

# HIV-Associated Wasting Linked to Higher Mortality

Even in the era of effective antiretroviral treatment, wasting syndrome remains a threat for some people living with HIV.

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[HIV-associated wasting](#), which is still a concern for some people living with the virus, is associated with increased risk of death, according to a cohort study and a meta-analysis conducted in the era of modern antiretroviral therapy.

In the early years of the AIDS epidemic, wasting syndrome, or substantial unintentional weight loss, was a prominent physical manifestation of HIV. Not long after the advent of protease inhibitors and modern combination antiretroviral therapy in the mid-1990s, people started seeing unusual body shape changes, including excessive abdominal fat accumulation. Today, weight gain is a more common concern among people on HIV treatment but wasting has not gone away. Chronic inflammation, comorbidities and food insecurity may be contributing factors.

Michael Wohlfeiler, MD, of the AIDS Healthcare Foundation, and colleagues looked at the links between new onset HIV-associated wasting or low weight, viral suppression and all-cause mortality. Results were published in [AIDS Research and Human Retroviruses](#).

This analysis included more than 62,000 participants in the OPERA (Observational Pharmacology Epidemiology Research & Analysis) cohort without prior wasting or low weight who were receiving HIV care during 2016–2020. They were followed until death, loss to follow-up or the end of the study end on October 31, 2021. HIV-associated wasting or low weight was defined as a diagnosis of wasting or an underweight or low-normal [body mass index](#) (less than 20.0).

Over a median follow-up of 45 months, 4,755 participants (8%) developed wasting or low weight, and 1,354 (2%) died. People with new onset wasting or low weight had a significantly higher rate of death than those without after adjusting for age, race/ethnicity, changes in viral load and other factors (hazard ratio 1.96, or nearly double the risk).

Among 4,572 participants who were on antiretroviral treatment when they developed wasting or low weight, 68% had viral suppression (viral load below 200), and subsequent virological failure was uncommon (7%). Among those without viral suppression at the start of the study, 70% achieved viral suppression and 60% achieved an undetectable viral load (below 50) during follow-

up. These findings show that even people on effective treatment can still develop wasting or low weight.

“HIV-associated wasting remains a challenge for some people with HIV,” the study authors conclude. “Particular attention needs to be paid to HIV-associated wasting/low weight and virologic control to restore health and potentially reduce the risk of death.”

Another analysis published in [BMC Infectious Diseases](#) similarly found that hospitalized people with HIV on antiretroviral treatment who experienced weight loss had a higher risk of death.

Using MedLine, Embase and LILACS databases from March 2020 through October 2023, Sarah Almeida Cordeiro, of the Federal University of Amazonas-UFAM in Brazil, and colleagues conducted a systematic review and meta-analysis of relevant prospective cohort studies in English, Spanish or Portuguese.

Out of more than 700 studies reviewed, just 10 met the inclusion criteria. Together, these included 1,637 people living with HIV. The studies were conducted in Brazil, Cameroon, Canada, China, Colombia, Ethiopia, South Africa, Tanzania and Thailand between 1996 and 2017. Combination antiretroviral therapy with protease inhibitors first became available in the United States in the mid-1990s, but it took longer to reach low- and middle-income countries.

A majority of study participants were men, and the average age was 33 years. The leading causes of hospitalization were coexisting infections, including tuberculosis and sepsis. More than half (58%) of hospitalized patients who lost weight died, and their risk of death was 1.5 times higher compared with those who did not lose weight.

The researchers concluded that weight loss significantly increased the risk of death in hospitalized people with HIV on combination antiretroviral therapy, but their confidence level was “very low” due to limitations of the component studies.

“The results of this review suggest that weight loss continues to be a problem and that there are still important gaps to be addressed on this topic,” they wrote. “It seems clear that it is essential to monitor the weight of people living with HIV and implement nutritional strategies for people at nutritional risk.”