**Title**: Distribution of Cardiovascular Disease (CVD) Death Rates Among Geographical Areas, Ethnicity groups, Gender groups and correlation between smoking.

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**Abstract**

This report examines the distribution of cardiovascular disease (CVD) death rates across various geographical areas. Using descriptive statistical methods, the study identifies significant differences and patterns in CVD death rates among regions. Key findings indicate higher rates in southern areas of the country compared to other areas, male gender group, white ethnicity groups with significant variations. Further it is found that a positive relationship between smoking and CVD death rate.

**Introduction**

**Background:** Cardiovascular disease is a leading cause of death globally. Understanding its geographical distribution is crucial for targeted healthcare interventions.

**Objective:** To analyze and compare CVD death rates among different geographical areas and identify any significant disparities.

**Scope:** This study focuses on CVD death rates across predefined areas (all the counties in the United Sates of America).

**Summary of the study**

* Significant higher CVD death rate can be seen in southern regions of the country. CVD death rate of some counties of the southern region if almost double the country average.
* Significant lower rates can be seen in the central region of the country.
* Higer CVD death rates can be seen in male gender group compared to the female.
* Black ethnicity group having the higher CVD death rate while Asian ethnicity having lowest rate.
* There is a positive relationship between smoking and CVD death rate.
* Sates of Minnesota having lower CVD death rate compared to the country average.
* Gender CVD death rate distribution of sate of Minnesota as same country distribution. Higher rates can be seen for the male gender group.
* In Minnesota, the lower rates are mostly centered around the twin cities metro.