both	15	7.2
Total	208	100.0

Case category

New case	173	83.2
Relapse	25	12.0
Treatment after default	10	4.8
Failure of previous treatment	0	0.0
Total	208	100.0

Disease characteristics (pulmonary cases)

Pretreatment smear +ve	72	40.9
Pretreatment culture +ve	121	68.8
Extent = 1	54	30.7
Extent=1 & cavity=N	53	30.1
Extent=1 & cavity=Y	1	0.6
Extent = 2	42	23.9
Extent=2 & cavity=N	28	15.9
Extent=2 & cavity=Y	14	8.0
Extent=3	18	10.2
Extent=3 & cavity=N	5	2.8
Extent=3 & cavity=Y	13	7.4
Extent=not specified	62	35.2
Extent=ns & cavity=N	62	35.2
Extent=ns & cavity=Y	0	0.0
Cavity=N	148	84.1
Cavity=Y	28	15.9

6-month short course treatment

Yes	10	4.8
2HRZE+4HR	9	4.3
2HRZS+4HR	0	0.0

Other standard regimen based on HRZES

Yes	52	25.0
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Among those defaulted

Never found	72	34.6
Retreated after default	25	12.0
Treatment stopped by doctor	21	10.1
Not recorded	90	43.3

Annex 1 (e) - Treatment defaulters - 05

Treatment supervision	N	%
Under DOT at chest clinic, hospital, CNS or other health staff (initial 2 months)		
>90%	43	20.7
>75%	14	6.7
>50%	15	7.2
>25%	11	5.3
≤25%	18	8.7
Not recorded	107	51.4
Under DOT at chest clinic, hospital, CNS or other health staff (subsequent 4 months)		
>90%	18	8.7
>75%	12	5.8
>50%	11	5.3
>25%	9	4.3
≤25%	23	11.1
Not recorded	135	64.9
Under supervision by relatives (initial 2 months)		
>90%	0	0.0
>75%	0	0.0
>50%	1	0.5
>25%	0	0.0
≤25%	61	29.3
Not recorded	146	70.2
Under supervision by relatives (subsequent 4 months)		
>90%	1	0.5
>75%	0	0.0
>50%	0	0.0
>25%	0	0.0
≤25%	42	20.2
Not recorded	165	79.3
Supplied for unsupervised treatment (initial 2 months)		
<5%	62	29.8
<10%	7	3.4
<15%	6	2.9
<25%	4	1.9
<50%	4	1.9
≥50%	4	1.9
Not recorded	121	58.2
Supplied for unsupervised treatment (subsequent 4 months)		
<5%	43	20.7
<10%	3	1.4
<15%	5	2.4
<25%	5	2.4
<50%	4	1.9
≥50%	3	1.4
Not recorded	145	69.7
Defaulted (initial 2 months)		
<5%	54	26.0
<10%	5	2.4
<15%	1	0.5
<25%	9	4.3
<50%	12	5.8
≥50%	17	8.2
Not recorded	110	52.9
Defaulted (subsequent 4 months)		
<5%	25	12.0
<10%	3	1.4
<15%	4	1.9
<25%	4	1.9
<50%	10	4.8
≥50%	27	13.0
Not recorded	135	64.9

Annex 1 (f) Sources completing Programme Forms

Sources completing Programme Forms	PFA	PFB1	PFB2	PFC	PFD
Chest Clinics	3 360	3 810	3 817	3 809	3 777
Hospital Authority	538	5	4	1	1
Private Practitioners/ Private Hospitals	0	0	0	0	0
Correctional Services and Others	34	20	20	16	7
Not Recorded	862	959	953	968	1 009
Total	4 794	4 794	4 794	4 794	4 794

Breakdown for Hospital Authority:

