Visualizing and Predicting Heart Diseases with an Interactive Dash Board

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Exploration Of Chorestrol By Age And Gender :

Cholesterol is a waxy, fat-like substance that plays many roles in the body, including synthesizing hormones and vitamin D. It also assists in the transporting of lipids. Cholesterol is found in the foods you eat, but it is also made by the liver.

Cholesterol circulating in the blood is carried by special particles called lipoproteins. The two major cholesterol-carrying lipoproteins are lowdensity lipoprotein (LDL) and high-density lipoprotein (HDL):

- LDL cholesterol (LDL-C) is often referred to as "bad" cholesterol because too much of it can build up in your arteries and form plaques, which increases the risk of heart disease.

- HDL cholesterol (HDL-C) is often referred to as "good" cholesterol as it carries cholesterol to the liver to be broken down and excreted.
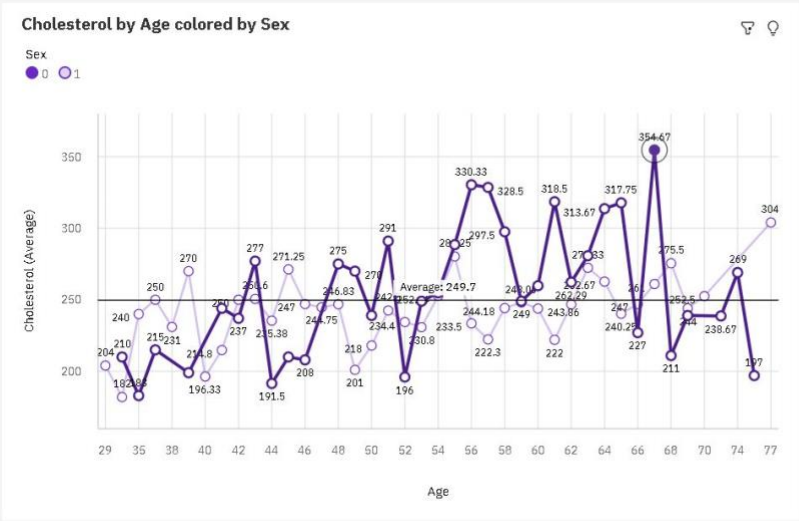
LDL Cholesterol Range by Age and Assigned Sex

Age/Sex Classification	LDL	
Males 19 and younger	Normal	Less than 110mg/dL
	Borderline	110-129mg/dL
	High	Greater than or equal to 130mg/dL
Males 20 and older	Normal	Less than 100 mg/dL
	Borderline	130-159 mg/dL
	High	160-189mg/dL
Females 19 and younger	Normal	Less than 110mg/dL
	Borderline	110-129mg/dL
	High	Greater than or equal to 130mg/dL
Females 20 and older	Normal	Less than 100 mg/dL
	Borderline	130-159 mg/dL
	High	160-189mg/dL

HDL Cholesterol Range by Age and Assigned Sex

Age/Sex	Classification	HDL
Males 19 and younger	Optimal	More than 45 mg/dL
Males 20 and older	Optimal	More than 40 mg/dL
Females 19 and younger	Optimal	More than 45 mg/dL

Females 20 and older   Optimal   More than 50 mg/dL

Cholesterol by Age colored by Sex

Sex
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Details

The most common values of **Age** are 54 (5.9 %) and 58 (5.6 %), together occurring 31 times, which is 11.5 % of the total.

The most common value of **Sex** is 1, occurring 183 times, which is 67.8 % of the total.

Over all **ages** and **sexes**, the average of **Cholesterol** is 249.7.

The average values of **Cholesterol** range from 182 to 354.7.

Cholesterol is unusually high when the combination of **Age** and **Sex** is 67 and 0.