Published in final edited form as:

Dermatol Clin. 2020 April ; 38(2): 233–238. doi:10.1016/j.det.2019.10.008.

Preexposure prophylaxis (PrEP) for HIV prevention among men who have sex with men and transgender persons: What dermatologists need to know

Kenneth A. Katz, MD, MSc, MSCE,

Dept. of Dermatology, Kaiser Permanente, 1600 Owens St., 9th Floor, San Francisco, CA 94110

Andrew J. Park, BA,

Geisel School of Medicine, Dartmouth College, 1 Rope Ferry Road, Hanover, NH 03755

Julia L. Marcus, PhD, MPH

Dept. of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA 02215

Keywords

HIV; men who have sex with men; transgender; PrEP; prevention

Introduction

In the early 1980s, outbreaks of Kaposi sarcoma (KS) and *Pneumocystis carinii* pneumonia among gay men heralded the beginning of the HIV/AIDS epidemic.^{1,2,3} In subsequent years, dermatologists played a crucial role in describing and treating KS and other mucocutaneous opportunistic infections in persons living with, and too often dying from, HIV infection.^{4,5,6,7}

Nearly 40 years later, HIV remains an important public health issue in the United States and throughout the world.^{8,9} In the United States, the epidemic has and continues to disproportionately affect gay men and other men who have sex with men (hereafter collectively called MSM) and transgender women. In the United States, MSM accounted for 67% of 38,281 new HIV infections in 2017; 55% of persons living with HIV infection in 2016; 42% of deaths of persons with diagnosed HIV infection in 2016; and 47% of deaths of persons with diagnosed HIV infection ever classified as having AIDS since the beginning of the epidemic.¹⁰ (Including MSM who inject drugs brings those figures to 70%, 60%, 51%, and 55%, respectively.) Less well tracked is HIV prevalence among transgender women and men in the United States, estimated to be 14.1% and 3.2%, respectively.¹¹ Substantial

corresponding author: Kenneth.A.Katz@kp.org, Tel: 628.242.2903.

Conflict of interest disclosure

Katz: no conflicts to disclose

Park: no conflicts to disclose

Marcus: JLM has received research grant support from Merck and has consulted on a research grant to Kaiser Permanente Northern California from Gilead Sciences.

disparities exist by race, ethnicity, gender, and geography in HIV incidence, prevalence, and outcomes in the United States, including among MSM and transgender persons.¹⁰

For much of the epidemic, prevention strategies have focused on reducing risk of HIV acquisition by encouraging behavioral changes among at-risk populations, such as having sex with condoms, limiting numbers of sexual partners, and adopting safer injection-drug-use practices. With the emergence of effective antiretroviral treatment, treatment of HIV-infected individuals to prevent transmission and post-exposure prophylaxis for HIV have also emerged as approaches to combat the epidemic.¹²

In the past decade, another approach has emerged: preexposure prophylaxis for HIV, commonly called PrEP, in which HIV-uninfected persons take anti-HIV medications during periods with potential HIV exposures to reduce HIV acquisition risk.

Dermatologists should learn about PrEP for two reasons. First, dermatologists should understand why HIV-uninfected patients might be taking anti-HIV medications. Second, dermatologists should know when and how to refer patients for consideration of PrEP. To those ends, this article reviews PrEP's effectiveness; adverse effects of PrEP; indications for taking PrEP; and PrEP uptake. The article's scope is limited to PrEP among MSM and transgender persons in the United States.

Effectiveness of PrEP

The most commonly used PrEP regimen in the United States involves taking a single daily pill containing two antiretroviral medicines – emtricitabine 200 mg and tenofovir disoproxil fumarate 300 mg. The brand name of the combination pill, commonly used by persons taking it, is Truvada.

A randomized clinical trial (RCT) studied the effectiveness of emtricitabine-tenofovir, taken daily, compared with placebo among MSM and transgender women.¹³ Both groups received safer-sex messaging, including regarding consistent condom use. Results of the trial, published in the *New England Journal of Medicine* in 2010, showed a 44% decrease in HIV acquisition among participants taking emtricitabine-tenofovir compared with participants taking placebo. Among participants taking emtricitabine-tenofovir who were compliant (defined as having detectable drug levels), the decrease was even more pronounced: 92%. A subgroup analysis of transgender women in the trial did not show a statistically significant decrease in HIV acquisition, possibly from lower compliance rates.^{14,15}

