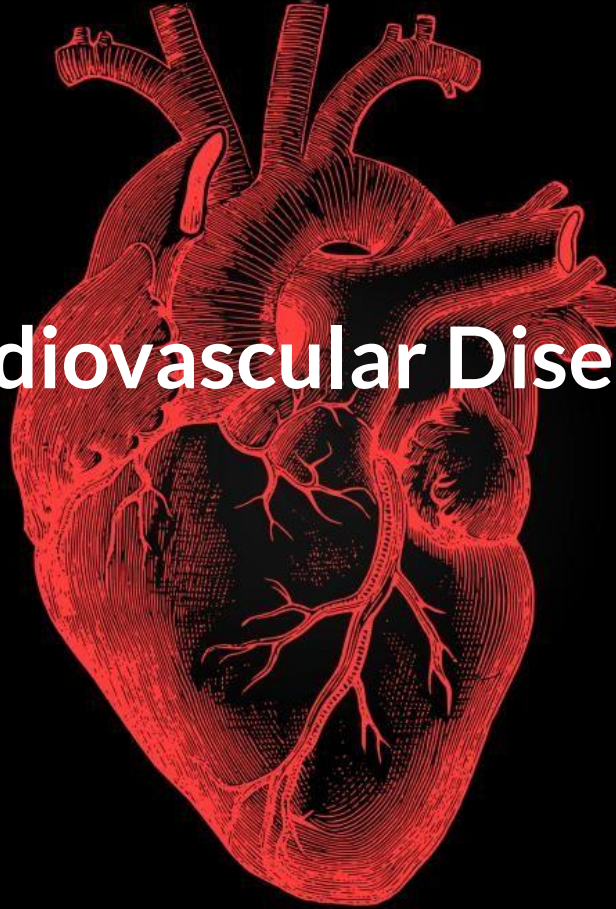


Cardiovascular Diseases



What are Cardiovascular Diseases?

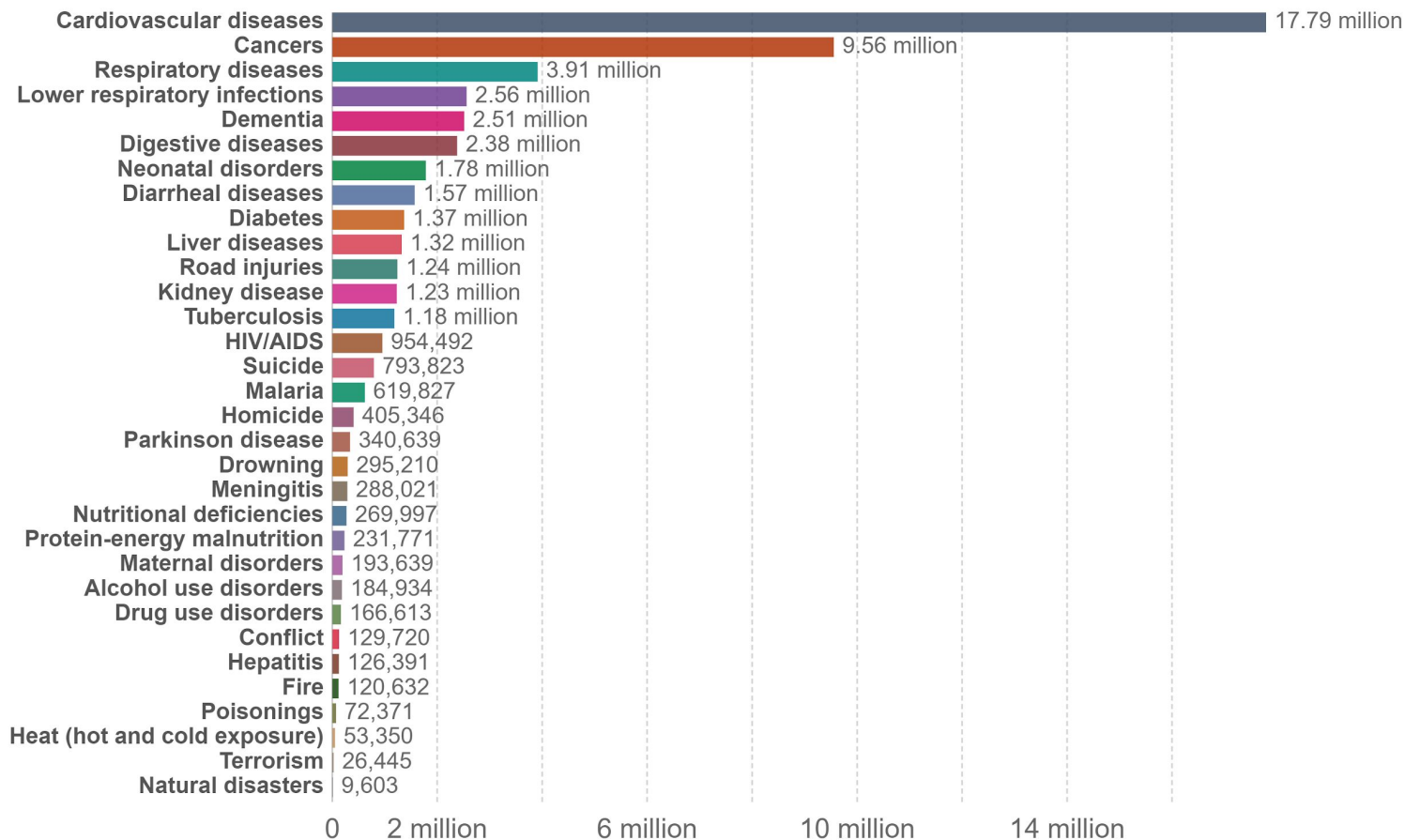
According to WHO (World Health Organization), “Cardiovascular diseases are a group of disorders of the heart and blood vessels.”

