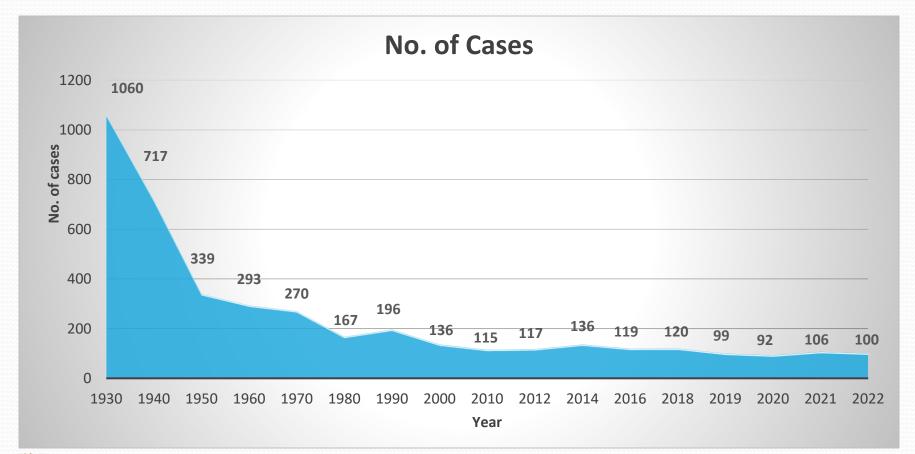
# TB Case Rates Hawaii vs. United States, 2002–2022



2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022



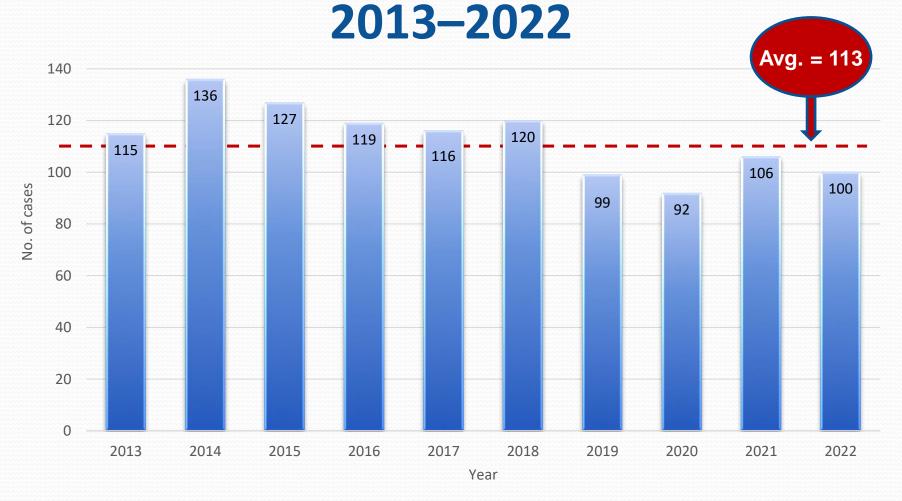
#### Reported TB Cases Hawaii, 1930–2022







