# Multi-Pronged Prevention Tactics Could Slash HIV Rates in IDUs

March 7, 2014

Tackling HIV prevention efforts among injection drug users (IDUs) with a multifaceted approach—including increased HIV testing and treatment as well as harm reduction and treatment for drug use—could cut new infections in this population by more than 60 percent by 2040 and save money overall. Publishing their findings in Health Affairs' March issue, which is devoted to papers on HIV, researchers at the Columbia Mailman School of Public Health and Brown University used computer modeling to project how various interventions would affect HIV rates among IDUs.

The investigators based their modeling off of HIV transmissions among sexually active New Yorkers between the ages of 15 and 64 who fell into three categories: IDUs, users of non-injection drugs, and non drug users. They compared the projected HIV incidence rates—the annual rate of new infections—in 2020 and 2040 when at least one of four different interventions were used: increasing access to HIV testing, expanding access to substance abuse treatment, increasing needle exchange program (NEP) use, and broadly treating the population with antiretrovirals as a means of preventing transmission ("treatment as prevention," or TasP).

The researchers projected that if all four such interventions were employed, new infections would drop 62.4 percent by 2040. When scaling up each intervention individually, HIV testing would lead to a 12 percent drop in new infections by 2040, substance abuse treatment would cause a 26 reduction, NEPs would lead to a 34 percent drop, and TasP would cut rates by 45 percent.

Combining just needle exchange and TasP would reduce infections by nearly as much as all four interventions combined.

"While this particular study did not focus on the cost effectiveness aspect," Brandon Marshall, PhD, assistant professor of public health at Brown and a former postdoctoral scholar at the Mailman School, said in a release, "other research has showed that the interventions we modeled turn out to be cost-saving—on an average of $350,000 in lifetime treatment costs—because they prevent new infections."

To read the study abstract, click here.

To read the Columbia press release, click here.