

United States Affiliated Pacific Islands, 2010

Tuberculosis in the U.S.-affiliated Pacific Island Jurisdictions (USAPI), 2010

The US-affiliated Pacific Islands consist of six jurisdictions that cover an area within the Pacific Ocean that is larger than the continental United States. Three are U.S. flag territories: American Samoa, the Commonwealth of the Northern Mariana Islands, and Guam. The other three — Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau – are independent countries but are also freely associated with the United States. These independent countries have Compacts of Free Association with the United States; under these compacts, the countries are fully sovereign in domestic and foreign affairs, but share responsibility for their health, education, defense, and other essential operations with the United States. Through these agreements, citizens residing in these three countries are able to immigrate to the United States without the usual overseas screening for health conditions that is required of those permanently resettling from other foreign countries.

As a result of their affiliations with the United States, the USAPIs are among the recipients of U.S. federal government funding, including CDC cooperative agreement funding for domestic TB control program activities.

How do the USAPI TB programs differ from the 50 U.S. state programs?

- Geographically, the USAPI constitute a total land area equivalent to two-thirds of Rhode Island (1,545 square miles). While there are 10 population centers, many Pacific Islanders live on surrounding islands, creating challenges for diagnosis and treatment of TB. Across these jurisdictions, basic infrastructure needs are not uniformly available; several of these jurisdictions are in close proximity to countries with higher rates of endemic TB.
- There is a consistent shortage of health care providers in all job classes, and continuing education opportunities are limited, often requiring staff to travel off-island for significant amounts of time. These challenges impact the delivery of health care
- The region grapples with health problems common to developed countries (diabetes, obesity, cancer) as well as those common to developing countries; infant mortality rates in this region exceed the national average, in some areas as much as 5 times greater.
- While case counts in this region are similar to low-incidence states, the rate of disease is much greater when compared with U.S. areas with similar case counts. The burden of disease in the region far exceeds that of any metropolitan statistical area with a population of 500,000 or greater. The USAPI regional TB case rate (106.0/100,000) is over 12 times greater than that of the State of Hawaii (8.8/100,000) and almost 30 times greater than the U.S. national rate (3.6/100,000).

Table 1. Tuberculosis Cases and Case Rates for USAPIs, Hawaii, and the United States, 2010

Jurisdiction	Cases	Rate	Population
USAPI Regional Total	519	106	489,506
American Samoa	3	4.5	66,432
Federated States of Micronesia	171	159.6	107,154
Guam	100	55.3	180,865
Marshall Islands	196	297.6	65,859
North Mariana Islands	32	66.2	48,317
Palau	17	81.4	20,879
Hawaii ¹	115	8.8	1,300,086
United States ¹	11,182	3.6	309,050,816

¹Not included in USAPI regional total.

USAPI TB Surveillance Data Highlights, 2010 (N=519)

- 119 (23%) age less than 15 years
- 141(27%) age 25–44 years
- 289 (56%) male
- 56 (11%) not born in the USAPI jurisdictions or the United States
 - 46 (82%) of these emigrating from the Republic of the Philippines
- 369 (71%) diagnosed with pulmonary disease only
- 224 (43%) positive culture for *Mycobacterium Tuberculosis*
- 4 (<1%) with MDR TB; no cases of XDR TB
- 174 (34%) were unemployed

