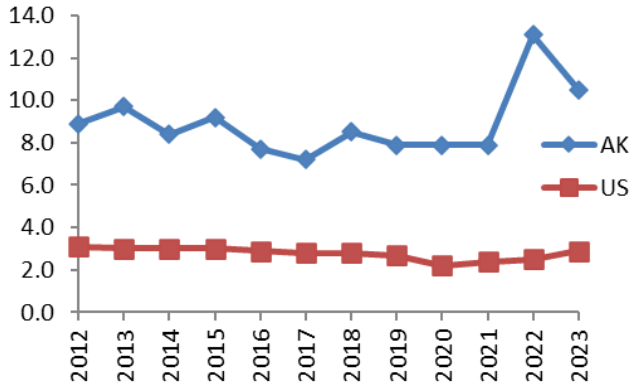
TUBERCULOSIS IN ALASKA- SUMMARY BRIEF 2023

Reported TB Cases

In 2023, 77 cases of TB disease were reported in Alaska, reflecting an incidence rate of 10.5 cases per 100,000 population. This represents a 19% decrease from the previous year. The U.S. TB incidence rate for 2023 was 2.9 cases per 100,000, which is a 15% increase from 2022.

Tuberculosis Incidence Rates, Alaska & U.S., 2012-2023



In the early- to mid-20th century, Alaska had some of the highest rates of TB morbidity and mortality ever recorded. Much of the TB activity in Alaska today is a legacy of this historic epidemic and of the ongoing challenges of TB control and healthcare delivery, particularly in rural regions of the state. Alaska continued to have the highest TB incidence rate in the nation in 2023.

US States with Highest TB Incidence, 2023[1]

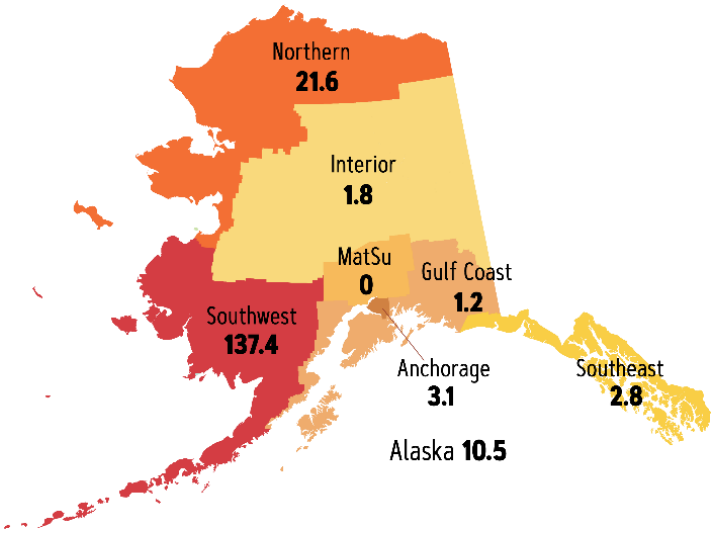
Jurisdiction	Number of Cases	TB Incidence
Alaska*	78	10.6
Hawaii	116	8.1
California	2113	5.4
New York	894	4.6
Texas	1235	4.0

*Alaska case count and incidence were updated to 77 and 10.5, respectively, after this preliminary CDC data was published.

Trends and populations

The Southwest and Northern regions of Alaska consistently have the highest rates of TB in the state, and the Alaska Native population bears a disproportionate burden of cases. While 76% of all U.S. TB cases were in foreign-born individuals, only 9% of Alaska cases were in foreign-born individuals. The median age of TB cases in 2023 was 33 years (range 0-87 years).

