

## The elusive end to HIV in the USA

Underscoring the tenacious HIV epidemic in the US, the Centers for Disease Control and Prevention (CDC) report on data from the National HIV Surveillance System, *Vital signs: status of human immunodeficiency virus testing, viral suppression, and HIV preexposure prophylaxis—United States, 2013–2018*, was released on Dec 3, 2019. The number of new HIV infections continues to hover around 38 000 and the proportion of people with infections who have been diagnosed has increased to 86%. However, despite the availability of highly effective antiretroviral treatments, only 63% of those who are diagnosed with HIV have a suppressed viral load and 18% of the estimated 1.2 million Americans who might be indicated for PrEP (pre-exposure prophylaxis) are receiving it. Across demographic groups, the youngest (aged 13–24 years), black men, and people who inject drugs had the lowest viral suppression.

The epidemiological snapshot might be unsurprising because of increased attention to the state of HIV in the US. In February, 2019, the federal initiative, *Ending the HIV Epidemic: A Plan for America*, was announced. The programme's aim is to end the HIV epidemic in 10 years, reducing the number of new HIV infections by 75% in the first 5 years and 90% by 2030. To achieve that, the initiative proposes four pillars: diagnosis of HIV infection as early as possible; rapid HIV treatment to achieve sustained viral suppression; preventing infection in those at risk, including through PrEP; and rapid detection and response.

The focus on PrEP is logical given its potential. With daily adherence to one of two available regimens, emtricitabine plus tenofovir disoproxil fumarate and emtricitabine plus tenofovir alafenamide, efficacy for preventing infection with HIV-1 is near 99%. In September, 2019, the US Department of Health and Human Services (HHS) announced an agreement with Gilead granting a US\$6 million contract to the pharmaceutical company to distribute the very drugs it manufactures. The HHS will pay \$200 a month per bottle to cover Gilead's costs for dispensing the medication through its supply chain.

Coincident to the CDC report, *Ready, Set, PrEP*, was launched on Dec 3, 2019, and was heralded by HHS Secretary Alex Azar as an "historic expansion of access to HIV prevention medication". The programme makes PrEP

available at no cost for those who qualify: participants who test negative for HIV, who need a prescription from a medical provider, and for those who are uninsured or with health insurance that does not include prescription drug coverage. Gilead will donate up to 2.4 million bottles of PrEP medication, for which the corporation may take substantial tax deductions. Yet the programme will reportedly reach only about 4250 individuals within the first 6 months, a fraction of those who could benefit from PrEP for preventing HIV infection.

There are other criticisms beyond the low number of people reached by the expansion. Without competition to bring prices down, PrEP medication is prohibitively costly (\$13 000 per person per year). Furthermore, the threat of delays in filling prescriptions because of a small number of providers might compromise PrEP adherence, and disparities in uptake and availability are most pronounced in the hardest hit regions of the USA (eg, the south). The programme also neglects the other routes by which prescriptions are obtained, including clinics funded by non-profit organisations and via private health insurance plans. The recommendation by the US Preventive Services Task Force for PrEP to prevent HIV will force private insurers to cover all drug costs by 2021. But of major concern are the out-of-pocket expenses for ancillary prevention costs, including clinical services and laboratory testing every 3 months for HIV and kidney function, which individuals might be responsible for with or without health coverage.

There has been an undeniable shift in acknowledging the poor progress in HIV in the USA, with a renewed sense of urgency at the end of this decade. After convening outside of the USA for the past 7 years, the 23rd International AIDS Conference, AIDS 2020, will take place in the San Francisco Bay Area in July. In collaboration with a group of leading HIV researchers and academics and timed with the meeting, *The Lancet* will publish a landmark Series, HIV in the USA, that probes the health system-based, economic, and demographic factors that determine the course of the epidemic. No matter how effective treatment and prevention tools may be, without addressing these structural issues, the end of HIV in the USA is not yet in sight. ■ *The Lancet*



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For the report on National HIV Surveillance System data see <https://www.cdc.gov/mmwr/volumes/68/wr/mm6848e1.htm>

For more on the *Ending the HIV epidemic initiative* see <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>

For more on *Ready, Set, PrEP* see <https://www.getyourprep.com/>

For the US Preventive Services Task Force recommendations for PrEP see <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/prevention-of-human-immunodeficiency-virus-hiv-infection-pre-exposure-prophylaxis>

For more on the AIDS 2020 conference see <https://www.aids2020.org/>