Some CVD Examples:

- Deep Vein Thrombosis & Pulmonary Embolism
- Coronary Heart Disease
- Cerebrovascular Disease
- Peripheral Arterial Disease



Number of deaths by cause, World, 2017



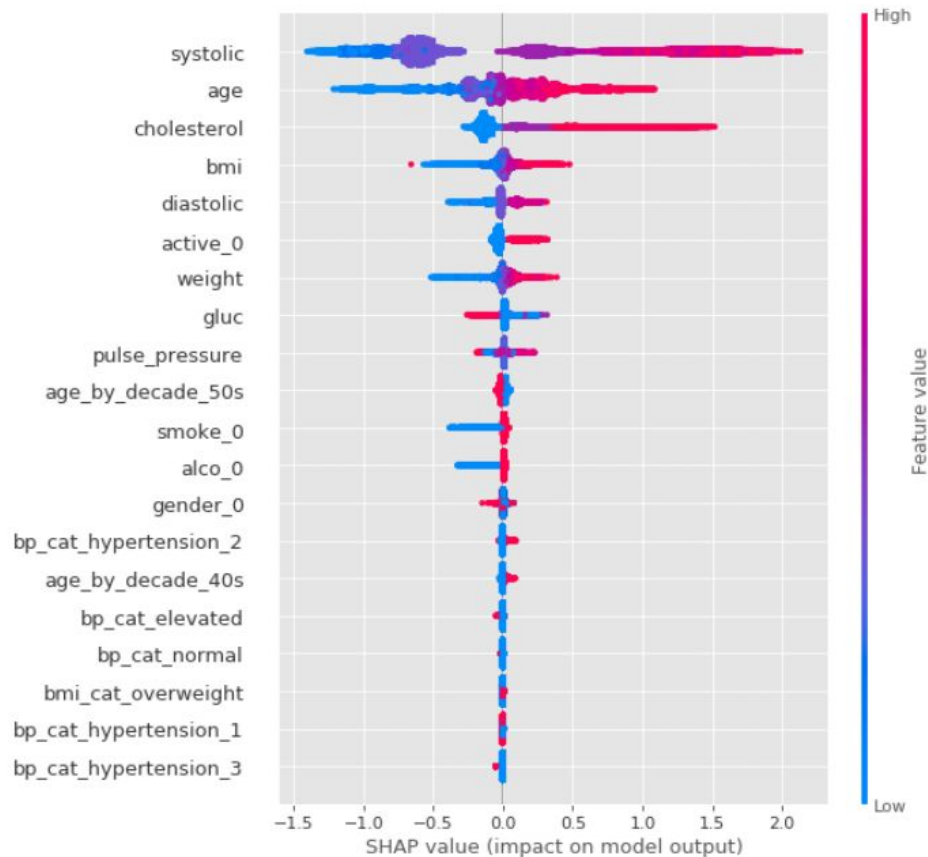
Our Goal

How Can We Help Prevent CVD Casualties?

1. What factors are most important when determining protective and risk factors?
2. Is there a certain population group that is most affected by CVDs?
3. What's the best way to spread knowledge of CVDs and how to reduce risk?

