

The TB/HIV Registry

Surveillance Report on TB/HIV co-infection in Hong Kong (2019)

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TB-HIV Registry

A total of 39 cases with TB-HIV co-infection were reported to the TB-HIV Registry in 2019. The cumulative number of cases reported to the TB-HIV Registry from all sources as in 2019 was 745 (Table 1).

Information on TB as a primary AIDS-defining illness is available in all the 39 cases reported to the TB-HIV Registry in 2019. Of these 39 cases, 20 (51.3%) had TB as a primary AIDS-defining illness (Table 2).

The drug susceptibility pattern among culture-positive (sputum or other specimens) TB-HIV cases for the years 1996-2019 is shown in Table 3. Twenty-eight patients reported to the TB-HIV Registry had a positive sputum and/or other specimen culture in 2019. Twenty-seven (96.4%) had disease due to *Mycobacterium tuberculosis* with favourable susceptibility pattern. One had bacillary resistance to streptomycin. Among all the 524 cases reported to TB-HIV Registry with a positive sputum or other specimen culture between 1996 and 2019, 9 (1.7%) had MDRTB. There is no XDR-TB cases detected among the reported TB-HIV cases so far. DH will continue to monitor prevalence of drug resistance in the context of HIV.

Table 4 shows the characteristics of 39 patients seen at chest clinics and/or SPP in 2019. The characteristics of these patients are similar to those of the 2018 cohort. The median CD4 count was 135.5 / μ L at time of TB diagnosis. Extra-pulmonary involvement (irrespective of lung involvement) is common, with over two-thirds of the patients having TB involving one or more extra-pulmonary sites.

Annex 3 (b)

Table 1. Total number of TB-HIV cases reported to TB-HIV Registry, all sources (1996-2019)*

Year	Number of TB-HIV cases**
1996	22
1997	19
1998	22
1999	25
2000	24
2001	34
2002	22
2003	28
2004	35
2005	42
2006	50
2007	56
2008	50
2009	38
2010	25
2011	28
2012	20
2013	21
2014	25
2015	24
2016	36
2017	31
2018	29
2019	39
Total	745

* 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 3 (c)

Table 2. TB as primary AIDS-defining illness among 559 cases reported to chest clinics and/or SPP (1996-2019)*

Year	TB as primary AIDS-defining illness					Total
	Yes			No	Information not available	
	Extra-pulmonary	Pulmonary and TB cervical lymph node with CD4 < 200 µL	Subtotal			
1996	1	7	8	1	0	9
1997	2	3	5	2	0	7
1998	6	3	9	3	0	12
1999	7	6	13	3	0	16
2000	3	4	7	5	0	12
2001	4	6	10	7	0	17
2002	4	9	13	2	0	15
2003	1	10	11	5	0	16
2004	5	7	12	11	0	23
2005	8	14	22	7	0	29
2006	9	19	28	7	0	35
2007	10	17	27	8	2	37
2008	14	13	27	6	0	33
2009	9	3	12	6	5	23
2010	4	10	14	5	3	22
2011	6	8	14	8	6	28
2012	4	9	13	5	2	20
2013	7	10	17	1	3	21
2014	7	8	15	9	1	25
2015	7	5	12	8	4	24
2016	8	8	16	17	3	36
2017	8	6	14	12	5	31
2018	5	8	13	11	5	29
2019	13	7	20	19	0	39
Total	152	200	352	168	39	559

* 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 2019, 559 cases were seen at chest clinics and/or SPP. The table is compiled basing on data of these 559 cases.

Table 3. Drug sensitivity pattern among culture positive (sputum and/or other specimens) TB-HIV cases from TB-HIV Registry, all sources (1996-2019)

Year	Susceptible to SHRE	Any resistance (non-MDR/XDR)	MDR	XDR	Drug susceptibility unknown	Total number of culture positive cases
1996	7	1	0	0	0	8
1997	5	1	0	0	0	6
1998	13	1	0	0	0	14
1999	16	4	1	0	0	21
2000	13	2	0	0	0	15
2001	23	5	0	0	0	28
2002	11	3	1	0	0	15
2003	18	2	1	0	0	21
2004	20	6	0	0	0	26
2005	29	5	0	0	0	34
2006	32	3	0	0	0	35
2007	30	7	1	0	0	38
2008	30	3	0	0	0	33
2009	22	7	0	0	0	29
2010	12	2	0	0	0	14
2011	12	4	0	0	0	16
2012	13	2	1	0	0	16
2013	13	5	0	0	0	18
2014	11	7	0	0	1	19
2015	14	1	2	0	2	19
2016	27	3	0	0	0	30
2017	19	2	2*	0	0	23
2018	16	2	0*	0	0	18
2019	27	1	0	0	0	28
Total	433	79	9	0	3	524

* excluding one case with clinical specimen cultured negative but rpo B mutation detected

Annex 3 (d)

Table 4: Characteristics of 39 TB-HIV cases reported from chest clinics and SPP in 2019

	Number	Proportion
Age distribution		
0 to 19	0	0.0%
20 to 39	8	20.5%
40 to 59	26	66.7%
60+	5	12.8%
Sex distribution		
Male	33	84.6%
Female	6	15.4%
Ethnicity		
Chinese	28	71.8%
Asians, non-Chinese	8	20.5%
African	3	7.7%
Others	0	0.0%
Case category		
New case	32	82.1%
Relapse	2	5.1%
Treatment after default	0	0.0%
Failure of previous treatment	0	0.0%
Others	0	0.0%
Unknown	5	12.8%
TB as a primary AIDS defining illness		
Yes	20	51.3%
No	19	48.7%
CD4 count at time of co-infection (median, IQR)*	135.5 (38.3-251) / μ L	
Anti-retroviral therapy at time of co-infection		
Yes	15	38.5%
No	24	61.5%
Presence of extra-pulmonary TB (irrespective of lung involvement)		
Yes	28	71.8%
No	11	28.2%
Extent of Respiratory TB**		
Minimal	13	48.1%
Moderate	7	25.9%
Extensive	7	25.9%
Sputum bacteriological status#		
Smear + culture +	11	34.4%
Smear - culture +	16	50.0%
Smear + culture -	0	0.0%
Smear - culture -	5	15.6%
Drug resistance pattern (based on sputum and/or other specimen culture)##		
Susceptible to SHRE	27	96.4%
Resistant to streptomycin alone	1	3.6%
Resistant to rifampicin alone	0	0.0%
MDR	0	0.0%
XDR	0	0.0%

* Information on CD4 count unknown in 1 patient.

** Chest X-ray finding not available in 2 patients. Of the remaining 37 patients, 27 had lung parenchymal lesion suggestive of TB on CXR.

Sputum test results not available in 7 patients,

28 of 39 cases had a positive sputum and/or other specimen culture.