

Queensland Health

Tuberculosis epi 2020 summary report

Communicable Diseases Branch



**Queensland
Government**

Introduction

Data for this report were extracted from Notifiable Diseases Register on 12 April 2021 by notification date for the period 1 January 2016–31 December 2020. Up to date TB data are available in the [Queensland Health Weekly Notifiable Conditions Report](#).

Data are subject to change as a result of ongoing data quality activities.

Notifications

There were 181 notifications of active TB in 2020 (Figure 1). Eighty-eight percent were laboratory confirmed by culture or NAT and 12% were clinical diagnoses only. The breakdown by TBCU is shown in Table 1.

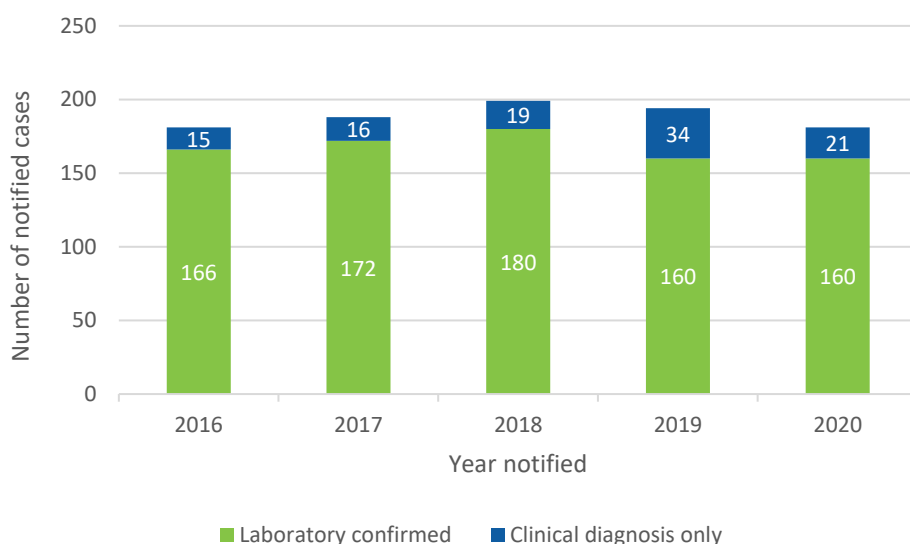


Figure 1 Number of notified cases of tuberculosis by diagnosis type, Queensland 2016-2020

Table 1 Number of notified cases of tuberculosis by TBCU, Queensland 2016-2020

TBCU	2016	2017	2018	2019	2020
MSCTBS	133	140	136	137	136
Cairns	15	23	33	27	20
Townsville	9	10	11	10	10
Torres and Cape	6	6	8	6	2
Rockhampton	7	3	7	2	8
Toowoomba	6	6	3	6	2
Mackay	5	0	1	6	3
Total	181	188	199	194	181

Demographics

In 2020, there were 96 females (53%) and 85 males (47%) notified with TB. The age range of cases was 3 to 87 years, with a median age of 34 years. The most frequently notified age groups were between 20–35 years of age (Figure 2).

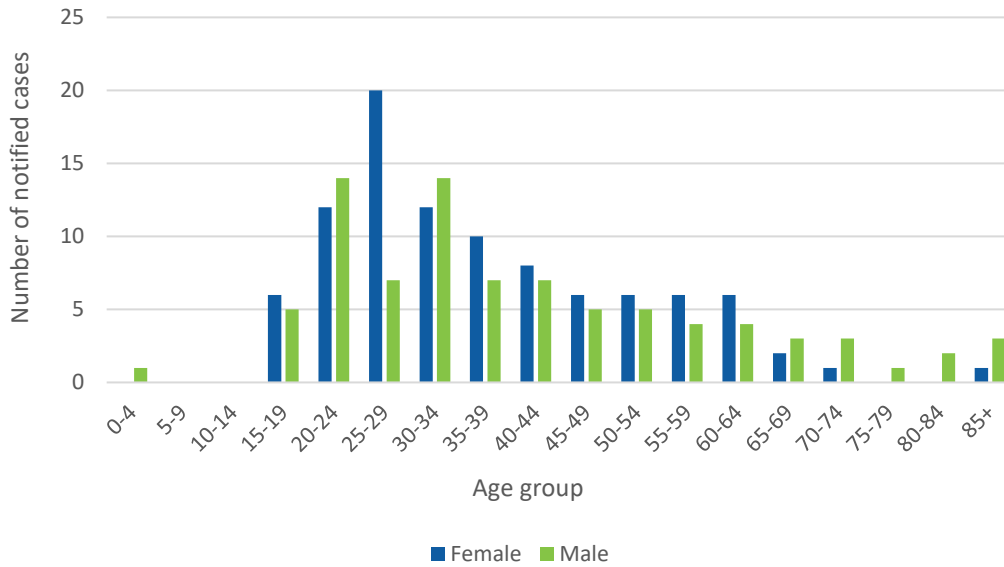


Figure 2 Number of notified cases of tuberculosis by sex and age group, Queensland 2020

Cases were predominantly residents of metropolitan Brisbane with 41% of cases residing in Metro South HHS and 19% in Metro North HHS (Table 2).