The pill's manufacturer subsequently applied to the U.S. Food and Drug Administration (FDA) for approval for prevention of HIV infection. Approval was granted in 2012 “in combination with safer sex practices for preexposure prophylaxis to reduce risk of sexually acquired HIV-1 in at-risk adults.” Daily emtricitabine-tenofovir remains the only FDA-approved PrEP regimen.^{16,17} In May 2018, FDA approved use of daily emtricitabine-tenofovir in adolescents weighing ≥ 35 kg.¹⁶

In real-world settings, daily emtricitabine-tenofovir has been extremely effective in preventing HIV acquisition. Among 4991 PrEP users in Northern California, for example,

not a single infection occurred during 5104 person-years of PrEP use.¹⁸ Only six HIV infections in persons taking daily emtricitabine-tenofovir for PrEP have been reported; all resulted from HIV strains resistant to tenofovir or emtricitabine.¹⁹

An alternative PrEP regimen has more recently been endorsed by an expert panel²⁰ and others^{21,22} for MSM at substantial risk of HIV acquisition from sexual exposure but who are unable or would prefer not to take daily emtricitabine-tenofovir. The alternative regimen – commonly called “2-1-1” – involves taking two emtricitabine-tenofovir tablets two hours prior to anticipated sexual exposure, followed by single tablets 24 and 48 hours post-exposure. In a RCT conducted among MSM, “2-1-1” reduced HIV acquisition by 86% compared with placebo.²³ “2-1-1” has not been approved by FDA or endorsed by CDC and is not yet recommended for other groups at high risk of HIV acquisition, including transgender persons, injection drug users and persons infected with hepatitis B virus.²⁰

Other PrEP regimens, including oral, intramuscular, and topical formulations, are in development.²⁴

Adverse Effects of PrEP

Concerns about PrEP have focused on medication adverse effects and potential changes in sexual behaviors among PrEP users that might increase risk of acquisition of other STIs.

Regarding medication adverse effects, a systematic review of RCTs studying daily emtricitabine-tenofovir for PrEP found no significant differences in adverse events between active and placebo groups.²⁵ Gastrointestinal adverse effects, including nausea and diarrhea, required PrEP interruptions in some persons, most of whom subsequently reinitiated PrEP without recurrence of those effects.²⁵ Subclinical changes in renal and hepatic function and bone mineral density have occurred in some RCTs.²⁶ In real-world settings, adverse events have rarely led to PrEP discontinuation.²⁷ CDC guidelines include recommendations for pre-PrEP testing and counseling and for adverse event monitoring.¹⁷

Concerns regarding changes in sexual behavior stem from a concept called “risk compensation,” in which persons who feel protected from a harm might engage in behaviors that put them at risk of other harms. Some data suggest that, among MSM using PrEP, STI rates are high,²⁸ although valid comparison groups are lacking.²⁹ Concerns about “risk compensation,” however, should not preclude prescribing of PrEP, because benefits of preventing HIV acquisition outweigh potential harms.³⁰

PrEP Indications

CDC first issued clinical guidelines for PrEP in 2014, with an update issued in 2017.¹⁷ PrEP indications for men who have sex only with men, according to the 2017 guidelines, are as follows:

- Adult man
- Without acute or established HIV infection
- Any male sex partners in past 6 months

- Not in a monogamous partnership with a recently tested, HIV-negative man

AND at least one of the following:

- Any anal sex without condoms (receptive or insertive) in past 6 months
- A bacterial STI (syphilis, gonorrhea, or chlamydia) diagnosed or reported in past 6 months¹⁷

CDC guidelines also include separate PrEP indications for MSM who also have sex with women and/or inject drugs.¹⁷ A 2015 CDC study estimated that 24.7% of sexually active MSM in the United States – or 813,970 MSM – met indications for PrEP.^{31,32}

CDC guidelines do not include specific PrEP indications for transgender persons but recommend consideration of PrEP in transgender persons who are at risk of sexual acquisition of HIV.¹⁷

Notably for dermatologists, a diagnosis of syphilis – which has many mucocutaneous manifestations and disproportionately affects MSM³³ -- is one indication for PrEP. Syphilis among HIV-uninfected MSM and transgender women correlates with substantial risk of subsequent HIV acquisition.³⁴

In November 2018, the U.S. Preventive Services Task Force (USPSTF) – a panel that makes clinical preventive-services recommendations – released its first draft recommendation regarding daily emtricitabine-tenofovir for PrEP.³⁵ The draft recommended PrEP for HIV-uninfected persons at high risk of HIV acquisition, including MSM with one of the following characteristics:

- A serodiscordant sex partner (i.e., a sex partner living with HIV)
- A recent sexually transmitted infection (STI) with syphilis, gonorrhea, or chlamydia
- Inconsistent use of condoms during receptive or insertive anal sex

The draft also recommended PrEP for transgender persons at high risk of HIV acquisition.³⁵

The draft recommendation carries an A grade, meaning the panel believes with high certainty that net benefit is substantial.³⁶ An A grade on a final recommendation would also mean, under the Affordable Care Act, that health insurers must cover PrEP for persons covered by the recommendation without cost-sharing (i.e., co-pays or deductibles).³⁷

PrEP Uptake

Daily PrEP use is increasing in the United States, with 78,360 users aged 16 years taking daily PrEP for > 30 days in 2016 compared with 13,748 in 2014.³⁸ Of users in 2016, 95% were male; MSM status was not reported. Given the estimate that > 800,000 MSM meet PrEP criteria³¹, substantial barriers to PrEP uptake clearly remain.

Stark racial, ethnic, gender, and geographic disparities in PrEP uptake also exist.³³ For example, although Black men and women comprised approximately 40% of persons meeting

PrEP indications in one study, White men and women were six times more likely to be prescribed PrEP than Black men and women.³³ Notably, racial and ethnic disparities in PrEP uptake exist even in insured populations with access to care.³⁹

Barriers to PrEP uptake exist for both patients and providers. Among MSM, barriers include lack of PrEP awareness, cost and insurance concerns, perceived low risk for HIV acquisition, concerns about medication side effects and culturally insensitive care, and – more so among Black than White MSM – medical mistrust and anti-gay and anti-HIV stigma.^{40,41} Barriers among transgender women include concerns about side effects, difficulty taking pills, stigma, exclusion of transgender women in PrEP-related advertising, and lack of research on transgender women and PrEP.⁴² Barriers among transgender men include possible side effects, cost issues, identifying trans-competent providers, importance of contraception, and condom use.⁴³

Regarding cost, the list price of daily emtricitabine-tenofovir is nearly \$2,000 per month.⁴⁴ Many insurance plans help cover costs, although deductibles and co-pays can hinder access to PrEP.^{27,45} The manufacturer of emtricitabine-tenofovir has programs that can help defray costs for insured, uninsured, or underinsured persons.⁴⁶

Dermatologists' knowledge, attitudes, and practices regarding PrEP have not been studied. Among other physicians, barriers to PrEP prescribing include time constraints; lack of familiarity with and knowledge about PrEP; uncertainty about insurance coverage; ambiguity about who should prescribe PrEP; lack of comfort with discussing sexual activities, testing for acute HIV, or conveying a new HIV diagnosis; and concerns about risk compensation.^{47,48,49} Lack of risk-assessment tools to identify patients at risk of HIV acquisition is another obstacle.⁵⁰

Dermatologists can help overcome some of those barriers to help mitigate some disparities in PrEP uptake by becoming familiar with PrEP and which patients might benefit from it. Although dermatologists themselves might not be prescribing PrEP, they can and should refer to providers who are prepared to prescribe it. An Internet-based CDC database that identifies location-specific providers who offer PrEP is available to dermatologists and other providers as well as members of the public.⁵¹

Conclusion

PrEP represents a critically important HIV prevention approach for HIV-uninfected MSM and transgender persons. By understanding why, when, and how PrEP can be used for HIV prevention, dermatologists can help mitigate the disproportionate impact of the ongoing HIV epidemic on MSM and transgender persons.

REFERENCES

1. Centers for Disease Control. Pneumocystis pneumonia--Los Angeles. MMWR Morb Mortal Wkly Rep. 1981;30:250–2. [PubMed: 6265753]
2. Centers for Disease Control. Kaposi's sarcoma and Pneumocystis pneumonia among homosexual men--New York City and California. MMWR Morb Mortal Wkly Rep. 1981;30:305–8. [PubMed: 6789108]

