The public health policy of “test-and-treat”—testing widely for HIV and treating people immediately regardless of health status—would lower HIV transmission, AIDS and death rates, but double the rate of multidrug resistance (MDR) to antiretrovirals, according to a mathematical projection concerning men who have sex with men (MSM) in Los Angeles County (LAC). Researchers from the University of Southern California (USC) looked at the MSM population in LAC, analyzing HIV treatment methods and how they affected the virus between 2000 and 2009. They presented their projections in the advanced online edition of Clinical Infectious Diseases.

Using a deterministic epidemiological model to simulate the next decade of the epidemic among the LAC MSM population, the investigators compared the status quo to the potential implementation of a test-and-treat policy. They found that, by 2023, test-and-treat would lower new infections by 34 percent, deaths by 19 percent and new AIDS cases by 39 percent. At the same time, MDR would increase from the current 4.79 percent to 9.06 percent.

“We’re not saying that testing everybody and treating everybody is bad,” said the study’s principal investigator, Neeraj Sood, PhD, associate professor at the USC Schaeffer Center for Health Policy and Economics, in a release. “All we’re saying is that you should proceed with caution and closely monitor the prevalence of multidrug-resistant HIV as you scale up the test-and-treat model.”

To read the study abstract, click here.

To read a release on the study, click here.