Most Important Factors Associated w/ CVDs

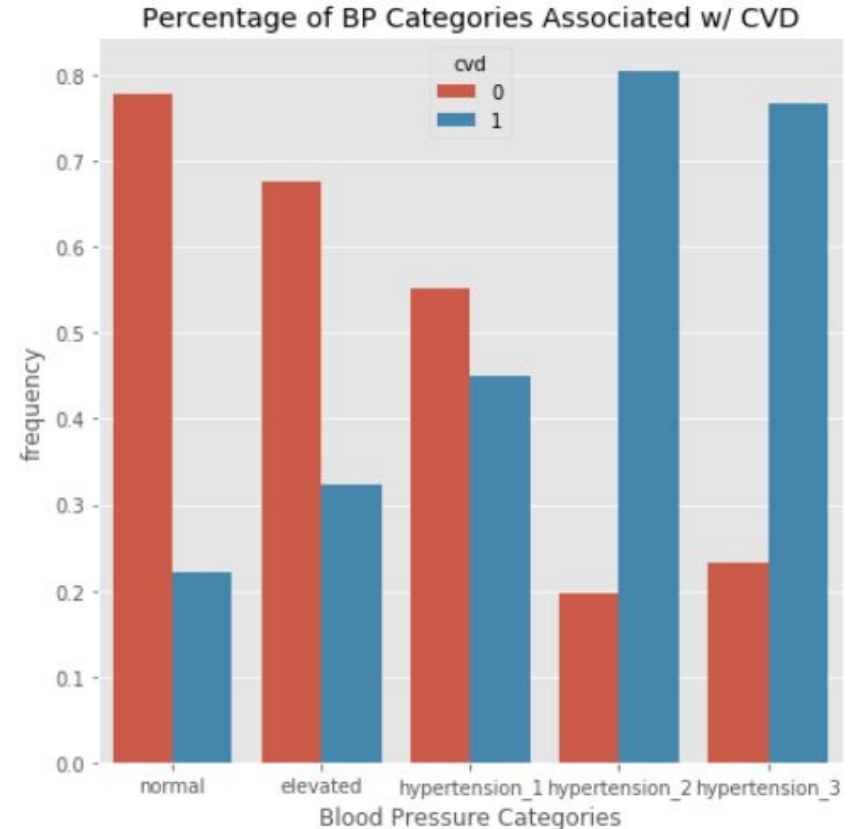
- Systolic Pressure
- Age
- Cholesterol Level
- BMI
- Diastolic Pressure
- Sedentary Lifestyle (Not Active)