3. Centers for Disease Control. A cluster of Kaposi's sarcoma and Pneumocystis carinii pneumonia among homosexual male residents of Los Angeles and Orange Counties, California. MMWR Morb Mortal Wkly Rep. 1982;31:305–7. Available at: <https://www.cdc.gov/mmwr/preview/mmwrhtml/00001114.htm>. Accessed March 6, 2019. [PubMed: 6811844]
4. Friedman-Kien AE. Disseminated Kaposi's sarcoma syndrome in young homosexual men. J Am Acad Dermatol. 1981;5:468–71. [PubMed: 7287964]
5. Conant MA. AIDS and Kaposi's sarcoma. Curr Probl Dermatol. 1985;13:92–108. [PubMed: 3971743]
6. Kaplan MH, Sadic N, McNutt NS, et al. Dermatologic findings and manifestations of acquired immunodeficiency syndrome (AIDS). J Am Acad Dermatol 1987;16:485–506. [PubMed: 2950145]
7. Tschachler E The dermatologists and the HIV/AIDS pandemic. Clin Dermatol. 2014 Mar-Apr;32(2):286–9. [PubMed: 24559565]
8. The White House. National HIV/AIDS Strategy for the United States: Updated to 2020. 7 2015 Available at: <https://files.hiv.gov/s3fs-public/nhas-update.pdf>. Accessed March 6, 2019.
9. World Health Organization. Global health sector strategy on HIV, 2016–2021. 6 2016 Available at: <https://apps.who.int/iris/bitstream/handle/10665/246178/WHO-HIV-2016.05-eng.pdf;jsessionid=66DB90518FBD22B96A7CF61550321533?sequence=1>. Accessed March 6, 2019.
10. Centers for Disease Control and Prevention. HIV Surveillance Report, 2017; vol. 29 <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2017-vol-29.pdf>. Published 11 2018 Accessed March 28, 2019.
11. Becasen JS, Denard CL, Mullins MM, et al. Estimating the Prevalence of HIV and Sexual Behaviors Among the US Transgender Population: A Systematic Review and Meta-Analysis, 2006–2017. Am J Public Health. 2018 11 29:e1–e8. doi: 10.2105/AJPH.2018.304727. [Epub ahead of print]
12. CDC. Prevention. Available at: <https://www.cdc.gov/hiv/basics/prevention.html>. Accessed April 3, 2019.
13. Grant RM, Lama JR, Anderson PL, et al. Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. N Engl J Med. 2010;363:2587–99. [PubMed: 21091279]
14. Deutsch MB, Glidden DV, Sevelius J, et al. HIV pre-exposure prophylaxis in transgender women: a subgroup analysis of the iPREx trial. Lancet HIV. 2015;2:e512–9. [PubMed: 26614965]
15. Marshall BDL, Mimiaga MJ. Uptake and effectiveness of PrEP for transgender women. Lancet HIV. 2015;2:e502–3. [PubMed: 26614960]
16. Truvada label. Available at: <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=54e82b13-a037-49ed-b4b3-030b37c0ecdd>. Accessed March 28, 2019.
17. Centers for Disease Control and Prevention: US Public Health Service: Preexposure prophylaxis for the prevention of HIV infection in the United States—2017 Update: a clinical practice guideline. Published 3 2018 Available at: <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2017.pdf>. Accessed March 28, 2019.
18. Marcus JL, Hurley LB, Nguyen DP, et al. Redefining Human Immunodeficiency Virus (HIV) Preexposure Prophylaxis Failures. Clin Infect Dis. 2017;65:1768–9. [PubMed: 29020235]
19. Cohen SE, Sachdev D, Lee S, et al. Acquisition of TDF-susceptible HIV Despite High Level Adherence to Daily TDF/FTC PrEP as Measured by Dried Blood Spot (DBS) and Segmental Hair Analysis: A Case Report. Poster 1298. IDWeek 2018 Available at: <https://idsa.confex.com/idsa/2018/webprogram/Paper69862.html>. Accessed April 2, 2019.
20. Saag MS, Benson CA, Gandhi RT. Antiretroviral Drugs for Treatment and Prevention of HIV Infection in Adults: 2018 Recommendations of the International Antiviral Society-USA Panel. JAMA. 2018;320:379–396. [PubMed: 30043070]
21. San Francisco Department of Public Health. Important HIV Prevention and Treatment Updates for San Francisco Providers. 2 12, 2019 Available at: http://www.sfcityclinic.org/providers/HIVUpdate_02122019_v2.pdf. Accessed April 2, 2019.
22. Bajko MS. SF health officials embrace non-daily PrEP dosing regimen. The Bay Area Reporter. 2 27, 2019 Available at: https://www.ebar.com/news/news/272877/sf_health_officials_embrace_non-daily_prep_dosing_regimen_. Accessed April 2, 2019.

