

U.S. HIV Guidelines Recommend Statins to Prevent Cardiovascular Disease

A recent study of people with HIV showed that a daily statin lowers the risk for heart attacks and other cardiovascular events.

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The Department of Health and Human Services (DHHS) has updated its antiretroviral treatment guidelines to recommend statins for people living with HIV who are ages 40 to 75 and have a low to intermediate risk for cardiovascular disease (CVD).

The [updated guidance](#) is supported by [findings from the REPRIEVE trial](#), which showed that middle-aged HIV-positive people with low to moderate CVD risk scores who took daily pitavastatin (Livalo) lowered their risk for heart attacks, strokes and other major cardiovascular events by 35%.

As people with HIV live longer thanks to effective antiretroviral treatment, cardiovascular disease has become a leading cause of illness and death. Studies show that HIV-positive people have about a twofold higher risk for CVD than their HIV-negative peers. What's more, people with HIV experience cardiovascular complications at younger ages. In part, this may be due to chronic inflammation that persists even in people on effective HIV treatment.

It is well known that people with high atherosclerotic cardiovascular disease (ASCVD) risk scores can benefit from statins, which decrease low-density lipoprotein (LDL) cholesterol levels and may have additional benefits such as reducing inflammation and blood clotting. Statins generally are not recommended for HIV-negative people with low ASCVD risk scores unless they have certain comorbidities, but scoring systems developed for the general population tend to underestimate the risk for people living with HIV.

The new DHHS guidelines were developed in collaboration with the American College of Cardiology, the American Heart Association and the HIV Medicine Association. The recommendations are for primary prevention, meaning prevention of a first cardiovascular event. People who have already had a heart attack, coronary revascularization procedure or other events need more intensive management.

- For people with HIV ages 40 to 75 who have high (20% or greater) 10-year ASCVD risk scores, the guidelines recommend starting high-intensity statin therapy—the same as the recommendation for HIV-negative people.
- For HIV-positive people ages 40 to 75 with low to intermediate (5% to just under 20%) 10-year risk scores, the guidelines recommend starting at least moderate-intensity statin therapy, for example 4 milligrams once-daily pitavastatin, 20 mg once-daily atorvastatin (Lipitor) or 10 mg once-daily rosuvastatin (Crestor).
- For those in this age group with 10-year risk estimates below 5%, the guidelines still favor initiating at least moderate-intensity statin therapy. However, the authors acknowledge that the absolute benefit from statins is modest for this population, so decision-making should take into account HIV-related factors that can increase CVD risk.
- For people with HIV under age 40, there is not enough data to recommend either for or against statin therapy for primary CVD prevention. For HIV-negative people of this age, lifestyle modification is recommended, with statin therapy considered only for specific groups at higher risk.
- For the general population, people ages 20 to 75 with elevated LDL levels (190 or higher) are advised to start high-intensity statin therapy, and those ages 40 to 75 with diabetes are advised to start at least moderate-intensity statin therapy. These recommendations should also apply to people with HIV.
- For people over 75, the guidelines do not offer a recommendation, as there are inadequate study data for this age group

The guidelines authors caution that administration of certain statins with antiretroviral drugs may result in significant drug interactions. In some cases, this may require statin dose adjustment, switching to another statin or increased monitoring for adverse effects. Pitavastatin was chosen for the REPRIEVE trial because it generally does not have clinically relevant interactions with antiretrovirals.

In addition, the authors advise that pregnant people with low to intermediate CVD risk should wait until after pregnancy to start statins, and statins should be discontinued if a person becomes pregnant. Breastfeeding is not recommended while taking statins.

Statins are generally safe and well tolerated. In the REPRIEVE trial, serious adverse events were uncommon and occurred with similar frequency in the pitavastatin and placebo groups. Muscle damage (rhabdomyolysis) is a potential serious adverse event, but muscle-related symptoms were uncommon and mainly mild. Statins can trigger diabetes, and there were more cases in the pitavastatin group compared with placebo group, but the incidence was low overall.

In November, the British HIV Association [likewise released new guidance](#) recommending statins for all people with HIV ages 40 and older, emphasizing that statin therapy should be used as part of a holistic heart-healthy lifestyle that includes diet modification, exercise, weight management and smoking cessation.

Click here for the full [updated statin therapy recommendations](#).

Click here to learn more about [HIV and heart health](#).