Blood Pressure

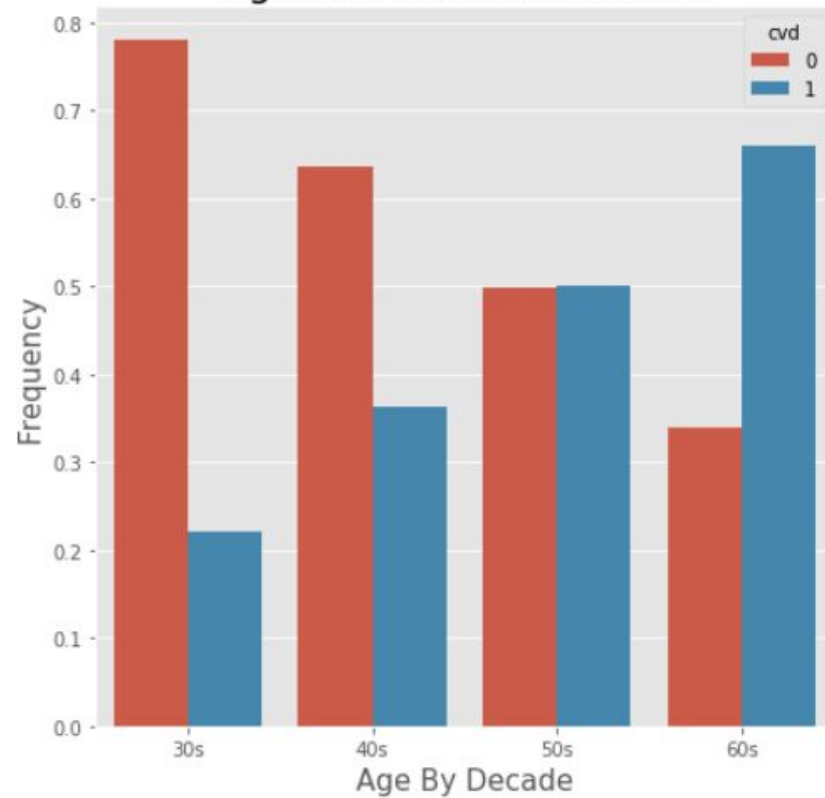
Systolic / Diastolic Pressure

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

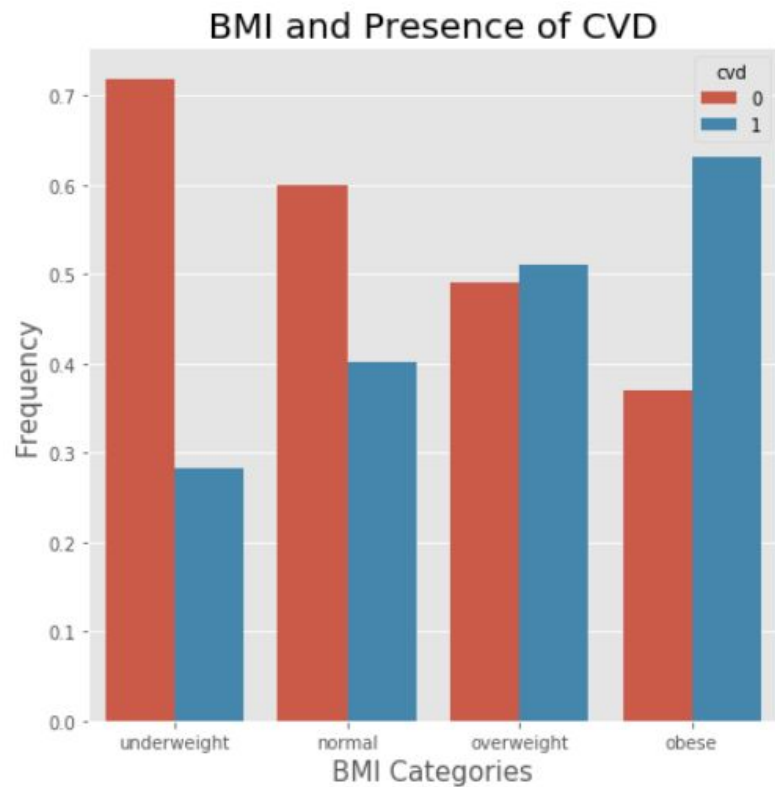


Age

Age and Presence of CVD



BMI



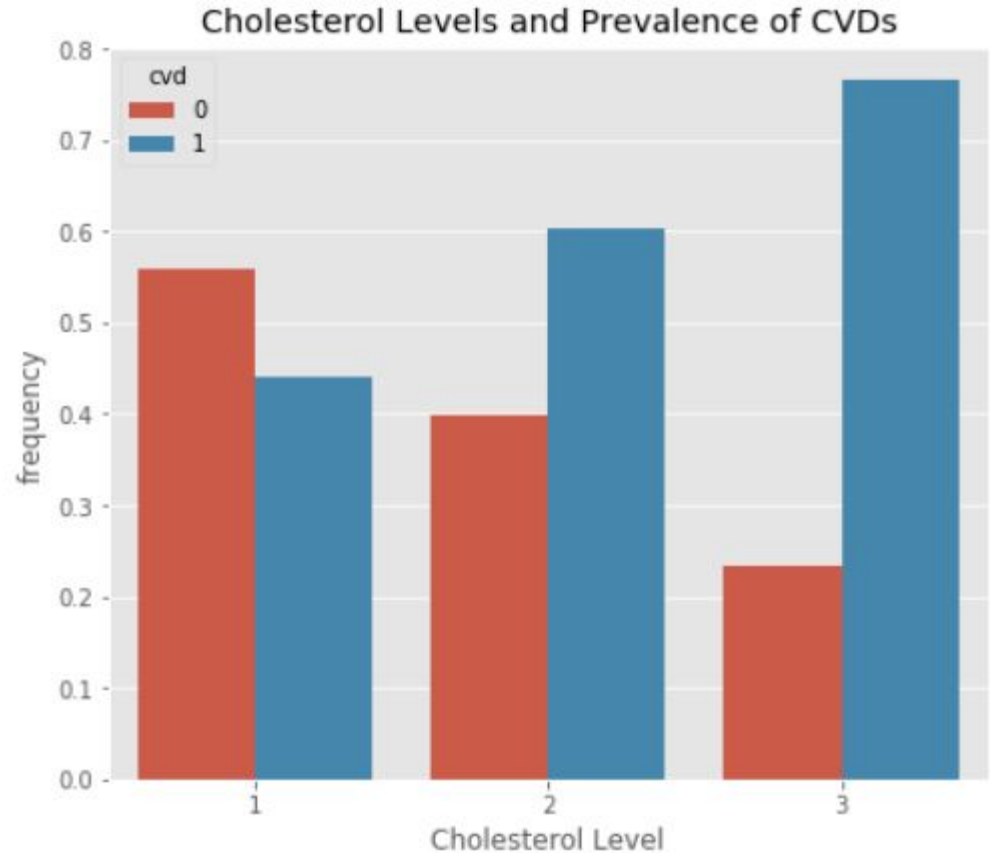
BMI Classification

BMI	Category
Lower than 18.5	Underweight
18.5 up to 25	Optimal
25 up to 30	Overweight
30 upwards	Obese

Cholesterol

What causes high cholesterol?

- Unhealthy eating habits
- Sedentary lifestyle
- Smoking (lowers our HDL)



Further Research

- Details on smoking, physical activity, and drinking (more than just boolean values). E.g. On average, how many times a week do you work out?
- Include average eating habits
- Type of work lifestyle (if any)
- Average Stress Level (1-10 scale)
- On Average, number of hours sleep a night
- Any pre-existing family history of CVDs
- Multiclass (What type of CVD)
- Relative Fat Mass Index

Thank You!