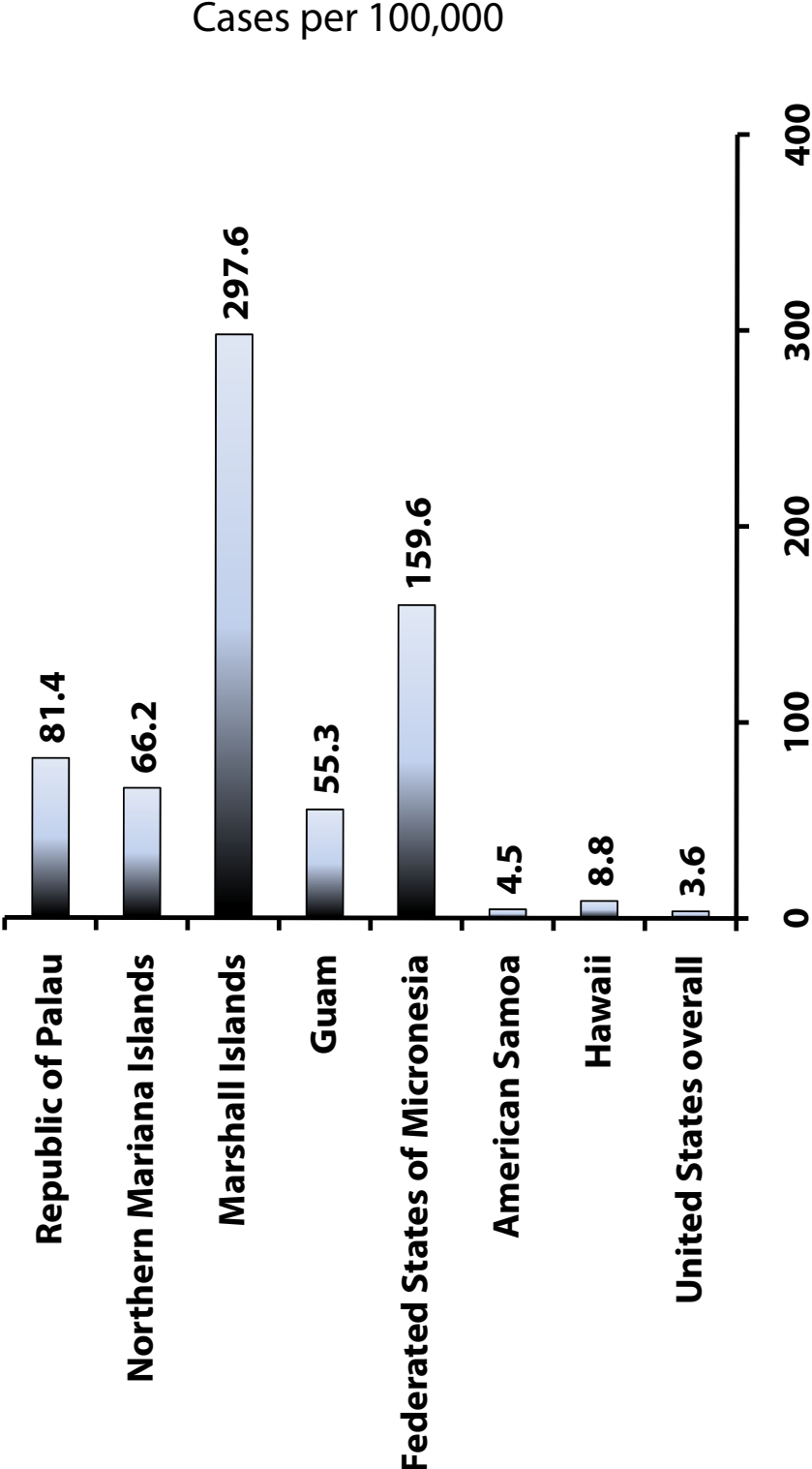
The data reported here reflect cases reported to the CDC National TB Surveillance System using the Report of a Verified Case of TB. Denominators for computing 2010 rates for the United States and Hawaii were obtained from Annual Estimates of the Population for the United States and States, and for Puerto Rico (July 1, 2000– July 1, 2010) (www.census.gov/popest/states/tables/NST-PEST2010-01.xls) (accessed August 30, 2011); for all other areas, from IDB Summary Demographic Data (<http://www.census.gov/ipc/www/idb/summaries.html>).



