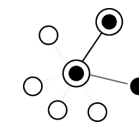


# Investigating the impact of closing disparities in TB incidence & case-fatality rates across U.S.-born racial-ethnic populations in the United States

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC or other authors' affiliated institutions.

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# Motivation

Despite advances in prevention and treatment, significant racial-ethnic disparities exist in rates of tuberculosis (TB) in the United States.

Goal : Estimate the burden of U.S.-born TB cases and deaths with TB that are attributable to racial-ethnic disparities in TB incidence and case-fatality.

# Methods

- Project age-specific baseline incidence and case-fatality rate projections for each U.S.-born racial-ethnic population through 2035.
- Create trends representing attaining disparity reduction goals and estimate the difference in projected TB cases and deaths.

**Incidence rate goal: 0.4/100,000**

**Case-fatality rate goal: 0.05/case**

- Calculate the health and economic burden of these disparities between 2023 - 2035:

## Health burden

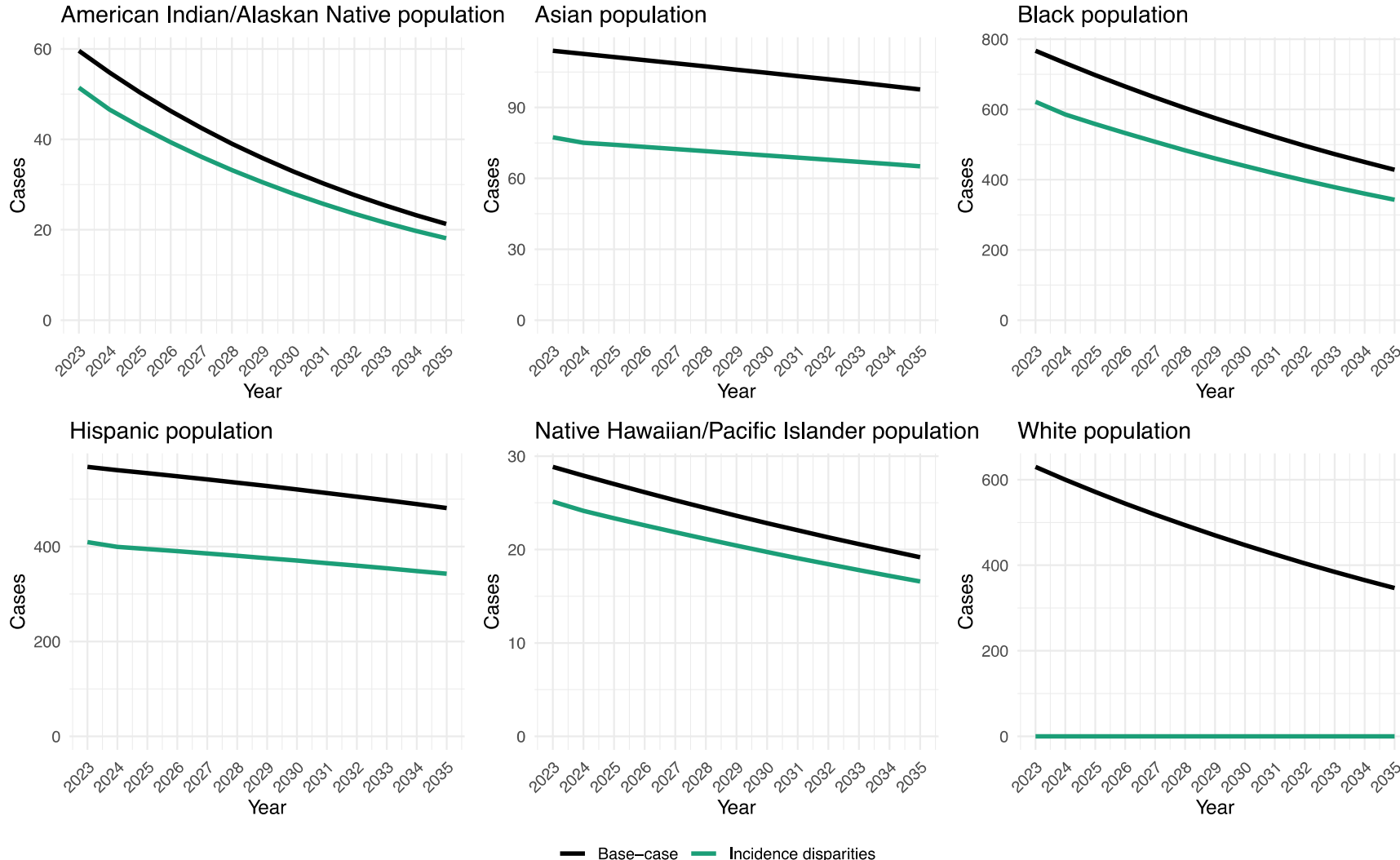
- TB cases
- Deaths with TB
- Quality adjusted life years (QALYs)

