



Tuberculosis in Homeless Population on Skid Row, California



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Introduction

- Skid Row is home to one of the largest concentrations of homeless people in the country. (1)
- There is little access to shelter, food, and healthcare for these residents. (1)
- California has the largest number of cases of tuberculosis in the Nation.(1)
- The nature of homelessness allows for communicable diseases such as tuberculosis to spread more quickly.
- The Program TB on Wheels can reduce the rapid rate of the disease by providing free education classes regarding the signs and symptoms, advocating to The Tuberculosis Control Branch to implement rapid testing, and referring individuals who test positive to centers that can treat TB (8).

Problem

One of the major health problems in Skid Row, California is Tuberculosis which is plaguing the community.

- Due to the large number of homeless in this area, and it being “the epicenter of LA’s addiction crisis” (5), there has been an increase in the number of cases of TB.
 - There is a large homeless shelter located in the community that accounts for over 12,000 people.
 - A large number of people in this community are retired veterans or drug abusers. They account for a large percentage of the tuberculosis cases.
 - Due to the living conditions, lack of support, and the nature of the health problems in this population - TB becomes a widespread concern.
- Illnesses such as TB, are typically uncontrolled and whenever this happens, it can be dangerous due to the ability for it to transmit easily and spread so rapidly.

Populations at risk:

- Migrants
- Children less than 5 years of age
- Groups with high rates of TB transmission
 - Homeless persons
 - Injection drug users
 - People with HIV

Other populations in the world that are experiencing outbreaks/high cases of TB also consist of a community similar to Skid Row.

