Tuberculosis: Environmental and Individual Indicators: A Work in Progress

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Why Tuberculosis?

Tuberculosis infects one-third of the world's population and causes more than three million deaths every year.

Abstract

Throughout the United States, tuberculosis has become a growing problem. This is particularly true in the African American community. But why are African Americans being hit so hard by this disease? The objective of my research is to determine the correlations between individual indicators (age, gender, ethnicity, recent immigration), environmental indicators (dwelling crowding, population density, poverty, building size and age, exposure to recent immigrants) and rates of infection with tuberculosis. This will be accomplished by using a geographical information system, with zip codes as the unit of analysis. The research sheds light on the nature of the relationship between these factors and the higher risk of infection among African Americans. It suggests that the greater risk of infection among African Americans may be due to a higher occurrence of environmental risk factors (poverty, crowding, population density, and exposure to recent immigrants) in the African American community.

Why Tuberculosis?

My hope is that through a greater understanding of the nature of tuberculosis and how it is spread, we may better equip ourselves to slow the tidal wave. But what can be done now? By educating people about the seriousness of this disease and the factors that contribute to its spread, I believe that we can make an immediate impact. Furthermore, it is my hope that through recognition, more volunteers will devote time abroad to children like the boy shown here from Cape Town, South Africa, who have no hope without our help.

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References

Images
2. http://www.i-j-healthgeographics.com/content/3/1/23/figure/F2

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