



Tuberculosis Surveillance Update — Montana, 2021

This report reflects confirmed tuberculosis cases reported to the Montana Department of Public Health and Human Services (DPHHS) in 2021. This report was prepared by the Tuberculosis Program. Contact Ryan Weight at 406-444-0273 or ryan.weight@mt.gov with questions.

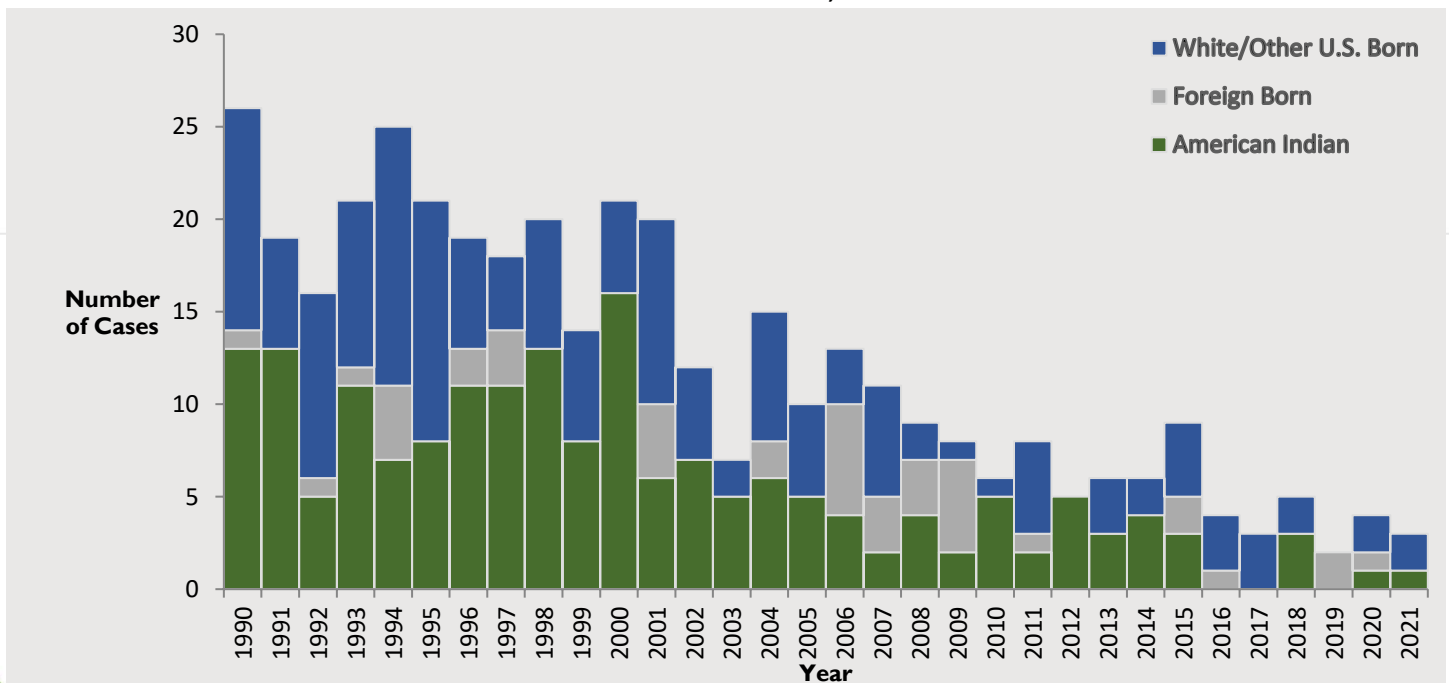
TB Surveillance Update (Table)

- Three patients with new, active tuberculosis were reported in Montana in 2021.
- Counties of residence for the TB cases included **Big Horn (1), and Yellowstone (2)**.
- Two patients had pulmonary/pleural disease. Additionally, one patient had pulmonary/pleural disease and extrapulmonary TB of the spine.
- None of the patients had a drug-resistant TB organism. However, one patient died before a specimen was collected for susceptibility testing.
- One patient was coinfecting with tuberculosis and COVID-19.
- Patient risk factors included: contact to an infectious TB patient, injecting drug use within past year, and excess alcohol use within past year.
- All patients were U.S. born.
- All the cases were found incidentally and very early in disease. Only one patient had typical signs and symptoms of active TB disease.
- No contacts were found to be infected by the three cases.

