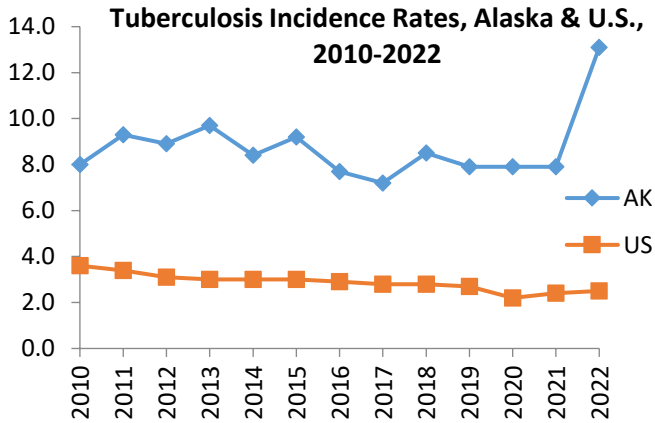




# TUBERCULOSIS IN ALASKA- SUMMARY BRIEF 2022

## Reported TB Cases

In 2022, 95 cases of TB disease were reported in Alaska, reflecting an incidence rate of 13.1 cases per 100,000 population. This represents a 64% increase from the previous year. The U.S. TB incidence rate for 2022 was 2.5 cases per 100,000, which is a 4.2% increase from 2021.



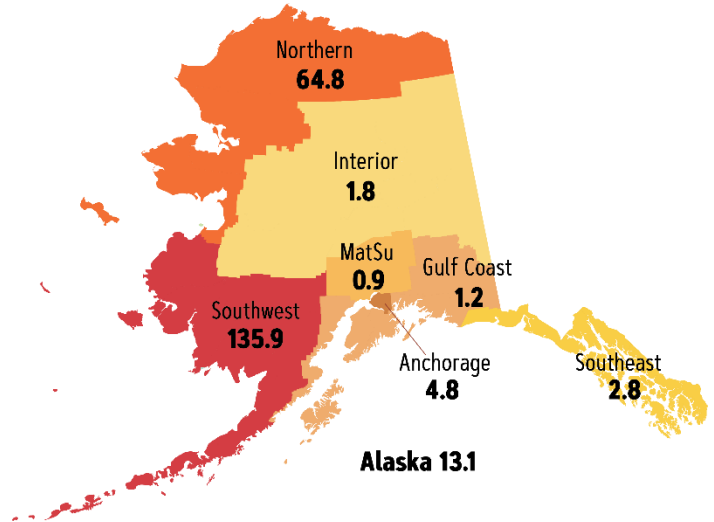
In the early- to mid-20th century, Alaska had some of the highest rates of TB morbidity and mortality ever recorded. Much of the TB activity in Alaska today is a consequence of this legacy and of the ongoing challenges of healthcare delivery, particularly in rural regions of the state. In 2022, Alaska continued to have the highest TB incidence rate in the nation. Many TB cases in Alaska arise from activation of longstanding untreated latent TB infection.

Jurisdiction	Number of Cases	TB Incidence
Alaska	95	13.1
Hawaii	101	7.0
California	1843	4.7
Texas	1089	3.6
New York	714	3.6

## Trends and populations

TB incidence is not evenly distributed in Alaska; it varies dramatically between different regions and populations. The Southwest and Northern regions consistently have the highest rates of TB, and the Alaska Native population bears a disproportionate burden of cases. The median age of TB cases in 2022 was 33 years (range 0-93 years). While 73% of all U.S. cases were in foreign-born individuals, only 10.5% of Alaska cases were foreign-born.

## Regional Incidence per 100,000 population



## Case demographics and social risk factors

	2022 Count (%)	2022 Incidence
Male	47 (49%)	12.4
Female	48 (51%)	13.4
Pediatric (0-14 years)	27 (28%)	17.9
Foreign-born	10 (11%)	17.3
Am. Indian/ AK Native	81 (85%)	70.6
Asian	6 (6%)	12.3
White	7 (7%)	1.5
Pacific Islander	1 (1%)	8.4
Black	1 (1%)	3.8
Homelessness	4 (4%)	172.4
Drug Use (IV & non-IV)	18 (19%)	
Excessive alcohol use	15 (16%)	
Known epi-link to another active case	38 (40%)	

## Alaska TB cases by country of birth, 2022

Country	Count (%)
United States	85 (90%)
Philippines	3 (3.2%)
Afghanistan	1 (1.1%)
American Samoa	1 (1.1%)
China	1 (1.1%)
Ethiopia	1 (1.1%)
Korea	1 (1.1%)
Kyrgyzstan	1 (1.1%)
United Kingdom	1 (1.1%)



### Outbreaks, clusters, and investigations

In 2022, 38 cases (40%) had a known epidemiologic link to another active case, demonstrating the significance of recent transmission. Estimates of recent transmission in Alaska are higher than in any other jurisdiction in the U.S.<sup>2</sup>

### Clinical Features

Clinical feature	Count (%)
Sputum AFB smear positive	30 (36% of pulmonary cases)
Sputum culture positive	60 (71% of pulmonary cases)
Isoniazid resistant	6 (6%)
Multi-drug resistant	0 (0%)
Previous TB disease	14 (15%)
Abnormal chest x-ray or CT	82 (86%)
Died during treatment	8 (8%)

### Site of disease

Site	Count (%)
Pulmonary	84 (88%)
Lymphatic	4 (4%)
Pleural	4 (4%)
Meningeal	3 (3%)
Peritoneal	1 (1%)
Pericardium	1 (1%)
Adrenal	1 (1%)
Brain	1 (1%)
Esophagus	1 (1%)
Other	1 (1%)

### Program Challenges

- Geographic and healthcare access barriers continue to challenge timely evaluation, laboratory testing, directly observed treatment, and contact investigation. Public health staffing shortages and turnover also continue to be problematic.
- 72% of contacts to TB patients with AFB smear-positive sputum were examined (national target 94%).
- 72% of active TB patients with positive AFB sputum smear results had treatment initiation within 7 days of sputum collection (target 96%).
- 55% of active TB patients had sputum culture conversion documented within 60 days of treatment initiation (target 83%).

### Program Successes

- 90% of TB cases had a known HIV status
- 99% of TB cases had a sputum culture result reported
- 99% of cases with a positive culture had drug susceptibility testing performed
- 93% of infectious cases had a contact investigation
- 83% of contacts diagnosed with TB infection started treatment and 83% of those who initiated treatment completed it

In 2022 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 2022 included:

- Evaluation of 406 identified contacts to infectious cases
- Treatment of 188 people with TB infection
- Coordination of screening and follow-up for 35 immigrant/refugee B-notifications

### REFERENCES AND RESOURCES:

#### State of Alaska

TB Control Program Website:

<http://dhss.alaska.gov/dph/Epi/id/Pages/tb.aspx>

Alaska TB Control Manual:

<https://health.alaska.gov/dph/Epi/id/Pages/Alaska-TB-Manual.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

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

National TB Indicators Project:

<http://www.cdc.gov/tb/publications/factsheets/statistics/ntp.htm>

TB Glossary: <https://www.cdc.gov/tb/topic/basics/glossary.htm>

State and Local TB Data:

1. Tuberculosis—United States, 2022:

[https://www.cdc.gov/mmwr/volumes/72/wr/mm7212a1.htm#T1\\_down](https://www.cdc.gov/mmwr/volumes/72/wr/mm7212a1.htm#T1_down)

2. Estimates of recent transmission:

<https://www.cdc.gov/tb/statistics/reports/2020/table57.htm>