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A Statistical Analysis of the Impact of Behavior on the Transmission of *Mycobacterium Tuberculosis* Infection and the Development of Drug-Resistant Strains

Tuberculosis (TB) infection has long been established as a disease of poverty, showing increased infection rates, severity of symptoms, and mortality risk in at-risk populations. Alcoholism, drug use, HIV infection, and poverty are well-known contributors to this relationship, though the complexity of the behaviors involved has yet to be fully explored.

This project seeks to create a more detailed profile of the behavioral components of TB spread. Demographic variables, population density and average income, alcohol and drug use, homelessness, and cultural perceptions of diseases and their methods of spread will be analyzed, and particular emphasis will be placed on the factors that impact treatment compliance and the development of drug resistant strains.