Reported TB Cases Hawaii,







## TB Cases and Case Rates by County Hawaii, 2021-2022

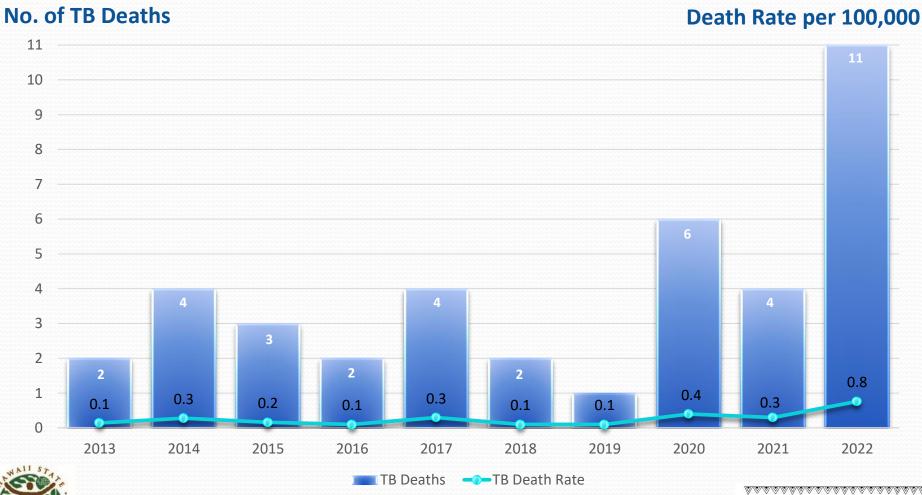
|          | No. of | Cases |      | Rates population) | Population Estimates |           |  |  |
|----------|--------|-------|------|-------------------|----------------------|-----------|--|--|
| County   | 2021   | 2022  | 2021 | 2022              | 2021                 | 2022      |  |  |
| Hawaii   | 10     | 6     | 4.9  | 2.9               | 203,792              | 206,315   |  |  |
| Honolulu | 86     | 78    | 8.6  | 7.8               | 1,004,673            | 995,638   |  |  |
| Kauai    | 5      | 5     | 6.8  | 6.8               | 73,791               | 73,810    |  |  |
| Maui     | 5      | 11    | 3.0  | 6.7               | 164,817              | 164,351   |  |  |
| TOTAL*   | 106    | 100   | 7.3  | 6.9               | 1,447,154            | 1,440,196 |  |  |

Note: Population estimates used to compute case rates were obtained from U.S. Census Bureau, Annual Estimates of the Resident Population for Counties in Hawaii: April 1, 2020 to July 1, 2022 (accessed on 4/24/2023)

<sup>\*</sup>Kalawao County population data (81 in 2021 and 82 in 2022) are added to total population estimate however no TB cases were identified in Kalawao County in 2021 or 2022