Alice Ho Miu Ling Nethersole Hospital	0	1	2	2	2
Caritas Medical Centre	12	12	12	12	10
Castle Peak Hospital	4	3	1	2	1
Duchess of Kent Children Hospital	0	0	0	0	0
Fung Yiu King Hospital	0	0	0	0	0
Grantham Hospital	203	2	1	1	0
Haven of Hope Hospital	45	1	1	1	2
Kowloon Hospital	55	5	1	1	1
Kwong Wah Hospital	38	4	4	4	4
North District Hospital	82	7	7	6	6
Nam Long Hospital	0	0	0	0	0
Our Lady of Maryknoll Hospital	2	0	0	0	0
Pamela Youde Nethersole Eastern Hospital	0	0	0	0	0
Pok Oi Hospital	2	1	2	1	2
Prince of Wales Hospital	12	12	12	12	12
Princess Margaret Hospital	1	2	1	1	1
Queen Elizabeth Hospital	27	13	11	11	9
Queen Mary Hospital	37	0	0	0	0
Ruttonjee Hospital	174	1	1	1	1
Shatin Hospital	0	0	0	0	0
Tai Po Hospital	0	0	0	0	0
Tseung Kwan O Hosital	13	0	0	0	0
Tuen Mun Hospital	9	9	9	9	9
Tung Wah Eastern Hospital	0	0	0	0	0
Tung Wah Hospital	0	0	0	2	2
United Christian Hospital	68	10	9	9	8
Wong Tai Sin Hospital	34	1	2	1	1
Wong Chuk Hang Hospital	0	0	0	0	0
Yan Chai Hospital	6	6	6	6	6
Total	824	90	82	82	77

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

Drugs & duration: _____

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

1. New case (<1m previous Rx)
 2. Relapse case.
 3. Treatment after default.
 4. Failure of previous treatment.
- Date of last treatment (mm/yyyy): __/____ Duration of last treatment: __ months
5. Others, specify: _____

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

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

2. Pleura	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	2010	2011	2012	2013	2014
Notified TB cases who are Chinese New Immigrants (with years of arrival in Hong Kong)	≤1 year	13	14	24	18	12
	1< and ≤2 year	13	18	14	9	15
	2< and ≤3 year	17	10	15	11	12
	3< and ≤4 year	12	8	19	14	14
	4< and ≤5 year	11	10	7	14	12
	5< and ≤6 year	5	11	6	16	7
	6< and ≤7 year	9	10	15	10	13
	Total	80	81	100	92	85
Overall notified TB cases		5 093	4 794	4 858	4 664	4 705

The above table shows the number of all notified TB cases in Hong Kong from 2010 to 2014 and the number of TB cases among the Chinese new immigrants (staying in Hong Kong less than 7 years) according to the number of years they have arrived in Hong Kong.

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 2010 to 2014 are 72.5, 67.8, 67.9, 64.9 and 65.0 respectively.

From Annex 2 (b), the overall estimated rates (per 100 000) among the new immigrants from 2010 to 2014 are 25.5, 25.4, 31.4, 29.7 and 26.9 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 (2010-2014)

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

	2010	2010	2010	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	8	9	17	3	4	7	4	4	8	7	3	10	5	2	7
20-39	13	29	42	3	37	40	19	50	69	12	43	55	20	30	50
40-59	2	13	15	14	10	24	10	10	20	9	14	23	12	12	24
60+	2	4	6	5	5	10	1	2	3	2	2	4	2	2	4
Total	25	55	80	25	56	81	34	66	100	30	62	92	39	46	85

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

	2010	2010	2010	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	14.3	17.1	15.6	5.4	7.8	6.6	7.9	8.5	8.2	15.9	7.3	11.8	11.6	5.0	8.4
20-39	58.4	22.0	27.2	12.4	28.0	25.6	70.1	39.9	45.2	42.9	35.0	36.5	68.6	24.1	32.5
40-59	13.0	43.5	33.2	80.5	29.9	47.2	45.1	25.1	32.2	39.4	32.3	34.7	49.9	25.6	33.8
60+	101.3	103.6	102.8	240.0	136.4	173.9	38.6	48.2	44.5	66.7	42.8	52.2	59.8	40.0	48.0
Total	26.1	25.2	25.5	25.3	25.4	25.4	33.2	30.5	31.4	30.7	29.3	29.7	39.1	21.2	26.9