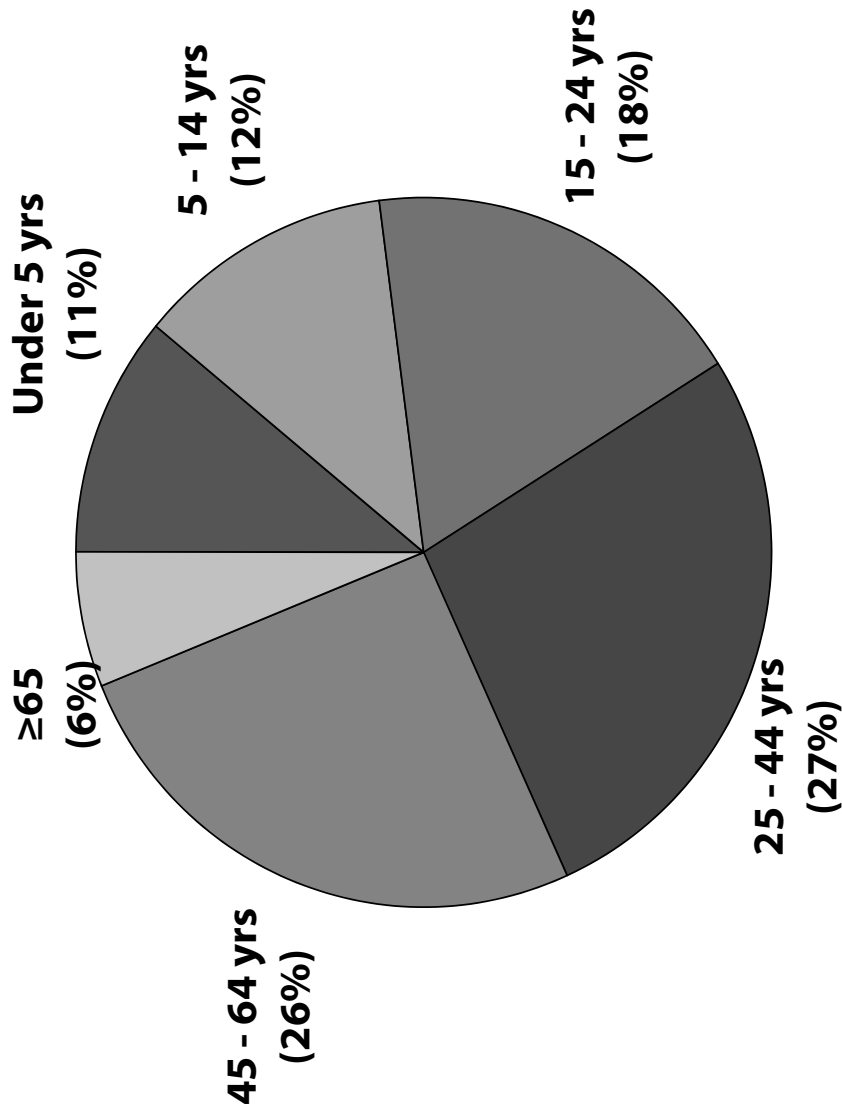
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TB Case Rates, U.S.-Affiliated Pacific Islands, 2010



