

# The TB / HIV Registry

## Surveillance Report on TB/HIV co-infection in Hong Kong (2021)

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## ***TB-HIV Registry***

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A total of 30 cases with TB-HIV co-infection were reported to the TB-HIV Registry in 2021. The cumulative number of cases reported to the TB-HIV Registry from all sources as in 2021 was 793 (Table 1).

Information on TB as a primary AIDS-defining illness is available in 28 out of 30 cases reported to the TB-HIV Registry in 2021. Of these 28 cases, 21 (75.0%) 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 1996-2021 is shown in Table 3. Twenty-two patients reported to the TB-HIV Registry had a positive sputum and/or other specimen culture in 2021. Only one case had disease due to *Mycobacterium tuberculosis* resistant to isoniazid and streptomycin, all other cases had diseases with favourable susceptibility pattern. Among all the 557 cases reported to TB-HIV Registry with a positive sputum or other specimen culture between 1996 and 2021, 9 (1.6%) had MDRTB. There is no XDR-TB case 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 30 patients seen at chest clinics and/or SPP in 2021. The median CD4 count was 78/ $\mu$ L at time of TB diagnosis which is similar to the median count in 2020. Extra-pulmonary involvement (irrespective of lung involvement) is found in nearly three-quarter of patients.

**Table 1: Total number of TB-HIV cases reported to TB-HIV Registry, all sources from 1996–2021 <sup>(1)</sup>**

Year	Number of TB-HIV cases <sup>(2)</sup>
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
2020	18
2021	30
<b>Total</b>	<b>793</b>

## Notes:

- (1) Including cases reported from all sources (chest clinics, SPP, HA hospitals and private centres).
- (2) Some of the figures in the table for the previous years have been updated after
- ( i ) taking out some mismatched cases and cases with a revised diagnosis;
  - ( ii ) adding some cases which were previously unreported.

**Table 2: TB as primary AIDS-defining illness among 607 cases reported to chest clinics and/or SPP from 1996-2021 <sup>(1)</sup>**

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
2020	3	5	8	9	1	18
2021	10	11	21	7	2	30
Total	165	216	381	184	42	607

Note:

- (1) 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 2021, 607 cases were seen at chest clinics and/or SPP. The table is compiled basing on data of these 607 cases.

**Table 3: Drug susceptibility pattern among culture positive (sputum and/or other specimens) TB-HIV cases from TB-HIV Registry, all sources from 1996 - 2021**

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	2 <sup>(1)</sup>	0	0	32
2017	19	2	0 <sup>(1)</sup>	0	0	21
2018	16	2	0	0	0	18
2019	27	1	0	0	0	28
2020	11	0	0	0	0	11
2021	21	1	0	0	0	22
Total	465	80	9	0	3	557

Note:

(1) Excluding one case with clinical specimen cultured negative but rpo B mutation detected.

**Table 4: Characteristics of 30 TB-HIV cases reported from chest clinics and SPP in 2021**

	Number	Proportion
Age distribution		
0 to 19	1	3.3%
20 to 39	4	13.3%
40 to 59	17	56.7%
60+	8	26.7%
Sex distribution		
Male	26	86.7%
Female	4	13.3%
Ethnicity		
Chinese	19	63.3%
Asians, non-Chinese	11	36.7%
African	0	0.0%
Others	0	0.0%
Case category		
New case	26	86.7%
Relapse	4	13.3%
Treatment after default	0	0.0%
Failure of previous treatment	0	0.0%
Others	0	0.0%
Unknown	0	0.0%
TB as a primary AIDS-defining illness N = 28 <sup>(1)</sup>		
Yes	21	75.0%
No	7	25.0%
CD4 count at time of co-infection (median, IQR)	78 (31.8-176.0)/uL	
Anti-retroviral therapy at time of co-infection		
Yes	12	40.0%
No	18	60.0%
Presence of extra-pulmonary TB (irrespective of lung involvement)		
Yes	22	73.3%
No	8	26.7%
Extent of Respiratory TB N = 20 <sup>(1)</sup>		
Minimal	14	70.0%
Moderate	1	5.0%
Extensive	5	25.0%
Sputum bacteriological status (pre-treatment) N = 27 <sup>(1)</sup>		
Smear + culture +	6	22.2%
Smear - culture +	14	51.9%
Smear + culture -	0	0.0%
Smear - culture -	7	25.9%
Drug resistance pattern (pre-treatment) (based on sputum and/or other specimen culture) N = 22 <sup>(1)</sup>		
Susceptible to SHRE	21	95.5%
Resistant to rifampicin alone	0	0.0%
Resistant to streptomycin and isoniazid	1	4.5%
MDR	0	0.0%
XDR	0	0.0%

Note:

(1) N = number of cases available for analysis, N = 30 if not specified