Annex 2 (c)

TB Notification and Rates (All Cases) By Age & Sex (2010-2014)

All TB cases by age and sex

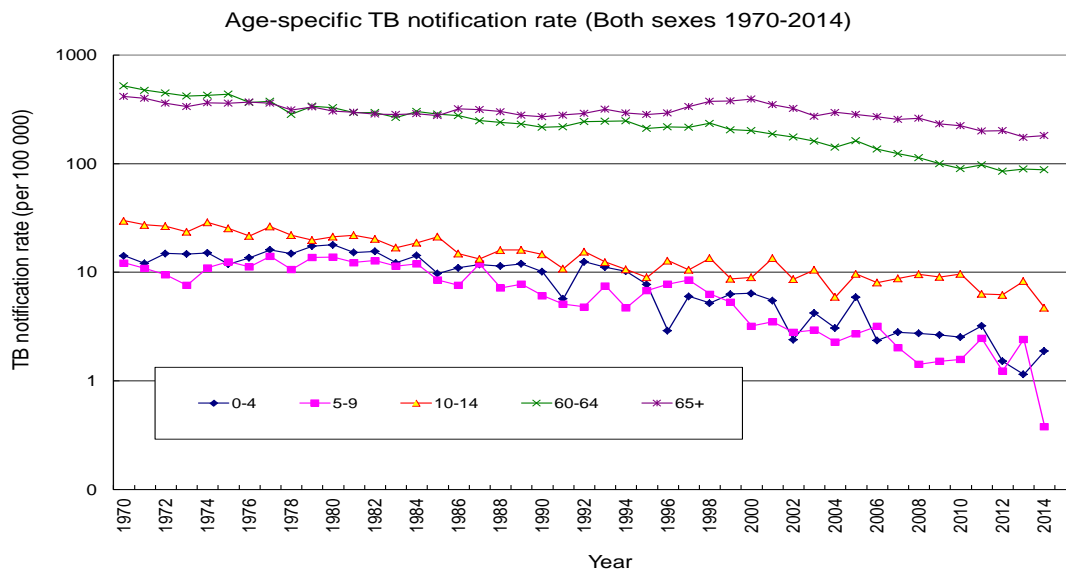
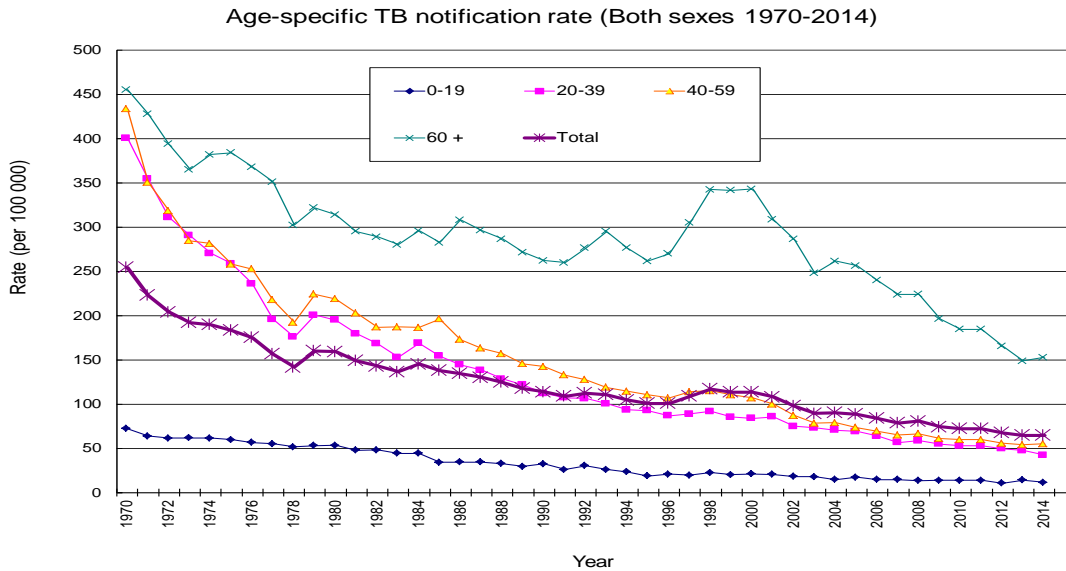
	2010	2010	2010	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	94	85	179	94	63	157	74	59	133	100	71	171	83	55	138
20-39	496	615	1 111	445	605	1 050	458	593	1 051	428	580	1 008	400	493	893
40-59	900	514	1 414	842	468	1 310	828	511	1 339	813	489	1 302	806	532	1 338
60+	1 740	649	2 389	1 711	566	2 277	1 726	609	2 335	1 565	618	2 183	1 709	627	2 336
Total	3 230	1 863	5 093	3 092	1 702	4 794	3 086	1 772	4 858	2 906	1 758	4 664	2 998	1 707	4 705

