

# Spatial Distribution of Tuberculosis Incidence, Los Angeles County 2005-2011

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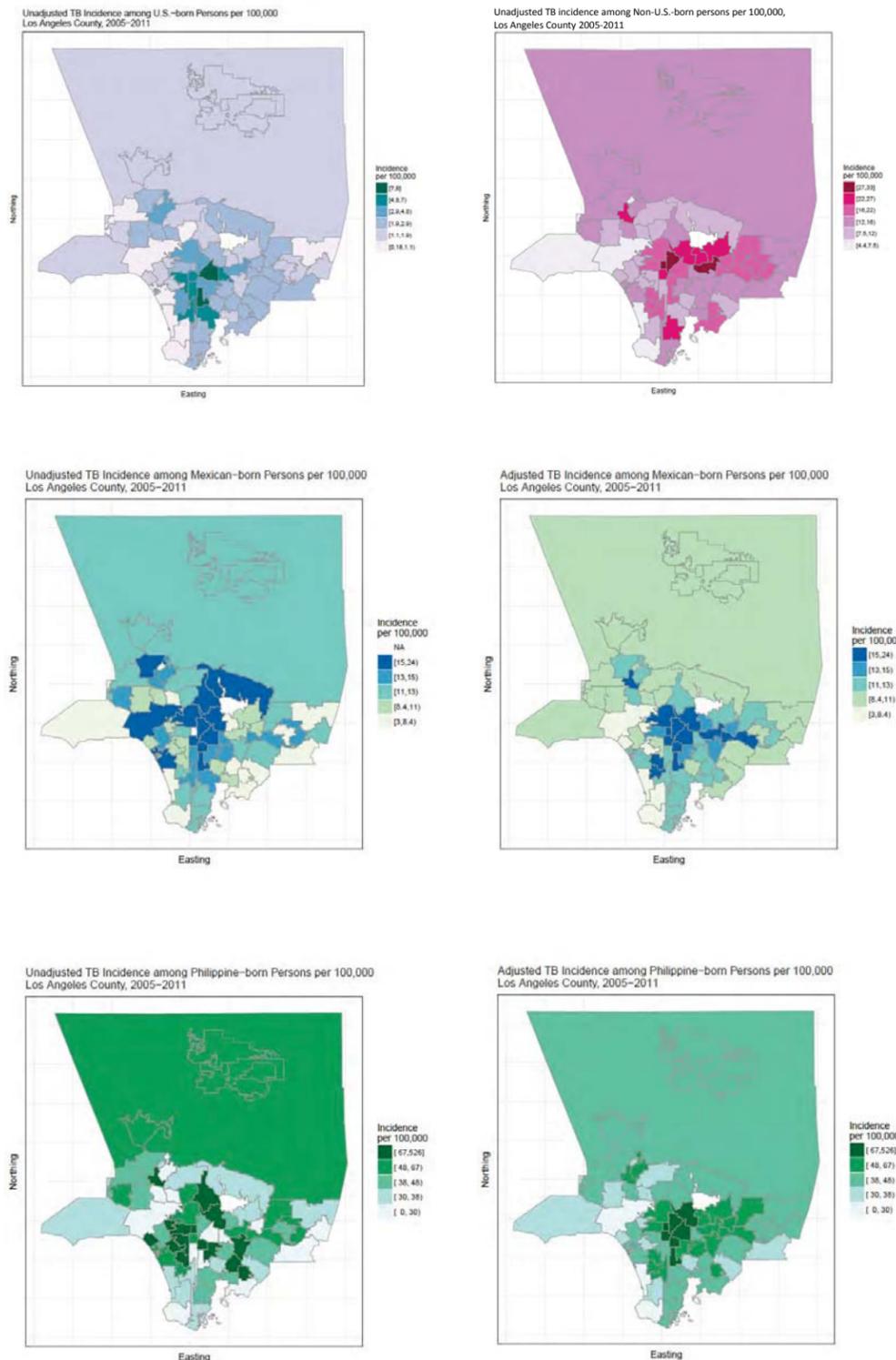
## BACKGROUND

- Tuberculosis (TB) disease incidence rate varies substantially by country of birth and other demographic factors.
- However, translating these statistics into public health action requires more detailed information, especially in jurisdiction like Los Angeles County which is more than 4,000 square miles.
- Local public health authorities may benefit from data that describe which geographic areas of the county are most affected, yet these data remain largely unreported in part because of limitations of sparse data.
- We aimed to describe the spatial distribution of TB disease incidence in Los Angeles County while addressing challenges arising from sparse data.

## METHODS

- Data on 5,447 TB cases from Los Angeles County were combined with stratified population estimates available from the Public Use Microdata Survey for years 2005 through 2011.
- TB disease incidence rates stratified by country of birth and Public Use Microdata Area (PUMA) were calculated
- Spatial smoothing was applied to incidence rates by country of birth and PUMA using conditional autoregressive models.

## RESULTS



## SUMMARY

1. Maps of unadjusted incidence among U.S.-born and non-U.S.-born person show areas of elevated incidence.
2. There were notable differences in the unadjusted and spatially-smoothed maps of TB disease incidence rates for selected high-risk subgroups, namely, persons born in Mexico, and the Philippines.
3. Spatially-smoothed maps showed areas of high incidence in downtown Los Angeles and surrounding areas for persons born in the Philippines. Areas of high incidence were more dispersed for Mexican-born persons.

## CONCLUSIONS

1. This study highlights areas of high TB incidence within Los Angeles County both for U.S.-born and non-U.S.-born cases and for cases born in Mexico and the Philippines.
2. Information on spatial distribution provided here complements other descriptions of the local disease burden and may help focus ongoing efforts to scale up latent TB infection testing and treatment among high-risk subgroups.

Contact Information: TBD???

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