## Economic burden

- TB health service costs
- Non - TB healthcare spending
- Patient productivity losses
- Non - healthcare spending 2

# Estimated TB cases (2020 – 2035)

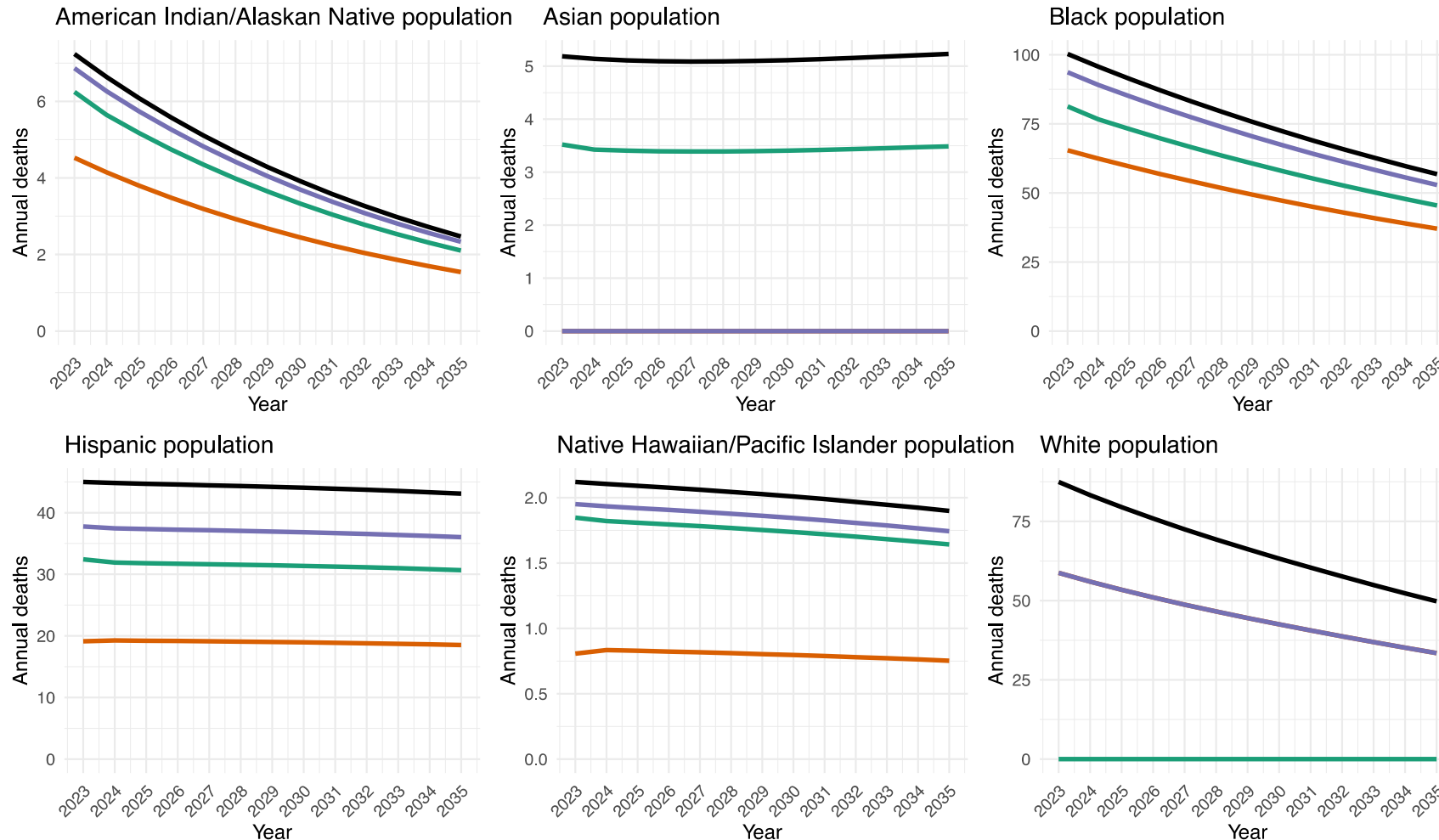
## Annual cases attributable to racial–ethnic disparities in TB



	<b>Cumulative cases 2023 - 2035</b>
<b>Base-case</b>	<b>29,128</b>
<b>Attributable to:</b>	
<b>Incidence disparities</b>	<b>12,566</b>