## TB Deaths and Death Rates Hawaii, 2013–2022

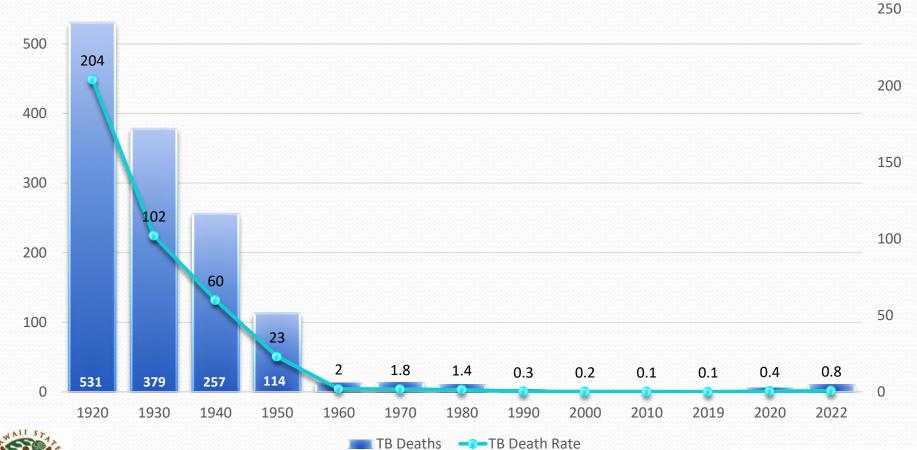


1/3/2024

### TB Deaths and Death Rates Hawaii, 1920–2022

No. of TB Deaths

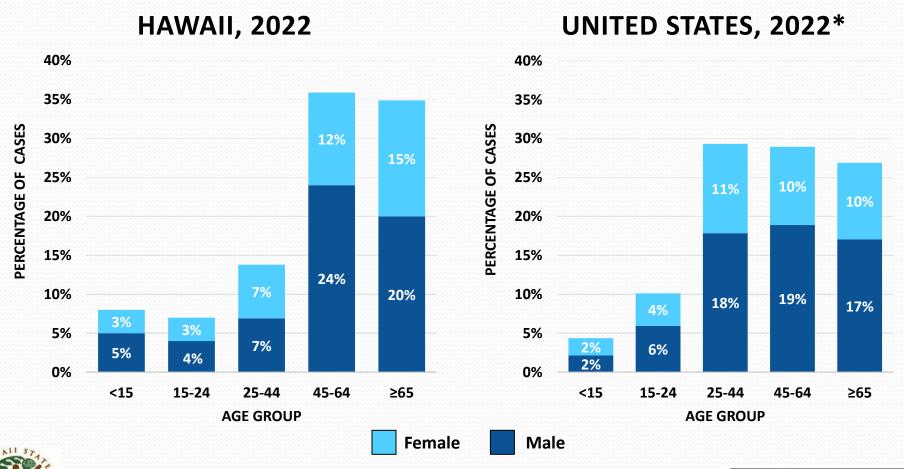
Death Rate per 100,000

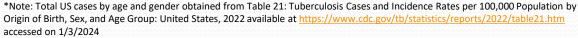






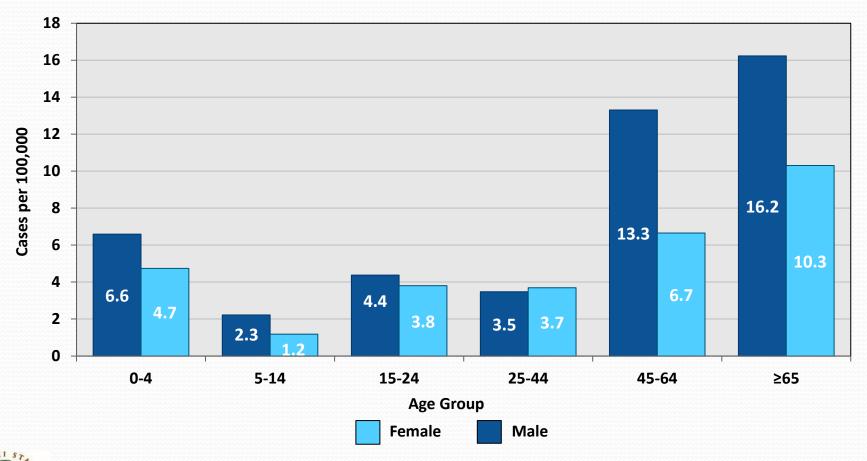
#### Percent of TB Cases by Age Group and Gender Hawaii vs. United States

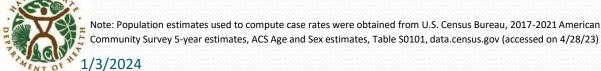






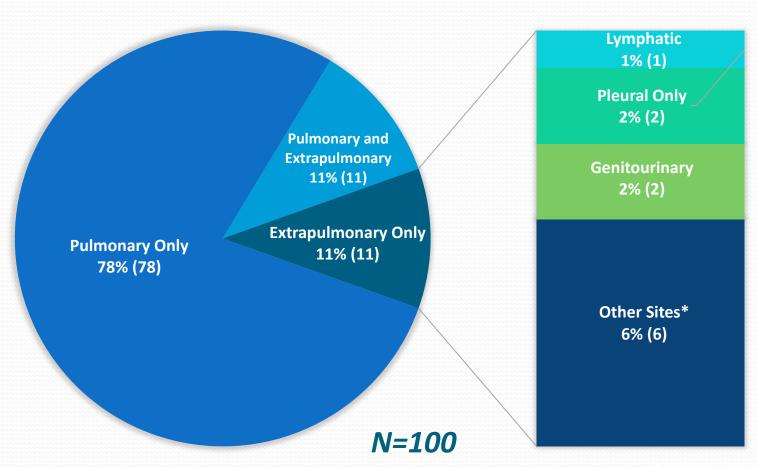
# TB Case Rates by Age Group and Gender Hawaii, 2022