Regional Incidence per 100,000 population



Case demographics and social risk factors

	2023 Count (%)	2023 Incidence
Male	41 (53%)	10.6
Female	36 (47%)	10.4
Pediatric (0-14 years)	23 (30%)	15.7
Foreign-born	7 (9%)	12.1
Am. Indian/ AK Native	66 (86%)	57.3
Asian	6 (8%)	12.2
White	3 (4%)	0.6
Pacific Islander	0 (0%)	0.0
Black	0 (0%)	0.0
Multi-Race	2 (3%)	
Homeless	0 (0%)	0.0
Incarcerated	4 (5%)	
Drug Use (IV & non-IV)	14 (18%)	
Excessive alcohol use	12 (16%)	
Known epi-link to another active case	37 (48%)	

Alaska TB cases by country of birth, 2023

Country	Count (%)
United States	70 (91%)
Philippines	5 (7%)
American Samoa	1 (1%)
Laos	1 (1%)

Clinical Features

Clinical feature	Count (%)
Sputum AFB smear positive	26 (37% of pulmonary cases)
Sputum culture positive	53 (75% of pulmonary cases)
Isoniazid resistant	4 (5%)
Multi-drug resistant	0 (0%)
Previous TB disease	6 (8%)
Chest x-ray or CT consistent with TB	61 (79%)
Died during treatment	6 (8%)

Site of disease

Site	Count (%)*
Pulmonary	71 (92%)
Bone/Joint	2 (3%)
Lymphatic	2 (3%)
Pleural	1 (1%)
Meningeal	1 (1%)
Breast	1 (1%)

*One case with both pulmonary and meningeal sites of disease was included in both categories.

Outbreaks, clusters, and investigations

In 2023, 37 cases (48%) had a known epidemiologic link to another active case, demonstrating the significance of recent and ongoing transmission. Children aged 14 years and younger comprised 30% of cases; this represents another marker of recent transmission. Estimates of recent transmission in Alaska are higher than in any other jurisdiction in the U.S.[2]

Program Challenges/Areas for Improvement

- Geographic and healthcare access barriers continue to challenge timely evaluation, laboratory testing, directly observed therapy, and contact investigation. Public health staffing and resource shortages also continue to be problematic.
- 77% of contacts to TB patients with AFB smear-positive sputum were examined (national target 94%).
- 77% of active TB patients with positive AFB sputum smear results had treatment initiation within 7 days of sputum collection (national target 96%).
- 61% of active TB patients had sputum culture conversion documented within 60 days of treatment initiation (national target 83%).

Program Successes

- 96% of TB cases had a known HIV status
- 98% of TB cases had a sputum culture result reported
- 100% of cases with a positive sputum culture had drug susceptibility testing performed
- 100% of infectious cases had a contact investigation
- 81% of contacts diagnosed with TB infection started treatment and 88% of those who started treatment completed it

In 2023 the TB control team partnered actively with colleagues in the Alaska Section of Public Health Nursing; Alaska State Public Health Laboratories; Anchorage Health Department; and Alaska's medical and social services providers and institutions, pharmacists, and DOT and community health aides in the management and prevention of TB disease. Some of the work of the TB control program and partners in 2023 included:

- Evaluation of 276 identified contacts to infectious cases
- Treatment of 227 people with TB infection
- Coordination of screening and follow-up for 83 immigrant/refugee B-notifications
- Community-wide outreach and screening in 13 remote communities with significant current or recent TB activity

References and Resources

State of Alaska

TB Program Website: https://health.alaska.gov/dph/Epi/id/Pages/tb.aspx

Alaska Epidemiology *Bulletin*. "Large Increase in Tuberculosis Activity— Alaska, 2022." Number 1, January 19, 2023.

Alaska Epidemiology *Bulletin*. "Alaska's Ongoing Journey with Tuberculosis." Vol 19, Number 1, April 11, 2017.

Centers for Disease Control and Prevention (CDC)

Main TB Website: https://www.cdc.gov/tb/

National TB Indicators Project: http://www.cdc.gov/tb/publications/factsheets/statistics/ntip.htm

State and Local TB Data:

Tuberculosis—United States, 2023: http://dx.doi.org/10.15585/mmwr.mm7312a4

Estimates of recent transmission: https://www.cdc.gov/tb/statistics/reports/2020/table57.htm