

Pneumonia Hospitalizations Still High for Positive Patients

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Although hospitalizations for [bacterial pneumonia](#) have greatly decreased among people living with HIV in Denmark since the introduction of combination antiretroviral (ARV) therapy in 1996, they remain six times higher than in the general population, according to a [study published](#) online October 3 in *Clinical Infectious Diseases*.

A number of studies around the globe have found significant decreases in new cases of all types of pneumonia in people living with HIV since 1996. No large studies, however, have compared the rate of new cases of bacterial pneumonia (pneumonia from infections other than *Pneumocystis jiroveci* [[PCP](#)]) requiring hospitalization between people living with HIV and their HIV-negative counterparts.

To compare the risk between HIV-negative and HIV-positive patients, Ole Sogaard, MD, from the Aarhus University Hospital in Skejby, Denmark, and his colleagues studied the medical records of 328,738 HIV-negative and 3,516 HIV-positive Danish patients receiving health care between 1995 and 2007. The HIV-negative and HIV-positive patients were matched for age, sex and race.

Sogaard's team found that the incidence risk of bacterial pneumonia cases requiring hospitalization dropped from 1995 to 2007 by 62 percent. The authors write that combination antiretroviral therapy is the greatest reason for the reduction. Despite this decrease, however, the risk for first-time hospitalization for pneumonia remained six times higher for HIV-positive patients than HIV-negative patients from 1997 through 2007.

The factors associated with a higher risk for pneumonia included having a low CD4 count and a history of injection drug use. However, even HIV-positive patients with relatively high CD4 counts remained at greater risk for pneumonia than HIV-negative patients. For people with HIV not on ARV therapy, a high viral load was also associated with a greater risk for pneumonia.

Sogaard's team proposes several possible explanations for the increased risk, including an overly active immune system. They also write that the pneumonia vaccine is not commonly used in Denmark, either among HIV-positive patients or elderly HIV-negative patients, as is currently recommended in the United States.

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