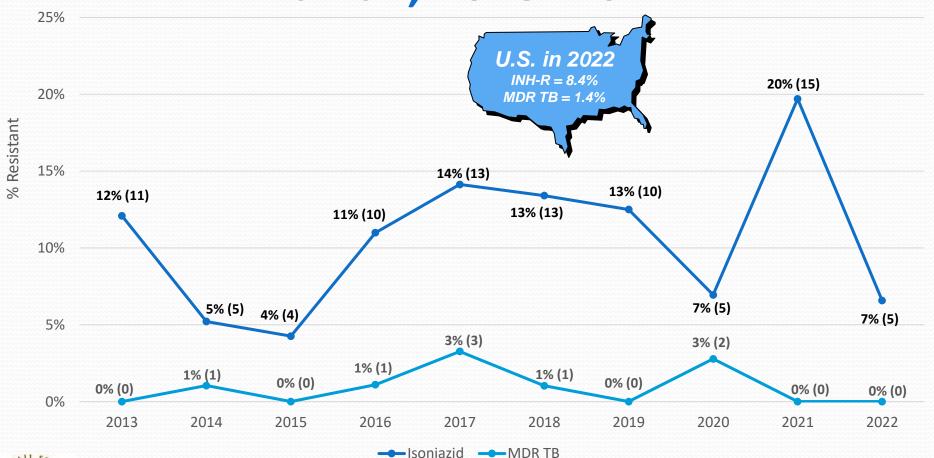


## TB Cases by Major Site of Disease Hawaii, 2022





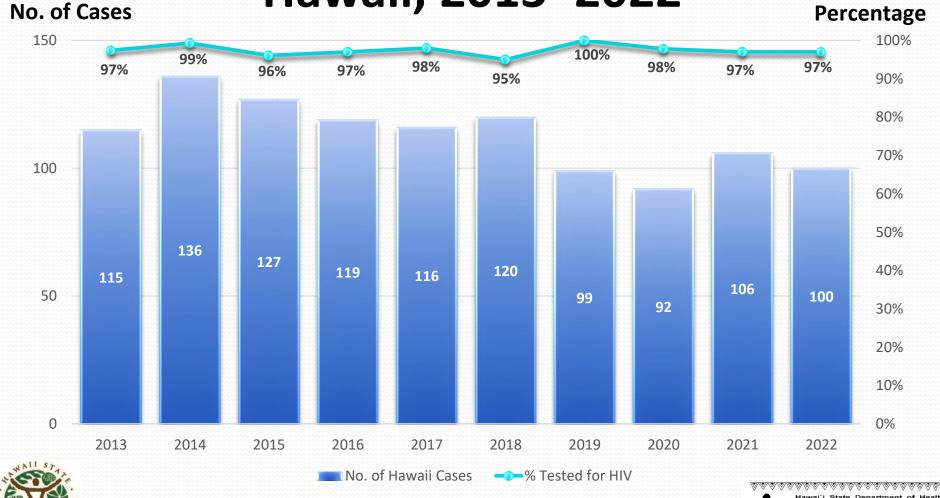
# Primary Anti-TB Drug Resistance\* Hawaii, 2013–2022



\*Cases are culture positive with initial drug susceptibility testing done. INH-R = at least resistant to INH; MDR = at least resistant to INH and RIF; isolates may be resistant to other drugs. Excludes cases with susceptibility testing not done or unknown for isoniazid and rifampin.



# Trends in HIV Testing Persons with TB Hawaii, 2013–2022



1/3/2024

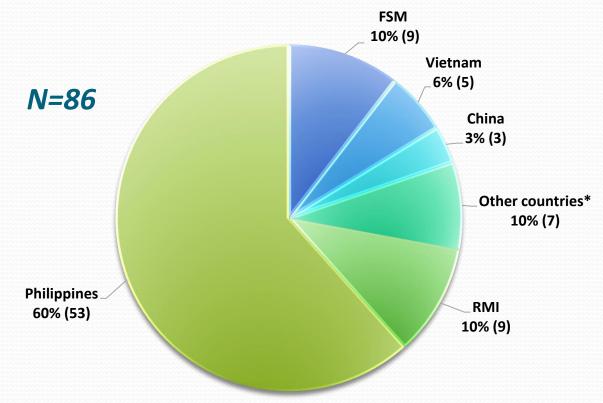
# US & Non-US Born Status of All Persons Reported with TB, Hawaii, 2022







