# Rochester Researchers Explore Possible HIV-Associated Hearing Loss

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Specialists in HIV and in hearing at the University of Rochester Medical Center in New York State and are gearing up to conduct what they believe is the first large study to examine potential connections between HIV infection and hearing loss. The study, announced in a November 5 press release, is being supported by a $1.9 million grant from the National Institute on Deafness and Other Communication Disorders.

According the Amneris Luque, MD, director of the AIDS Center of Strong Memorial Hospital in Rochester and the study's lead investigator, hearing loss among some people living with HIV has been reported. However, she said, these reports have been scattered and unconfirmed.

"There has not been a systematic study looking at hearing function in people with HIV," Luque said. "If there is hearing impairment, it could be related to the disease itself; it might be related to infections that our patients with [HIV] are prone to getting; or it might be related to the medications used to treat the disease."

Luque noted that people with HIV/AIDS might be aging prematurely compared with people without HIV. The team will look closely at whether a similar acceleration of aging may play a role in the hearing of people with HIV. Other potential causes for hearing loss in people with HIV, like those in the general population, include heredity, noise exposure and medications used to treat infections and conditions such as cancer. Sorting out those causes from other processes unique to people with HIV is challenging.

"We're trying to tease out what is happening in people with HIV," Luque said. "Is there something inherent about the infection that might be involved in hearing loss?"

The first of 360 volunteers was enrolled in the study last week. Participants in the study will undergo periodic, rigorous testing of their hearing. Scientists will study patients at various stages of HIV infection, including some long-term nonprogressors or elite controllers—people in whom the infection hasn't advanced even without medication.

The team will compare the results in people living with HIV with those of HIV-negative individuals undergoing similar audiologic testing conducted at the International Center for Hearing and Speech Research, also in Rochester.