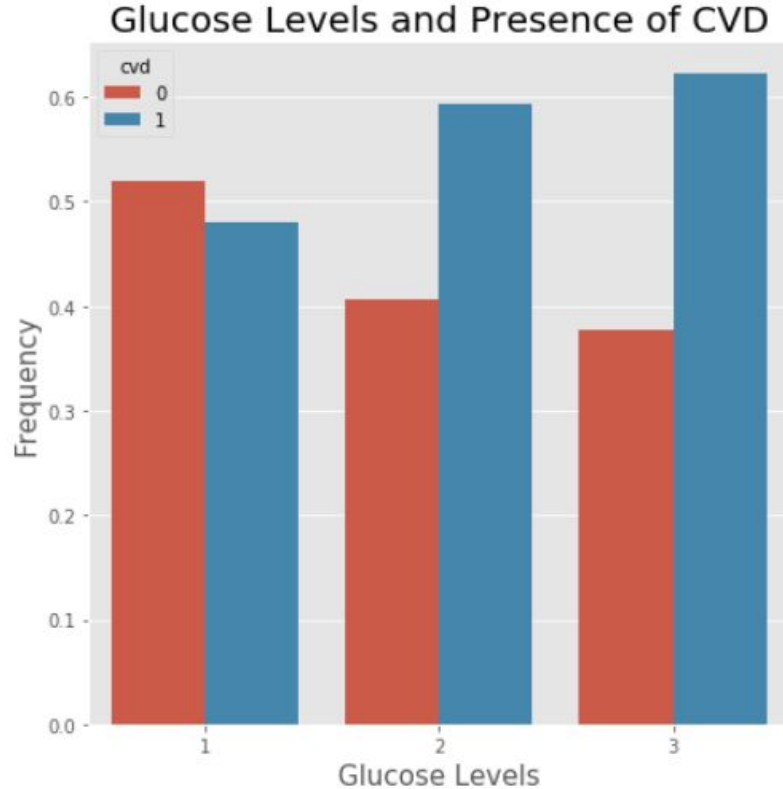


References

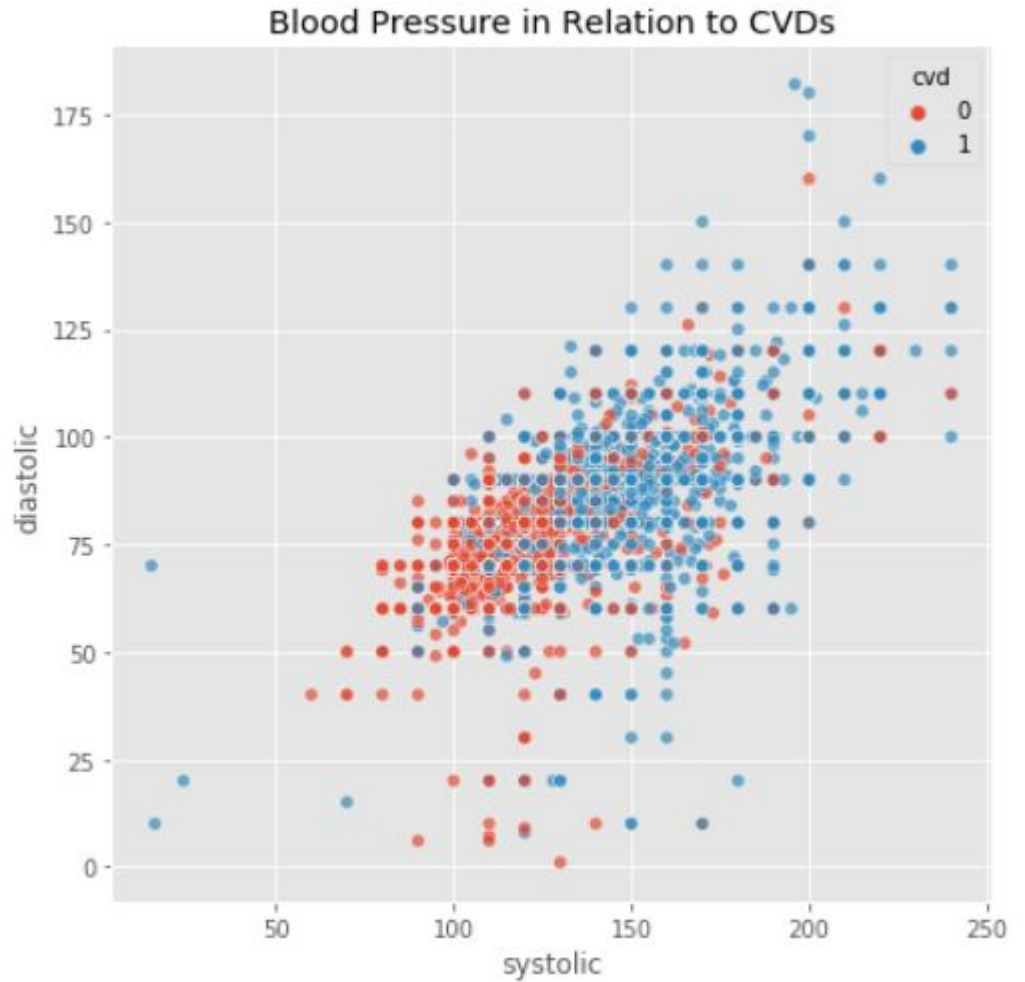
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Appendix

Glucose Levels

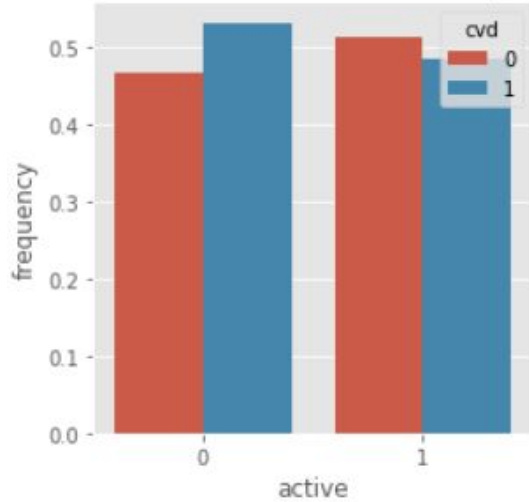


Blood Pressure Scatterplot

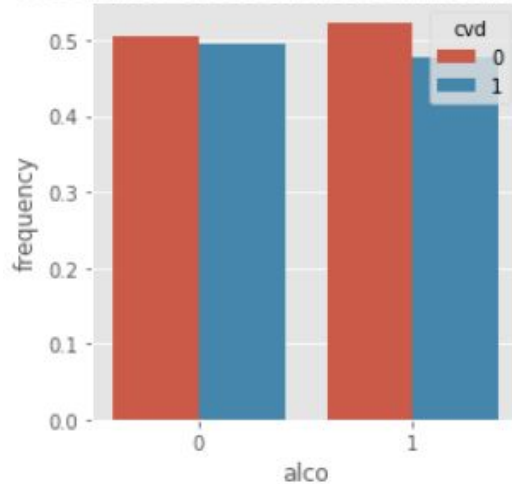


Smoking, Alcohol, and Activity Compared to CVD

Prevalence of CVD in Non-Active/Active



Prevalence of CVD in Non-Drinker/Drinker



Prevalence of CVD in Non-Smokers/Smokers