# Estimated deaths with TB (2020 – 2035)

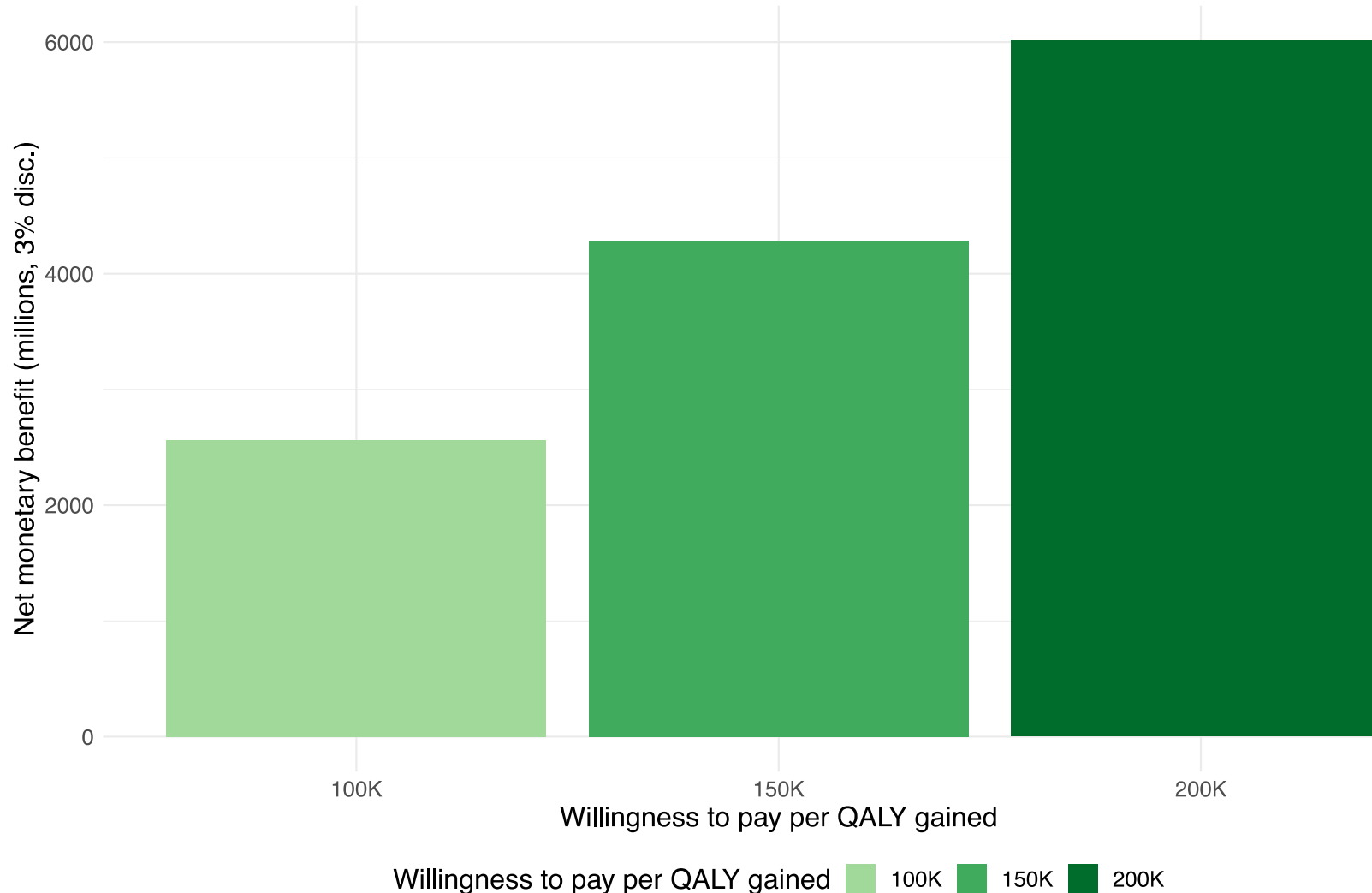
Annual deaths attributable to racial-ethnic disparities in TB



	Cumulative deaths 2023 - 2035
<b>Base-case</b>	<b>2,596</b>
<b>Attributable to:</b>	
<b>Incidence disparities</b>	<b>1,327</b>
<b>Case-fatality disparities</b>	<b>1,531</b>
<b>Incidence &amp; case-fatality disparities</b>	<b>2,120</b>

# Potential net monetary benefit (2020 – 2035)

Net monetary benefit of closing racial–ethnic disparities in TB incidence & case fatality rates



Potential net monetary benefit 2023–2035:

**2.5–6 billion**

(2020 USD)

3% annual discounting  
societal perspective

# Conclusions

43% of TB cases and 82% of deaths with TB among U.S.-born persons can be attributed to the combined racial-ethnic disparities in TB incidence and case-fatality rates.

Closing racial-ethnic disparities could have a large net monetary benefit and substantial gains in QALYs among these populations.



Thank you!

Questions?