23. Molina JM, Capitant C, Spire B, et al. On-demand preexposure prophylaxis in men at high risk for HIV-1 infection. *N Engl J Med*. 2015;373:2237–46. [PubMed: 26624850]
24. Hendrix CW. HIV Antiretroviral Pre-Exposure Prophylaxis: Development Challenges and Pipeline Promise. *Clin Pharmacol Ther* 2018;104:1082–97. [PubMed: 30199098]
25. Fonner VA, Dalglish SL, Kennedy CE, et al. Effectiveness and safety of oral HIV preexposure prophylaxis for all populations. *AIDS*. 2016;30:1973–83. [PubMed: 27149090]
26. Mulligan K, Glidden DV, Anderson PL, et al. Effects of Emtricitabine/Tenofovir on Bone Mineral Density in HIV-Negative Persons in a Randomized, Double-Blind, Placebo-Controlled Trial. *Clin Infect Dis* 2015;61:572–80. [PubMed: 25908682]
27. Marcus JL, Hurley LB, Hare CB, et al. Preexposure Prophylaxis for HIV Prevention in a Large Integrated Health Care System: Adherence, Renal Safety, and Discontinuation. *J Acquir Immune Defic Syndr*. 2016;73:540–6. [PubMed: 27851714]
28. Volk JE, Marcus JL, Phengrasamy T, et al. No New HIV Infections With Increasing Use of HIV Preexposure Prophylaxis in a Clinical Practice Setting. *Clin Infect Dis*. 2015;61:1601–3. [PubMed: 26334052]
29. Marcus JL, Volk JE, Snowden JM. Concerns about a study on sexually transmitted infections after initiation of HIV preexposure prophylaxis. *AIDS*. 2018;32:955–6. [PubMed: 29578895]
30. Marcus JL, Katz KA, Krakower DS, et al. Risk Compensation and Clinical Decision Making - The Case of HIV Preexposure Prophylaxis. *N Engl J Med*. 2019;380:510–2. [PubMed: 30726699]
31. Smith DK, Van Handel M, Wolitski RJ, et al. Vital Signs: Estimated Percentages and Numbers of Adults with Indications for Preexposure Prophylaxis to Prevent HIV Acquisition--United States, 2015. *MMWR Morb Mortal Wkly Rep*. 2015;64:1291–5. [PubMed: 26606148]
32. Smith DK, Van Handel M, Grey J, et al. Estimates of adults with indications for HIV pre-exposure prophylaxis by jurisdiction, transmission risk group, and race/ethnicity, United States, 2015. *Ann Epidemiol*. 2018;28:850–857.e9. [PubMed: 29941379]
33. Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2017. Atlanta: U.S. Department of Health and Human Services; 2018 Available at: https://www.cdc.gov/std/stats17/2017-STD-Surveillance-Report_CDC-clearance-9.10.18.pdf. Accessed April 2, 2019.
34. Solomon MM, Mayer KH, Glidden DV, et al. Syphilis predicts HIV incidence among men and transgender women who have sex with men in a preexposure prophylaxis trial. *Clin Infect Dis*. 2014;59:1020–6. [PubMed: 24928295]
35. S. Preventive Services Task Force. Draft Recommendation Statement. Prevention of Human Immunodeficiency Virus (HIV) Infection: Pre-Exposure Prophylaxis. Available at: <https://www.uspreventiveservicestaskforce.org/Page/Document/draft-recommendation-statement/prevention-of-human-immunodeficiency-virus-hiv-infection-pre-exposure-prophylaxis>. Accessed April 2, 2019.
36. U.S. Preventive Services Task Force. Grade Definitions. Available at: <https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions>. Accessed April 2, 2019.
37. S. Preventive Services Task Force. Appendix I. Congressional Mandate Establishing the U.S. Preventive Services Task Force. Available at: <https://www.uspreventiveservicestaskforce.org/Page/Name/appendix-i-congressional-mandate-establishing-the-us-preventive-services-task-force>. Accessed April 2, 2019.
38. Huang YA, Zhu W, Smith DK, et al. HIV Preexposure Prophylaxis, by Race and Ethnicity - United States, 2014–2016. *MMWR Morb Mortal Wkly Rep*. 2018;67:1147–1150. Available at: https://www.cdc.gov/mmwr/volumes/67/wr/mm6741a3.htm?s_cid=mm6741a3_w. Accessed April 3, 2019. [PubMed: 30335734]
39. Marcus JL, Hurley LB, Hare CB, et al. Disparities in Uptake of HIV Preexposure Prophylaxis in a Large Integrated Health Care System. *Am J Public Health*. 2016;106:e2–3.
40. Marcus JL, Hurley LB, Dentoni-Lasofsky D, et al. Barriers to preexposure prophylaxis use among individuals with recently acquired HIV infection in Northern California. *AIDS Care*. 2019;31:536–544. [PubMed: 30304942]