Reported TB Cases by Age Group U.S.-Affiliated Pacific Islands, 2010

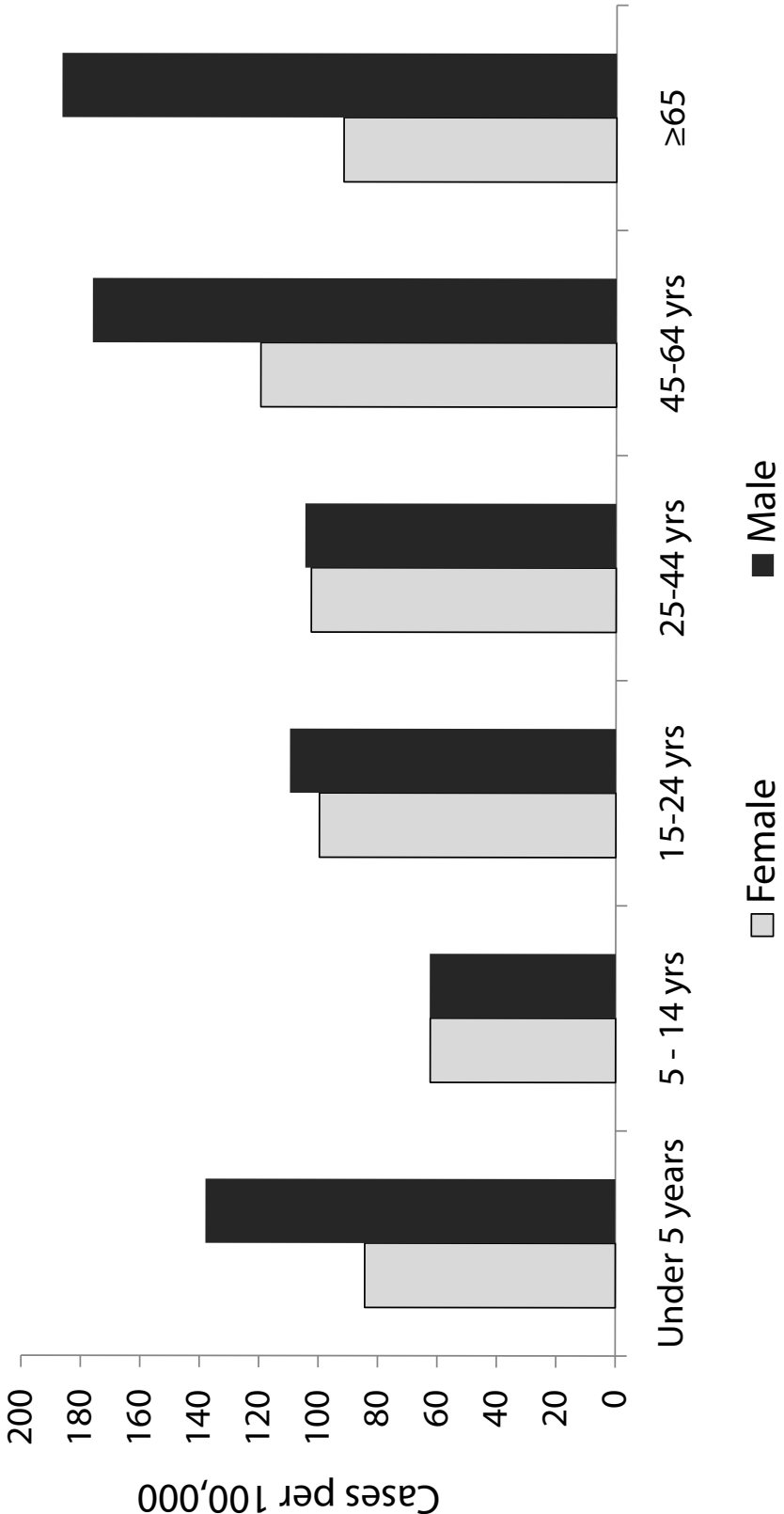


Note: Excludes missing or unknown.

