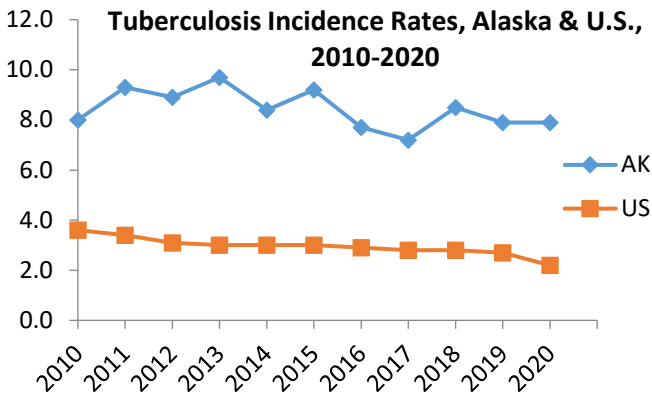




TUBERCULOSIS IN ALASKA- SUMMARY BRIEF 2020

Reported TB Cases

In 2020, 58 cases of TB disease were reported in Alaska, reflecting an incidence rate of 7.9 cases per 100,000 population. This represents no change from the previous year. The U.S. TB incidence rate for 2020 was 2.2 cases per 100,000, which is a 20% decrease from 2019, likely due in part to under-diagnosis and under-reporting related to the COVID-19 pandemic.



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 in the state. In 2020, 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.

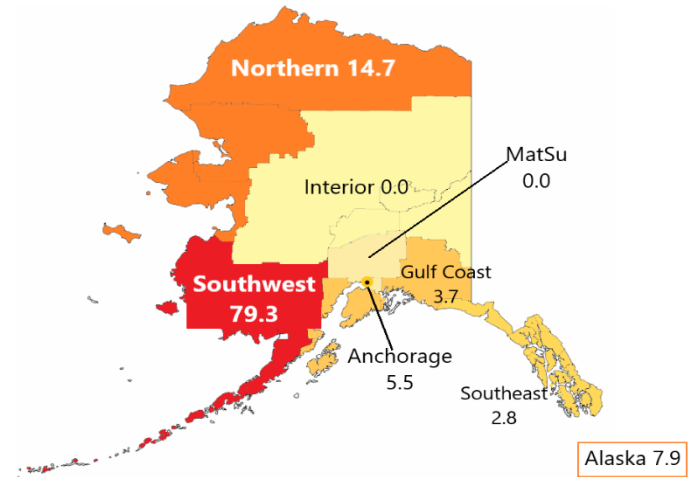
Jurisdiction	Number of Cases	TB Incidence
Alaska	58	7.9
Hawaii	92	6.5
California	1705	4.3
Texas	884	3.0
New Jersey	245	2.8

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 was 40.5 years (range 1-77 years). While

71% of all U.S. cases were foreign-born, only 24% of Alaska cases were foreign-born.

Regional Incidence per 100,000 population



Case demographics and social risk factors

		2020 Count (%)	2020 Incidence
Sex	Male	45 (78%)	12.0
	Female	13 (22%)	3.7
Pediatric (0-14 years)		11 (19%)	7.2
Foreign-born		14 (24%)	24.6
Race	Am. Indian/ AK Native	41 (71%)	36.3
	Asian	10 (17%)	20.7
	White	4 (7%)	0.8
	Pacific Islander	2 (3%)	17.1
	Black	1 (2%)	3.8
Homelessness		5 (9%)	256.5
Drug Use (IV & non-IV)		15 (26%)	
Excessive alcohol use		16 (28%)	
Known epi-link to another active case		16 (28%)	

Alaska TB cases by country of birth, 2020

Country	Count (%)
United States	44 (76%)
Philippines	8 (14%)
Thailand	2 (3%)
American Samoa	1 (2%)
Dominican Republic	1 (2%)
Peru	1 (2%)
Russia	1 (2%)



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Outbreaks, clusters, and investigations

In 2020, 16 cases (28%) 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.²

Clinical Features

Clinical feature	Count (%)
Sputum AFB smear positive	15 (27% of pulmonary cases)
Sputum culture positive	40 (73% of pulmonary cases)
Isoniazid resistant	0 (0%)
Multi-drug resistant	1 (2%)
Previous TB disease	1 (2%)
Abnormal chest x-ray or CT	53 (91%)
Died during treatment	2 (3%)

Site of disease

Site	Count (%)
Pulmonary	55 (95%)
Pleural	2 (3%)
Bone	2 (3%)
Eye/Ear	1 (2%)

Program Challenges

- Although TB remains a public health priority, the COVID-19 pandemic has negatively impacted TB control by diverting limited public health resources and further limiting access to health care, likely leading to decreased TB diagnosis, reporting, and treatment.
- 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.
- LTBI treatment initiation was lower than national targets among both identified contacts (80%, target 92%) and immigrants and refugees (83%, target 87%).
- 45% of contacts to an active case who were diagnosed with TB infection had documented treatment completion (target 93%).
- 62% of active TB patients with positive AFB sputum smear results had treatment initiation within 7 days of sputum collection (target 96%).

- 63% of active TB patients had sputum culture conversion documented within 60 days of treatment initiation (target 83%).

Program Successes

- 93% of patients with confirmed or suspected disease were started on an appropriate 4-drug regimen.
- 100% of cases with a positive culture had drug susceptibility testing performed.
- 100% of infectious cases had contact investigations.
- 91% of identified contacts to infectious cases were appropriately evaluated.
- Proportion of TB patients with known HIV status increased to 93% (from 88% in 2019).

In 2020 the TB control team partnered actively with colleagues in the Alaska Section of Public Health Nursing; the Alaska State Public Health Laboratories; the 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 2020 included:

- Evaluation of 137 identified contacts to infectious cases
- Treatment of 287 people with latent TB infection
- Coordination of screening and follow-up for 15 immigrant/refugee B-notifications

REFERENCES AND RESOURCES:

State of Alaska

TB Control Program Website:

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

Section of Epidemiology TB Bulletins:

<http://epibulletins.dhss.alaska.gov/Bulletin/DisplayClassificationBulletins/39>

Alaska TB Control Manual:

<https://dhss.alaska.gov/dph/Epi/id/Pages/Alaska-TB-Manual.aspx>

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:

https://www.cdc.gov/tb/statistics/reports/2020/state_local_data.htm

1. Reported Tuberculosis in the United States, 2020:

<https://www.cdc.gov/tb/statistics/reports/2020/table29.htm>

2. Estimates of recent transmission:

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