TB Trends (Figures 1 and 2)

- Incidence rates of TB in Montana and the United States have been decreasing; the 2021 MT rate (0.3 cases per 100,000 population) was 7.3 times lower than the 2020 U.S. rate (2.2 cases per 100,000 population; 2020 U.S. rate may have been affected by the COVID-19 pandemic; 2021 U.S. rate was not available at the time of this report).
- During the past 10 years, an average of 4.7 cases per year, approximately 0.5 case per 100,000 population, were reported in Montana (range: 2 to 9 cases).
- During the most recent five-year period (2017–2021) an average of 3.4 cases per year, or ~0.3 cases per 100,000 population, were reported in Montana.
- TB cases among American Indians have declined from an average of 10 cases per year in the 1990s to 5.7 cases per year in the 2000s to 2.5 cases per year in the 2010s.
- During the last 10 years (2012 – 2021) TB cases among American Indians has dropped to an average of 2 cases per year, and the last 5 years an average of 1 case per year were reported in Montana.

FIGURE 1. REPORTED ACTIVE TUBERCULOSIS CASES BY RACE — MONTANA, 1990–2021



Data source: DPHHS Montana Infectious Disease Information System



FIGURE 2. TUBERCULOSIS INCIDENCE RATE — MONTANA AND UNITED STATES, 2005–2021

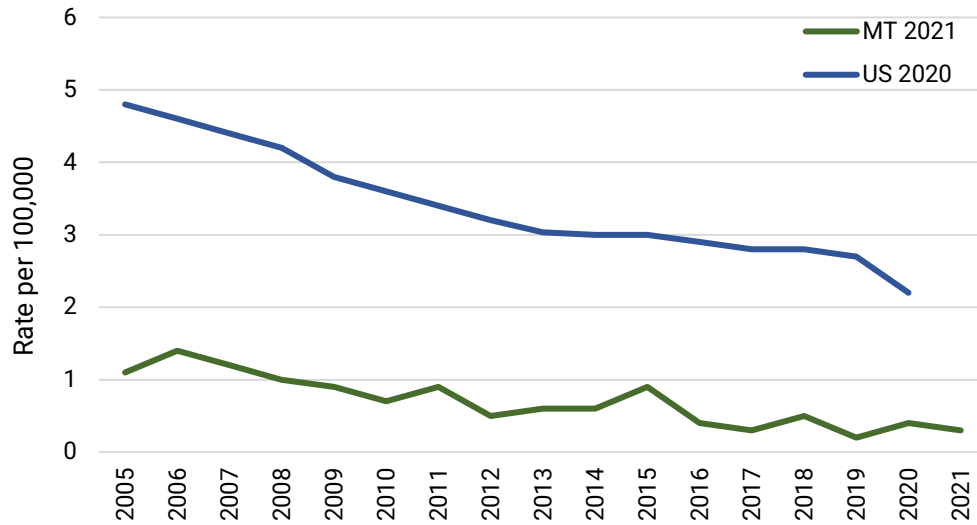


TABLE. TUBERCULOSIS CASE SUMMARY—MONTANA, 2019-2021

Characteristics	2019	2020	2021
New TB Cases	2	4	3
Incidence Rates (per 100,000)			
Montana	0.2	0.4	0.3
Sex			
Male	2	-	1
Female	-	4	2
Age at diagnosis (years)			
<5	-	-	-
5-14	-	-	-
15-24	-	-	-
25-44	1	1	1
45-64	1	1	-
≥65	-	2	2
Race, Ethnicity			
Non-Hispanic, White	1	2	2
Non-Hispanic, American Indian	-	1	1
Non-Hispanic, Other	-	1	-
Site of Disease			
Pulmonary/Pleural	1	1	2
Extrapulmonary only	1	3	-
Pulmonary & Extrapulmonary	-	-	1
Drug Resistance			
No resistance	2	3	3*
Isoniazid resistance	-	1	-
Multiple-drug resistance	-	-	-
Country of Origin			
U.S. born	-	3	3
Foreign born	2	1	-

*One or more patients met the definition of a clinical case but were culture-negative so susceptibility testing could not be completed

Data source: DPHHS Montana Infectious Disease Information System