# Countries of Birth for Non-US Born Persons Reported with TB, Hawaii, 2022







### TB Cases Born in the U.S.-Affiliated Pacific Islands Hawaii, 2013–2022

| Country of Birth  | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|-------------------|------|------|------|------|------|------|------|------|------|------|-------|
| FSM*              | 5    | 11   | 12   | 6    | 8    | 9    | 12   | 8    | 4    | 9    | 84    |
| Marshall Islands  | 5    | 5    | 10   | 4    | 14   | 10   | 11   | 8    | 10   | 9    | 86    |
| American Samoa    |      | 1    | 1    |      | 1    |      | 1    |      |      | 1    | 5     |
| Guam              | 2    |      | 1    | 1    |      | 1    |      |      |      |      | 5     |
| CNMI <sup>†</sup> |      |      |      |      |      |      |      |      | 2    |      | 2     |
| Palau             |      |      | 1    |      |      |      |      |      |      |      | 1     |
| TOTAL:            | 12   | 17   | 25   | 11   | 23   | 20   | 24   | 16   | 16   | 19   | 183   |
| Percent of Cases: | 10%  | 13%  | 20%  | 9%   | 20%  | 17%  | 24%  | 17%  | 15%  | 19%  |       |

<sup>\*</sup>FSM = Federated States of Micronesia which includes Chuuk, Kosrae, Pohnpei, and Yap †CNMI = Commonwealth of the Northern Mariana Islands



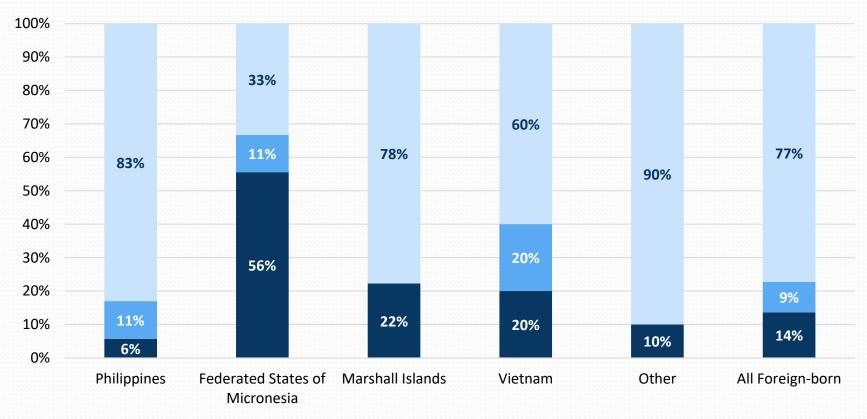
#### TB Cases among Pacific Islanders And Native Hawaiians, 2013–2022

| <u> </u>          |      |      |      |      |      | Andrewski | ********** |      | 4/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2 | 22222222222222222 | /1 |
|-------------------|------|------|------|------|------|-----------|------------|------|---|-------------------|--|
| COB & Race        | 2013 | 2014 | 2015 | 2016 | 2017 | 2018      | 2019       | 2020 | 2021                                    | 2022              | Total                                    |
| FSM*              | 5    | 11   | 12   | 6    | 8    | 9         | 12         | 8    | 4                                       | 9                 | 84                                       |
| Marshall Islands  | 5    | 5    | 10   | 4    | 14   | 10        | 11         | 8    | 10                                      | 9                 | 86                                       |
| American Samoa    |      | 1    | 1    |      | 1    |           | 1          |      |   | 1                 | 5  |
| Guam              | 2    |      | 1    | 1    |      | 1         |            |      |   |                   | 5  |
| CNMI <sup>†</sup> |      |      |      |      |      |           |            |      | 2                                       |                   | 2  |
| Palau             |      |      | 1    |      |      |           |            |      |   |                   | 1  |
| Tonga             | Χ    | Χ    | Χ    | Χ    | Χ    | Χ         | Χ          | Χ    | 2                                       |                   | 2  |
| Native Hawaiian   | Χ    | Χ    | Х    | Χ    | Χ    | Χ         | Χ          | Χ    | 2                                       | 1                 | 3  |
| TOTAL:            | 12   | 17   | 25   | 11   | 23   | 20        | 24         | 16   | 20                                      | 20                | 188                                      |
| Percent of Cases: | 10%  | 13%  | 20%  | 9%   | 20%  | 17%       | 24%        | 17%  | 19%                                     | 20%               |  |