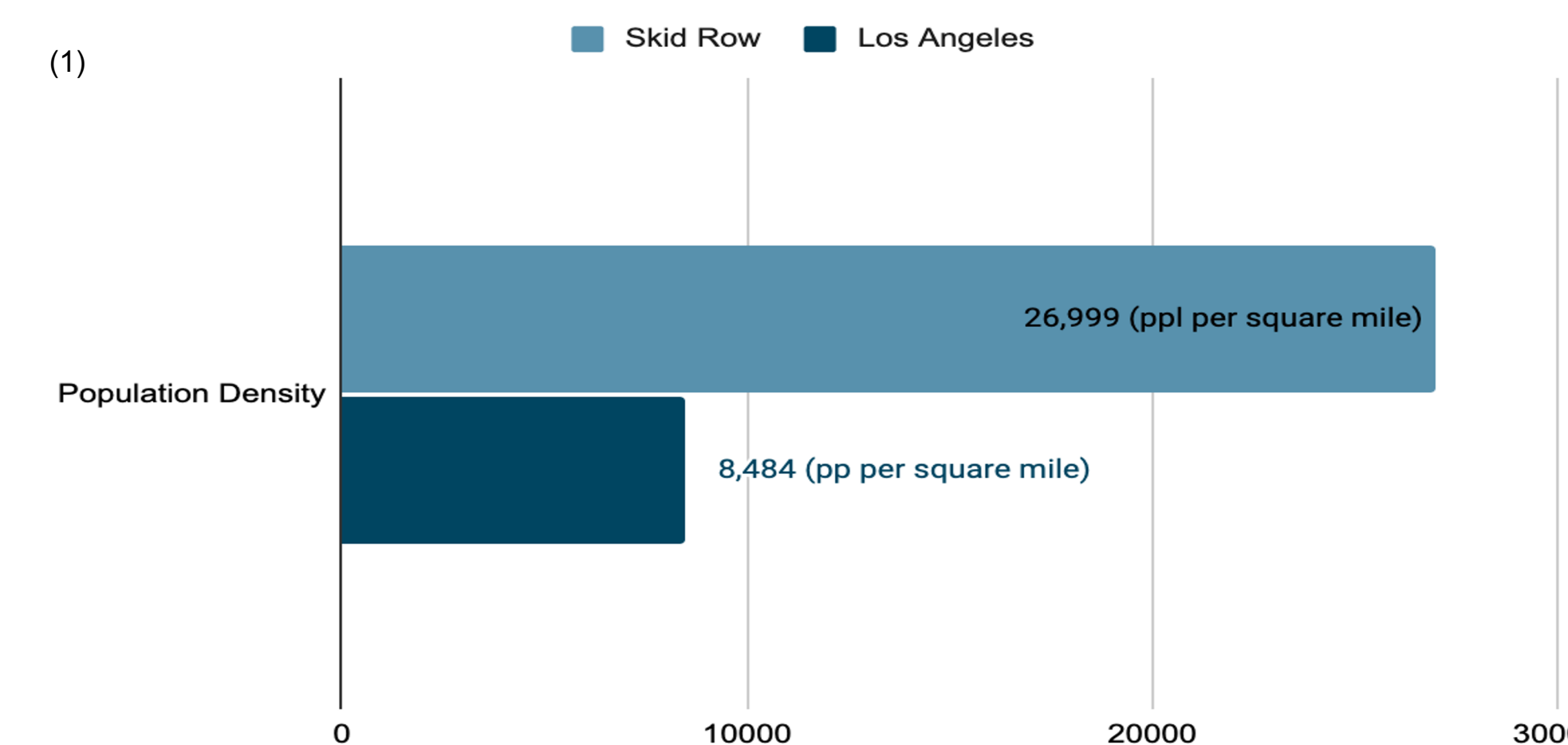
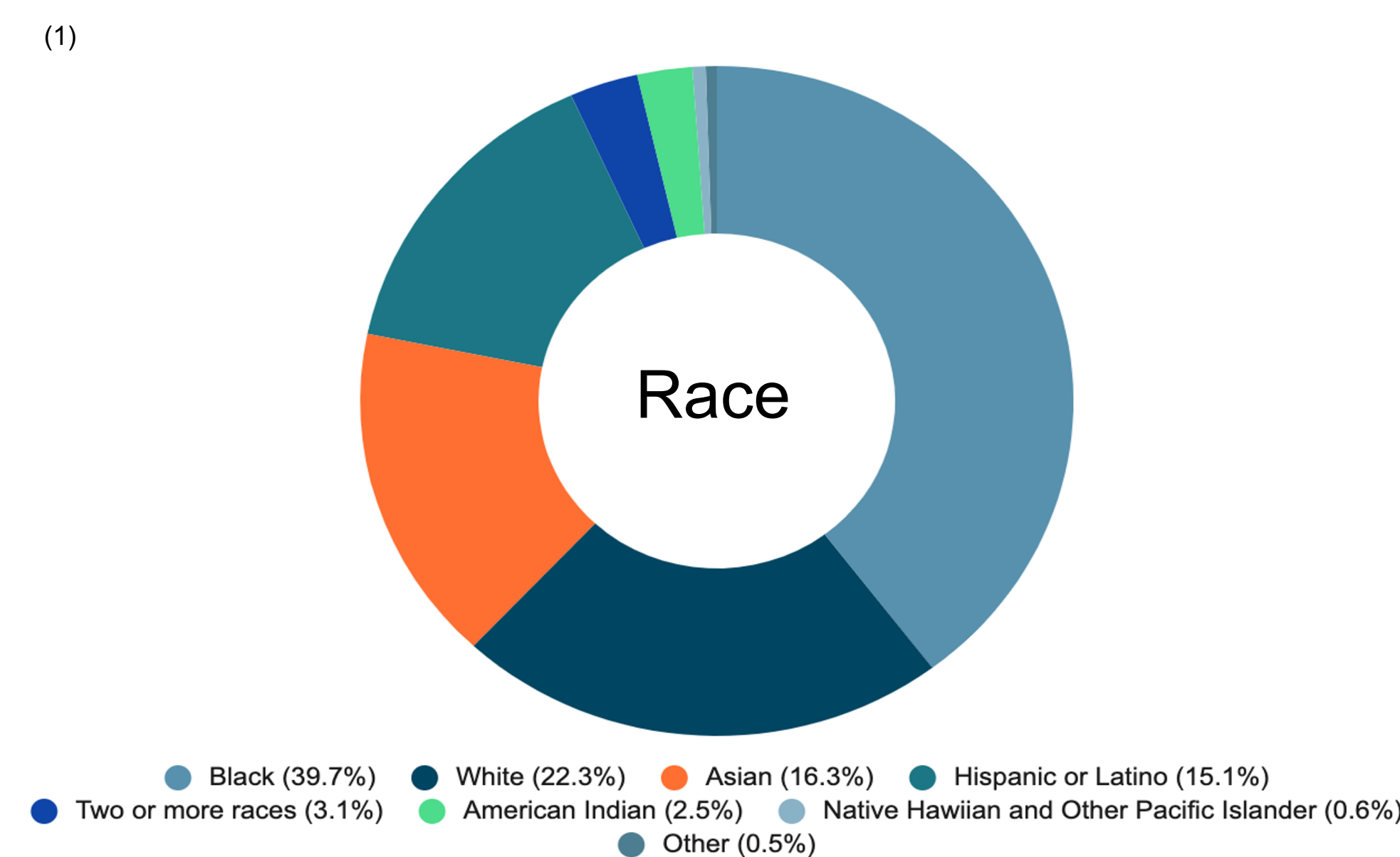
Factors contributing to the spread of TB are:

- Crowding
- Poor hygiene
- Lack of shelter
- Poor nutrition

National and Global Health Data:

- Since 2007, the ‘Skid Row Strain’ has been in the community. Within a 6 year span, 78 people have been diagnosed with the strain, 11 of whom have died. 60 of the diagnosed cases were from the Skid Row area (6).
- TB in the United States: over 8,000 reported cases in 2019. These were reported to the CDC from 60 different states, cities, and US territories. There is an estimated 13 million people living with latent TB infection (2).
- According to the WHO, “TB is the 13th leading cause of death and the second leading infectious killer after COVID-19. In 2020, an estimated 10 million people fell ill with TB worldwide” (7).

Community Assessment & Analysis



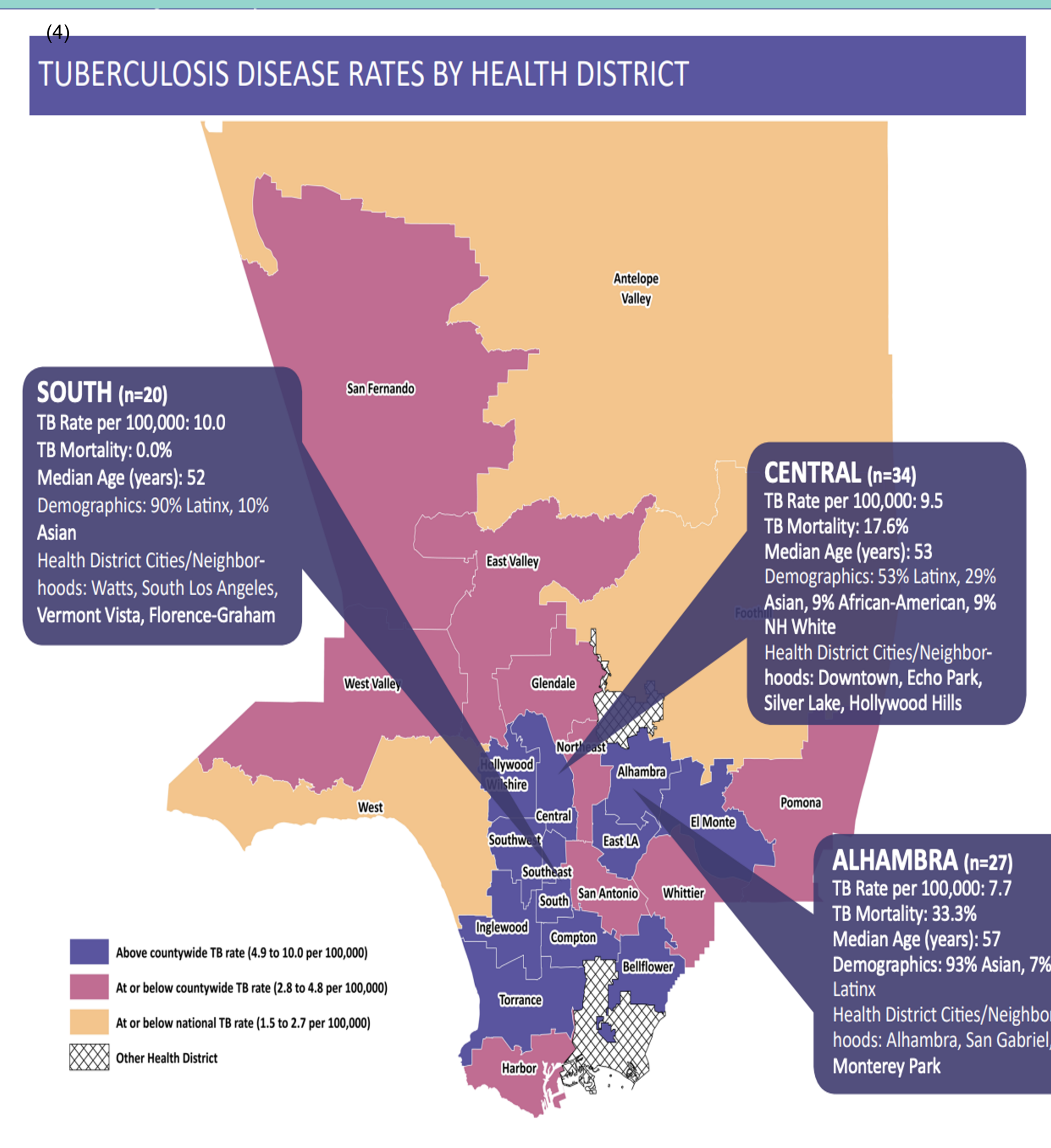
- The health district of Skid Row has a tuberculosis rate of about 9 per every 100,000, which is above the countywide rate of tuberculosis (2)
- There are 7,000 males and over 3,000 females that live in Skid Row (1)
- The average household size for Skid Row is about 10 people versus Los Angeles which is 3 people. (1)
- The population density of people who live in Skid Row is 3 times greater than of Los Angeles confirming that those in this community live in close proximity to each other. (1)

Resources Currently Available:

- There are 6 TB testing centers in the Los Angeles area: AltaMed Health Services, Arroyo Vista Family Health Center, Asian Pacific Health Care Venture, East Valley Community Health Center, JWCH Health Institute, and Martin Luther King Center for Public Health. (3)
- Of the 6 available testing centers only one specifically caters towards the Skid Row population, JWCH Health Institute. (3)

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Proposed Solution

- Program named TB on Wheels, that focuses on three major activities
 - First activity is free educational classes at homeless shelters that are taught by volunteer health care workers regarding proper hygiene, signs and symptoms of TB, medication regimen, etc.
 - Health care workers will be collecting donations from their own community to hand out free hand sanitizers, masks, food and water.
 - They will also be creating their own flyers to hand out regarding TB information.
 - Next activity is advocating to healthcare organizations such as The Tuberculosis Control Branch in California and applying for grants to try and implement rapid TB testing (9).
 - The Xpert MTB/RIF Ultra assay (rapid TB test) was first done in a French prison hospital, and had a “sensitivity, specificity, positive and negative predictive values of around 99% on raw sputum” (9). The testing is FDA approved, and can significantly reduce the rapid spread of TB by 18 days (9).
 - Last program activity is referring individuals who test positive to centers that can help treat and manage TB. The Tuberculosis Control Branch offers various resources such as testing, treatment and community resources (8).
- Overall, we want anyone from the homeless population that is attending TB on Wheels to be able to identify three early signs and symptoms of TB after completion of the program, list two ways of taking proper precaution when exposed, and be able to verbalize where to receive treatment.
- In conclusion, TB on Wheels was designed to stop the spread as efficiently as possible, and allow the homeless population to seek the treatment they deserve.