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

	2010	2010	2010	2011	2011	2011	2012	2012	2012	2013	2013	2013	2014	2014	2014
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-19	14.3	13.8	14.1	14.6	10.4	12.6	11.6	9.9	10.8	16.1	12.2	14.2	13.5	9.5	11.6
20-39	54.4	51.9	53.0	48.8	51.0	50.0	50.1	49.3	49.7	47.1	48.3	47.8	44.1	41.1	42.4
40-59	81.1	41.0	59.9	76.2	36.8	55.2	74.8	39.6	55.9	73.5	37.5	54.0	73.3	40.3	55.3
60+	282.5	95.8	184.7	266.0	80.0	168.5	257.8	82.4	165.7	224.9	80.4	149.1	235.8	78.2	153.0
Total	98.0	49.9	72.5	93.6	45.2	67.8	92.7	46.3	67.9	87.2	45.6	64.9	89.6	43.8	65.0

Annex 3

Trend of age-specific TB notification rates (1970-2014)



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

Annex 4(a)

TB-HIV Registry

A total of 25 cases with TB-HIV co-infection were reported to the TB-HIV Registry in 2014. The cumulative number of cases reported to the TB-HIV Registry from all sources as in 2014 was 586 (Table 1).

Out of the 25 cases reported to the TB-HIV Registry in 2014, 15 (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.

The pre-treatment drug sensitivity pattern among culture-positive (sputum or other specimens) TB-HIV cases for the years 1996-2014 is shown in Table 3. Nineteen patients reported to the TB-HIV Registry had a positive sputum or other specimen culture in 2014. Drug sensitivity result was available in eighteen. 11 (61.1%) had disease due to *Mycobacterium tuberculosis* with favourable sensitivity pattern. Two (11.1%) had bacillary resistance to streptomycin alone. Four (22.2%) had bacillary resistance to isoniazid and/or streptomycin. One patient (5.6%) had bacillary rifampicin mono-resistance. No patient had MDRTB in 2014. Among all the 406 cases reported to TB-HIV Registry with a positive sputum or other specimen culture between 1996 and 2014, 5 (1.2%) 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 25 patients seen at chest clinics and/or SPP in 2014. The characteristics of these patients are similar to those of the 2013 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 generally low (median 63) at time of TB diagnosis. Extra-pulmonary involvement is common, with about two-thirds of patients having TB involving one or more extra-pulmonary sites.

Annex 4 (b)

Table 1. Total number of TB-HIV cases reported to TB-HIV Registry, all sources (1996-2014)*

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
Total	586

* 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 400 cases reported to chest clinics and/or SPP (1996-2014)*

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
Total	111	166	277	101	22	400

* 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 2014, 400 cases were seen at chest clinics and/or SPP. The table is compiled basing on data of these 400 cases.

