but too much can clog arteries and may cause a heart attack or stroke.

## KEY TAKEAWAYS

Nearly 95 million
American adults have elevated cholesterol levels.

Heart disease accounts for 17\% of U.S, national health expenditures.


Prior authorization can cause unnecessary treatment delays for high cholesterol patients who fail statins.

## TOTAL CHOLESTEROL IS MADE UP OF:

- Low-density lipoprotein (LDL), the bad cholesterol
- High-density lipoprotein (HDL), the good cholesterol
- Triglycerides, a type of fat in the blood

Cholesterol is measured with a blood test that is ordered by your nurse or doctor. This test is sometimes called a cholesterol panel or a lipid panel. This panel may include a non-HDL cholesterol value. The non-HDL cholesterol calculation is the total cholesterol minus the HDL cholesterol.

## POPULATION STATISTICS

The American Heart Association estimates that 93.9 million American adults have elevated blood cholesterol levels.

- Almost 30\% of adults aged 20 years and older have high LDL cholesterol levels.
- Despite advances in pharmacologic treatment of high cholesterol, it remains a significant public health problem in the United States with more than $25 \%$ of adults aged 40-74 having high LDL levels.


## DEMOGRAPHIC STATISTICS

Non-modifiable risk factors include:

- Family history of early heart disease
- Age (men 45 years or older, women 55 years or older)
- African-American race

Modifiable risk factors include:

- Smoking cigarettes or cigars
- High blood pressure, or taking medicine for high blood pressure
- Diabetes or high blood sugar
- High LDL cholesterol or low LDL cholesterol


## ACCESS ISSUES

Patients diagnosed with high cholesterol will probably be advised to eat a heart healthy diet and become more physically active. These can be challenging for people facing certain social determinants of health. Studies have found, for example, that income level has been consistently associated with cardiovascular disease risk.

If patients with high cholesterol are prescribed statins, which help to lower cholesterol, they may be facing an incredibly high bill.

- Without insurance, statins can range from $\$ 33-\$ 600$ per month.
- If a patient doesn't respond well to a statin, another type of medication called a PCSK9 inhibitor may be prescribed.
- These medications frequently require prior authorization from insurance companies before patients can begin receiving them.
- Because the medications are injected, they can also require patients to make frequent trips to the doctor's office. These considerations can present access barriers for patients who don't have the economic means, transportation or work flexibility to visit their health care provider regularly.


## FINANCIAL BURDEN

While it's hard to pinpoint the exact financial burden of high cholesterol, heart disease accounts for $17 \%$ of U.S. national health expenditures. This is estimated to cost the United States $\$ 800$ billion by 2030.