41. Cahill S, Taylor SW, Elsesser SA, et al. Stigma, medical mistrust, and perceived racism may affect PrEP awareness and uptake in black compared to white gay and bisexual men in Jackson, Mississippi and Boston, Massachusetts. *AIDS Care*. 2017;29:1351–8. [PubMed: 28286983]
42. Rael CT, Martinez M, Giguere R, et al. Barriers and Facilitators to Oral PrEP Use Among Transgender Women in New York City. *AIDS Behav*. 2018;22:3627–3636. [PubMed: 29589137]
43. Rowniak S, Ong-Flaherty C, Selix N, et al. Attitudes, Beliefs, and Barriers to PrEP Among Trans Men. *AIDS Educ Prev*. 2017;29:302–14. [PubMed: 28825860]
44. Luthra S, Gorman A. Rising Cost Of PrEP To Prevent HIV Infection Pushes It Out Of Reach For Many. *NPR* 6 30, 2018 Available at: <https://www.npr.org/sections/health-shots/2018/06/30/624045995/rising-cost-of-prep-a-pill-that-prevents-hiv-pushes-it-out-of-reach-for-many>. Accessed April 3, 2019.
45. Patel RR, Mena L, Nunn A, et al. Impact of insurance coverage on utilization of pre-exposure prophylaxis for HIV prevention. *PLoS One*. 2017;12:e0178737. [PubMed: 28558067]
46. Gilead. How can you get help paying for Truvada for PrEP? Available at: <https://www.truvada.com/how-to-get-truvada-for-prep/truvada-cost>. Accessed April 3, 2019.
47. Petroll AE, Walsh JL, Owczarzak JL. PrEP Awareness, Familiarity, Comfort, and Prescribing Experience among US Primary Care Providers and HIV Specialists. *AIDS Behav*. 2017;21:1256–1267. [PubMed: 27885552]
48. Blackstock OJ, Moore BA, Berkenblit GV, et al. A Cross-Sectional Online Survey of HIV Pre-Exposure Prophylaxis Adoption Among Primary Care Physicians. *J Gen Intern Med*. 2017 1;32(1):62–70. [PubMed: 27778215]
49. Silapaswan A, Krakower D, Mayer KH. Pre-Exposure Prophylaxis: A Narrative Review of Provider Behavior and Interventions to Increase PrEP Implementation in Primary Care. *J Gen Intern Med*. 2017 2;32(2):192–198. [PubMed: 27761767]
50. Chou R, Evans C, Hoverman A, et al. Pre-Exposure Prophylaxis for the Prevention of HIV Infection: A Systematic Review for the U.S. Preventive Services Task Force. Evidence Synthesis No. 178. AHRQ Publication No. 18–05247-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; 2018.
51. CDC. Comprehensive PrEP Provider Directory and Locator. Available at: <https://npin.cdc.gov/prelocator>. Accessed April 3, 2019.

Synopsis

HIV remains an important public health concern in the United States, particularly for men who have sex with men (MSM) and transgender persons. With HIV preexposure prophylaxis (PrEP), HIV-uninfected persons use antiretroviral medications to prevent HIV acquisition. The most common PrEP regimen involves taking a single pill daily and is very effective in decreasing HIV acquisition, with few adverse effects. Barriers to PrEP access exist for MSM and transgender persons. Dermatologists can help combat the ongoing HIV epidemic among MSM, transgender persons, and others by understanding why, when, and how PrEP should be considered as an HIV prevention approach.

Key Points

- The ongoing HIV epidemic in the United States disproportionately affects men who have sex with men (MSM) and transgender persons, particularly members of racial/ethnic minority groups.
- Preexposure prophylaxis for HIV, called PrEP, is an HIV prevention approach in which HIV-uninfected persons take antiretroviral medications during periods with potential HIV exposures to reduce risk of HIV acquisition.
- PrEP has been shown to be very effective in preventing HIV acquisition when taken orally daily or, for some persons, intermittently, with few adverse effects.
- Patient and provider barriers to PrEP uptake exist for MSM and transgender persons.
- Dermatologists should know how, when, and why PrEP should be considered for MSM and transgender persons at high risk of HIV acquisition.