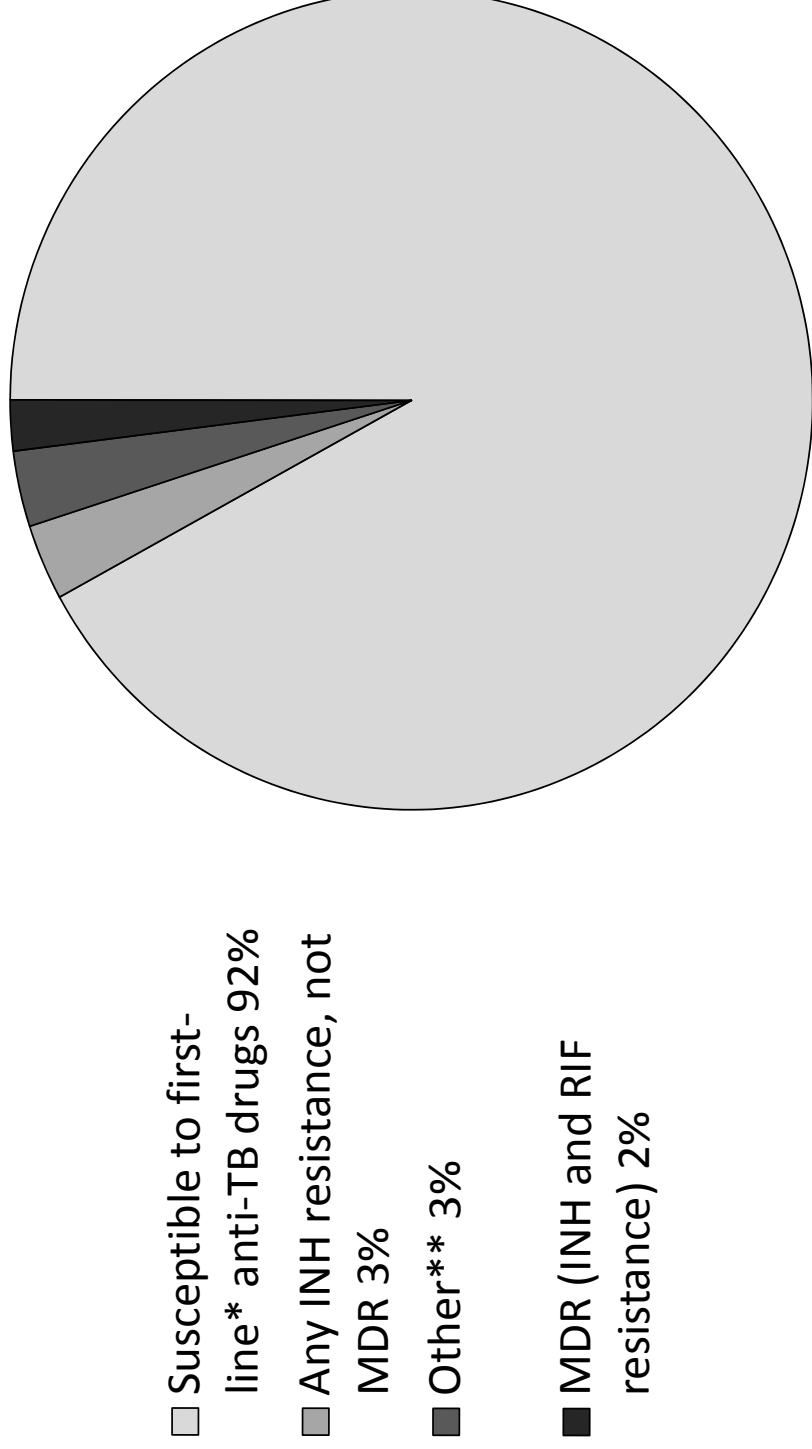


TB Case Rates by Age Group and Sex

U.S.-Affiliated Pacific Islands, 2010



Anti-TB Drug Susceptibility, U.S.-Affiliated Pacific Islands, 2010



*INH, RIF, PZA, EMB

**Other resistance (not MDR or INH resistant) or missing testing to at least one first-line drug

Note: Data reflect results for 210 of 224 culture-positive isolates for which drug sensitivity testing results were available.



Slide Narratives for US Affiliated Pacific Islands:

Slide 1-USAPI. TB Case Rates, U.S-Affiliated Pacific Islands, 2010. This bar chart shows TB rates for the U.S. Pacific Islands for reported cases in 2010. The case rate ranged from 4.5 per 100,000 persons in American Samoa to 297.6 per 100,000 persons in the Republic of the Marshall Islands with a regional case rate of 106.0 per 100,000 persons. The overall case rate for the United States (3.6 per 100,000) and for Hawaii (8.8 per 100,000) are also shown.

Slide 2-USAPI. Reported TB Cases by Age Group, U.S.-Affiliated Pacific Islands, 2010. This pie chart shows the age distribution of persons reported with TB in the U.S. Pacific Islands in 2010. Eleven percent were children under 5 years of age, 12% were children ages 5- to 14-year-olds, and 18% were 15- to 24-year-olds, whereas 27% were 25 to 44 years of age, 26% were 45- to 64-year-olds, and 6% were at least 65 years old.

Slide 3-USAPI. TB Case Rates by Age Group and Sex, U.S.-Affiliated Pacific Islands, 2010. This slide graphs the rates in 2010 of persons reported with TB in the U.S. Pacific Islands in 2010 by age group and sex. Children under 5-year-old had a rate of approximately 84 per 100,000 for females and 140 per 100,000 for males, while children in the 5- 14 year age group had lower rates (approximately 62 per 100,000 for both males and females). Among older age groups, rates fluctuated between a low of 91.8 per 100,000 (among females aged 65 years and older) to a low of 186.6 per 100,000 (among males aged 65 years and older).

Slide 4-USAPI. Anti-TB Drug Susceptibility, U.S.- Affiliated Pacific Islands, 2010. This pie chart shows the level of drug susceptibility for culture positive cases for in the U.S. Pacific Islands in 2010. Data were available for 93.75% of culture-positive cases for which drug susceptibility testing was available for 2010. Any isoniazid resistance that was not multi-drug resistance was 3%. Resistance to at least isoniazid and rifampin, known as multidrug-resistant TB (MDR TB), was 2%. Other resistance (Not MDR or INH resistant) or missing testing to at least one first-line drug was 3%.

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