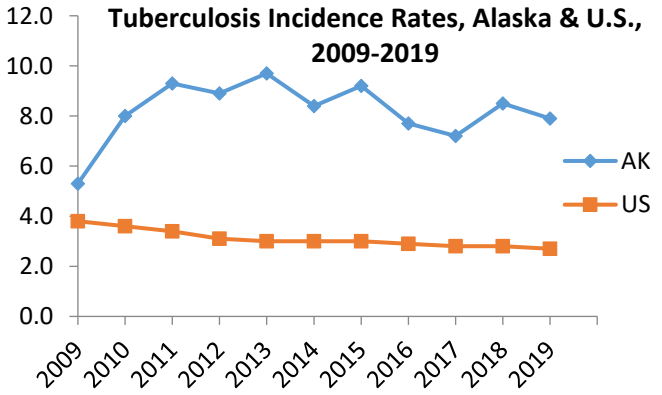
TUBERCULOSIS IN ALASKA- SUMMARY BRIEF 2019

Reported TB Cases

In 2019, 58 cases of TB disease were reported in Alaska, reflecting an incidence rate of 7.9 cases per 100,000 population. This represents a slight decrease from the previous year (8.5/100,000). The U.S. TB incidence rate for 2019 was 2.7 cases per 100,000.



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, as well as the ongoing challenges of healthcare delivery in the state. In 2019, Alaska continued to have the highest TB incidence rate in the nation. Most TB cases in Alaska are likely the result of activation of longstanding untreated latent TB infection.

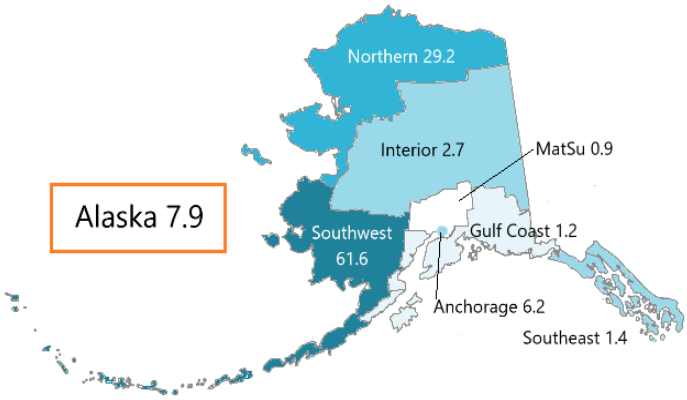
US States with Highest TB Incidence, 2019[1]

Jurisdiction	Number of Cases	TB Incidence
Alaska	58	7.9
Hawaii	99	7.0
California	2,113	5.3
Texas	1,159	4.0
New Jersey	311	3.5

Trends and populations

The incidence of tuberculosis 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 (61.6 and 29.2, respectively, in 2019), and Alaska Native individuals bear a disproportionate burden of cases (72%). In Alaska, only 26% of cases were foreign-born; in comparison, 71.4% of all U.S. cases were foreign-born. The median age of reported cases in Alaska was 43 years (range 0-78 years).

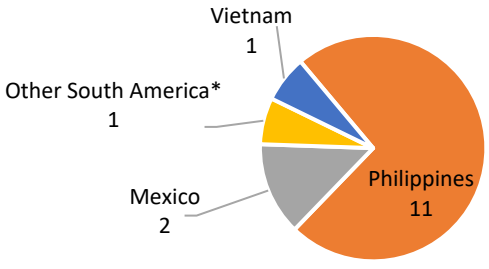
Regional Incidence per 100,000 population



Case demographics and social risk factors

		2019 Case Count (%)	2019 Incidence
Sex	Male	40 (69%)	10.6
	Female	18 (31%)	5.1
Pediatric (0-14 years)		8 (14%)	5.1
Foreign-born		15 (26%)	25.9
Race	Am. Indian/ AK Native	42 (72%)	36.9
	Asian	12 (21%)	25.0
	White	2 (3%)	0.4
	Pacific Islander	1 (2%)	9.4
	Black	1 (2%)	3.7
Homelessness		3 (5%)	157.3
Drug Use (IV & non-IV)		12 (21%)	
Excessive alcohol use		13 (22%)	
Known epi-link to another active case		17 (29%)	

Foreign-born AK TB cases: count by region of birth



*includes countries other than Brazil and Columbia

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Outbreaks, clusters, and investigations

In 2019, 17 cases (29%) 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	17 (36% of pulmonary cases, 29% of all cases)
Sputum culture positive	35 (74% of pulmonary cases, 60% of all cases)
Isoniazid resistant	4 (7%)
Multi-drug resistant	0 (0%)
Previous TB disease	9 (16%)
Abnormal chest x-ray or CT	48 (83%)
Died during treatment	2 (3%)

Site of disease

Site	Count (%)*
Pulmonary	47 (81%)
Pleural	5 (9%)
Lymphatic	2 (3%)
Bone	2 (3%)
Genitourinary	2 (3%)
Skin/soft tissue	2 (3%)

*cases with both pulmonary and extrapulmonary involvement were counted under both sites

Program Challenges

- Latent TB infection (LTBI) treatment initiation was lower than national targets among both identified contacts (89%, target 92%), and immigrants and refugees (72%, target 87%).
- 70% of contacts to an active case completed LTBI treatment.
- 69% of identified contacts to infectious cases were evaluated.
- 62% of active cases had sputum culture conversion documented within 60 days of treatment initiation.
- 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.

Program Successes

- 100% of active TB patients with positive AFB sputum-smear results had treatment initiation within 7 days of sputum collection
- 97% of patients with confirmed or suspected disease were started on an appropriate 4-drug regimen
- 98% of patients with a positive culture had drug susceptibility testing performed
- 94% of infectious cases had contact investigations.
- Proportion of TB patients with known HIV status increased to 88% (from 86% in 2018).

In 2019 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 2019 included:

- Evaluation of 289 identified contacts to infectious cases
- Treatment of 370 people with latent TB infection
- Completion of 9 community assessments in which over 1400 people were evaluated for TB disease and infection
- Coordination of screening and follow-up for 84 immigrant/refugee B-notifications

RESOURCES AND LINKS:

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:
http://dhss.alaska.gov/dph/Epi/id/SiteAssets/Pages/TB/TB_Manual.pdf

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/ntip.htm
TB Glossary: https://www.cdc.gov/tb/topic/basics/glossary.htm
State and City TB Report:
https://www.cdc.gov/tb/statistics/indicators/2019/transmission.htm
1. Reported Tuberculosis in the United States, 2019:
https://www.cdc.gov/tb/statistics/reports/2019/table28.htm
2. Estimates of recent transmission:
https://www.cdc.gov/tb/statistics/indicators/2019/transmission.htm