Table 2 Tuberculosis cases by hospital and health service of residence, Queensland 2020

Hospital and Health Service	Number of cases	%
Cairns and Hinterland	19	10%
Central Queensland	8	4%
Central West	0	0%
Darling Downs	2	1%
Gold Coast	6	3%
Mackay	4	2%
Metro North	35	19%
Metro South	74	41%
North West	1	1%
South West	0	0%
Sunshine Coast	8	4%
Torres and Cape	1	1%
Townsville	8	4%
West Moreton	3	2%
Wide Bay	5	3%
Overseas residents	7	4%
Total	181	100%

Nineteen (10%) cases of TB notified in Qld during 2020 were born in Australia. Of these 19 cases, 8 (42%) were Aboriginal or Torres Strait Islanders. One hundred and sixty-two (90%) cases were born overseas, of which 155 (96%) were born in a country with a current TB incidence of 40 cases per 100,000 population or greater.

Table 3 Tuberculosis cases by country of birth, Queensland 2020

Country of birth	Number of cases	%
Philippines	33	18%
India	24	13%
Australia	19	10%
Papua New Guinea	16	9%
Nepal	16	9%
Vietnam	11	6%
China	9	5%
Thailand	6	3%
Bhutan	5	3%
Zimbabwe	4	2%
Indonesia	4	2%
Ethiopia	4	2%
Brazil	3	2%
Cambodia	2	1%
England	2	1%
Sudan	2	1%
Colombia	2	1%
Myanmar (Burma)	2	1%
New Zealand	2	1%
Other	15	8%
Total	181	100%

There were 2 cross border PNG cases who were residents of villages covered under the provisions of the Torres Strait Treaty Act 1984. Australian citizens and permanent residents accounted for 49% of TB cases in 2020 (Table 4).

Table 4 Tuberculosis cases by visa status, Queensland 2020

Visa status	Number of cases	%
Australian born	19	10%
Overseas born Australian citizens or Permanent Resident	71	39%
Overseas Student	34	19%
Other	25	14%
Overseas Visitor	18	10%
Refugee/Humanitarian	10	6%
Treaty Visitation Rights (PNG/TSI treaty zone)	2	1%
Unauthorised Person	1	1%
Unknown	1	1%
Total	181	100%

Clinical presentation

The majority of TB cases in 2020 were new cases (176, 97%) with a small number of relapse cases following treatment overseas (n=3) or in Australia (n=2). Eighty-nine cases (49%) presented with symptoms, 37 cases (20%) were found by TB screening and 55 cases (30%) had an incidental diagnosis. Sixty-three percent of cases had pulmonary involvement (Table 5). The most common extrapulmonary sites were lymph node and pleural (Table 6).

Table 5 Number of tuberculosis cases by pulmonary involvement, Queensland 2020

Pulmonary involvement	Number of cases	%
Pulmonary only	101	56%
Pulmonary plus other sites	12	7%
Extra pulmonary only	68	37%
Total	181	100%

Table 6 Extra pulmonary sites of disease* reported in tuberculosis cases, Queensland 2020

Sites of disease	Number of cases
Lymph Node	47
Pleural	10
Abdominal	6
Bone/joint	4
Genito/Urinary	4
Eye/ocular	3
CNS, Meningeal	3
Disseminated	3
Miliary	1
Pericardial	1

*More than one site of disease may be reported per person, specific sites have not been reported for cases with disseminated disease

Ninety percent (n=165) of 2020 TB cases were tested for HIV, of which 3 were coinfecting with HIV.

Drug susceptibility testing results were available for 158 of 160 laboratory confirmed cases in 2020. Drug susceptibility results are shown in Table 7.

Table 7 Drug susceptibility testing of laboratory confirmed cases, Queensland 2020.

Drug susceptibility	Number	%
Fully susceptible	133	83%
Isoniazid (H) resistance (but susceptible to rifampicin R)	6	4%
Sensitive to rifampicin in the absence of any other testing	7	4%
Rifampicin resistant and poly resistant	0	0%
Multi-drug resistance (resistant to at least H & R)	1	1%
Other resistance (but not H or R)	11	7%
No DST data*	2	1%
Total	160	100%

*There were 2 patients who were lab confirmed by in-house PCR only, and therefore have no DST data