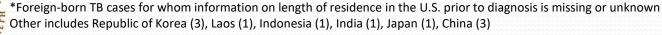
<sup>\*</sup>Federated States of Micronesia which includes Chuuk, Kosrae, Pohnpei, and Yap †CNMI = Commonwealth of the Northern Mariana Islands



# Percent of Foreign-Born TB Cases by Years of Residence in U.S. Prior to Diagnosis Hawaii, 2022









#### TB Cases and Case Rates by Zip Code of Residence at Time of Diagnosis, Hawaii, 2022

| County & Zip Code                   | Cases | Case Rate (per 100,000 population) | 2021 Population Estimate <sup>†</sup> |  |  |
|-------------------------------------|-------|------------------------------------|---------------------------------------|--|--|
| Hawai'i                             |       |                                    |                                       |  |  |
| 96720 – Hilo                        | 1     | 2.0                                | 49,886                                |  |  |
| 96737 – Hawaiian Ocean View*        | 2     | 51.9                               | 3,851                                 |  |  |
| 96738 – Waikoloa*                   | 1     | 12.7                               | 7,899                                 |  |  |
| 96740 – Kailua Village (Historical) | 1     | 2.4                                | 40,931                                |  |  |
| 96777 – Pahala*                     | 1     | 41.4                               | 2,418                                 |  |  |
| Honolulu                            |       |                                    | 2.2.2                                 |  |  |
| 96701 – 'Aiea*                      | 6     | 14.3                               | 41,818                                |  |  |
| 96706 – 'Ewa Beach*                 | 8     | 9.8                                | 81,658                                |  |  |
| 96707 – Kapolei*                    | 4     | 8.0                                | 49,903                                |  |  |
| 96782 – Pearl City*                 | 3     | 7.9                                | 37,992                                |  |  |
| 96786 – Wahiawa                     | 2     | 4.6                                | 43,042                                |  |  |
| 96789 – Mililani Town               | 1     | 1.8                                | 55,249                                |  |  |
| 96791 – Waialua*                    | 2     | 28.5                               | 7,010                                 |  |  |
| 96795 – Waimānalo*                  | 1     | 10.2                               | 9,815                                 |  |  |
| 96797 – Waipahu*                    | 9     | 12.3                               | 72,943                                |  |  |
| 96813 – Nu'uanu/Punchbowl*          | 3     | 11.9                               | 25,292                                |  |  |
| 96814 – Ala Moana*                  | 2     | 8.7                                | 22,880                                |  |  |
| 96815 – Diamond Head*               | 3     | 11.3                               | 26,608                                |  |  |
| 96816 – Waiʻalae/Kāhala*            | 6     | 11.6                               | 51,526                                |  |  |
| 96817 – Kalihi/Kapālama*            | 6     | 11.1                               | 54,183                                |  |  |
| 96818 – Salt Lake/Pearl Harbor*     | 5     | 8.4                                | 59,703                                |  |  |
| 96819 – Kalihi/Moanalua*            | 12    | 23.2                               | 51,712                                |  |  |
| 96822 – Makiki/Mānoa                | 2     | 4.2                                | 48,037                                |  |  |
| 96826 – McCully/Mōʻiliʻili*         | 3     | 9.8                                | 30,592                                |  |  |
| Kaua'i                              |       |                                    |                                       |  |  |
| 96705 – 'Ele'ele*                   | 1     | 42.0                               | 2,382                                 |  |  |
| 96746 – Kapa'a                      | 1     | 4.8                                | 20,810                                |  |  |
| 96766 – Līhu'e*                     | 3     | 17.2                               | 17,420                                |  |  |
| Maui                                |       |                                    |                                       |  |  |
| 96732 – Kahului*                    | 3     | 11.4                               | 26,361                                |  |  |
| 96753 - Kīhei                       | 2     | 6.8                                | 29,547                                |  |  |
| 96793 – Wailuku*                    | 6     | 18.3                               | 32,749                                |  |  |

<sup>\*</sup>Case rate in zip code was greater than the 2022 state case rate (6.9).
†2017-2021 American Community Survey 5-year population estimates used to compute case rates was obtained from US Census Bureau. <a href="https://data.census.gov/table">https://data.census.gov/table</a>