Table 3. Pre-treatment drug sensitivity pattern among culture positive (sputum and/or other specimens) TB-HIV cases from TB-HIV Registry, all sources (1996-2014)*

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****
Total	330	71	4 (+1)***	0	406

* Of all the cases reported to the TB-HIV Registry from 1996 to 2014, 406 had a positive culture (sputum or other specimens). The table is compiled basing on data of these 406 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.

Annex 4 (d)

Table 4: Characteristics of 25 TB-HIV cases reported from chest clinics and SPP in 2014

	Number	Proportion
Age distribution		
0 to 19	0	0.0%
20 to 39	10	40.0%
40 to 59	12	48.0%
60+	3	12.0%
Sex distribution		
Male	21	84.0%
Female	4	16.0%
Ethnicity		
Chinese	13	52.0%
Asians, non-Chinese	10	40.0%
African	2	8.0%
Others	0	0.0%
Case category		
New case	17	68.0%
Relapse	5	20.0%
Treatment after default	3	12.0%
Failure of previous treatment	0	0.0%
Others	0	0.0%
TB as a primary AIDS defining illness*		
Yes	15	62.5%
No	9	37.5%
CD4 count at time of co-infection (median, IQR)**	63 (41- 300) / μ L	
Anti-retroviral therapy at time of co-infection		
Yes	8	32.0%
No	17	68.0%
Presence of extra-pulmonary TB		
Yes	17	68.0%
No	7	28.0%
Unknown	1	4.0%
Extent of Respiratory TB***		
Minimal	6	37.5%
Moderate	3	18.8%
Extensive	7	43.8%
Sputum bacteriological status (pre-treatment)		
Smear + culture +	8	32.0%
Smear - culture +	6	24.0%
Smear + culture -	1	4.0%
Smear - culture -	5	20.0%
Incomplete/sputum test not performed	5	20.0%
Drug resistance pattern (pre-treatment)****		
Susceptible to SHRE	11	61.1%
Resistant to streptomycin alone	2	11.1%
Resistant to isoniazid alone	3	16.7%
Resistant to streptomycin + isoniazid	1	5.6%
Resistant to rifampicin alone	1	5.6%
MDR	0	0.0%
XDR	0	0.0%

* Information on TB as primary AIDS-defining illness unknown in one patient.

** Information on CD4 count unknown in 2 patients.

*** 16 out of 25 cases had lung parenchymal lesion on CXR. Information on CXR finding unknown in one patient.

**** 19 of 25 cases had a positive sputum and/or other specimen culture. Drug sensitivity result unknown in one patient.

Annex 5

HBsAg Seroprevalence Survey Among TB Patients Seen at Chest Clinics (2014)

In a sample survey conducted by the TB & Chest Service of the Department of Health in 2014 (2-month period from 1.3.2014 to 31.5.2014), the overall HBsAg seropositive rate among TB patients seen at chest clinics was 8.80%.

Sex/Age group	HBsAg status			HBsAg seropositive rate (%)*	Total
	Positive	Negative	Unknown		
Male					
0-19	0	17	3	0.00	20
20-39	2	75	3	2.60	80
40-59	26	151	6	14.69	183
≥60	32	267	16	10.70	315
Female					
0-19	1	12	1	7.69	14
20-39	6	123	2	4.65	131
40-59	10	119	1	7.75	130
≥60	7	107	4	6.14	118
Total	84	871	36	8.80	991

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

HBsAg Seroprevalence Survey 2013-2014

Sex/Age group	HBsAg seropositive rate (%)	
	2013	2014
Male		
0-19	3.45	0.00
20-39	8.51	2.60
40-59	16.16	14.69
≥60	9.42	10.70
Female		
0-19	0.00	7.69
20-39	4.03	4.65
40-59	8.41	7.75
≥60	11.34	6.14
Total	9.72	8.80

Annex 6

Crude and Standardised Death Rate and Notification Rate 1981 - 2014 (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

* 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 2014 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 :						
Hospital / Clinic sent to (if any):						Family member :						
Hospital / Clinic sent to (if any):						(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):												
				Smear	Culture	PCR test	Smear	Culture				
				Positive								
				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.

