
The HIV/AIDS community is currently talking about “ending the AIDS epidemic” or “achieving an AIDS-free generation.” This conversation—optimistic, speculative, and sometimes controversial—focuses on three evidence-based HIV prevention interventions: Treatment as Prevention (TasP), Post-Exposure Prophylaxis (PEP), and Pre-Exposure Prophylaxis (PrEP).

All three interventions utilize existing anti-retroviral medications to reduce transmission of HIV and prevent new infections in at-risk HIV-negative individuals. Recent research documents the potential efficacy of these interventions and the promise they hold.

The purpose of this fact sheet is to explain these interventions, the data that supports them, and how Californians living with and at-risk of HIV infection will be able to access them, with expanded insurance access now available under the Affordable Care Act (ACA).

What are TasP, PEP, and PrEP?

- **Treatment as Prevention (TasP)** – In TasP, people living with HIV/AIDS (PLWHA) use anti-retroviral (ARV) medications to reduce their viral load (the amount of HIV in the body) to undetectable levels.
  - With an undetectable viral load, the amount of HIV in the body is so small it greatly reduces the likelihood of passing the virus on to another person, making it even more critical that PLWHA are linked to and retained in care.
  - Strict adherence to TasP reduces the likelihood of transmission by up to 96%.

- **Post-Exposure Prophylaxis (PEP)** – PEP uses ARV medications to prevent HIV from replicateing and spreading through the body after an exposure to the virus. PEP is a short-term (28-day) intervention and must be started within three days of an exposure—sooner, if possible—to be effective. PEP was originally developed for occupational exposures, such as needle-sticks in hospitals, but is also effective for sexual exposures.
  - PEP is effective at blocking HIV infection up to 80% when initiated promptly and taken daily.

- **Pre-Exposure Prophylaxis (PrEP)** – PrEP is a new intervention that uses an established ARV medication, Truvada, to protect at-risk HIV-negative individuals from HIV infection. PrEP is different from PEP; the medication is taken before, not after, possible exposure.
  - As a new intervention, PrEP is still being studied to identify potential side effects, and its effect on individual behavior. Recent studies have found that side effects are minimal and that using PrEP does not lead to riskier sexual behavior.
  - Both the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) recommend that those at-risk for HIV explore PrEP as a prevention option.
  - The iPrEX OLE study, recently released at the 2014 International AIDS Conference in Australia, demonstrated that PrEP is up to 96% effective in preventing HIV infections when participants took the medication at least four times a week.

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**The Current State of HIV/AIDS in CA**

- California has reduced its General Fund commitment for HIV programs—apart from care—from $180 million to under $10 million since 2006.
- Nearly all state funding for HIV prevention—$25 million—was cut in 2009.
- The California Office of AIDS estimates that approximately 126,000 Californians are living with HIV. Of these, 23,000 or 18% are unaware of their HIV status.
- An estimated 6,000 Californians are newly diagnosed with HIV each year.

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The federal Ryan White HIV/AIDS Program plays a critical role in HIV prevention, both nationally and in California. The program ensures patients are linked to care at diagnosis and retained in care throughout treatment, while also providing the medications necessary to achieve viral suppression and prevent the spread of HIV.

- **Ryan White funds a broad range of support services**—mental health, oral health, transportation, case management, food, housing assistance, and treatment education—all of which ensure patients are linked to care at diagnosis and retained in care throughout treatment.
- The AIDS Drug Assistance Program (ADAP) is part of Ryan White that ensures people with HIV/AIDS have access to ARVs.
- **Ryan White helps patients successfully move across the clinical achievements detailed in the HIV/AIDS treatment cascade (above)** toward viral suppression or undetectable levels of HIV in the body.

Examples of Ryan White Services That Support Clients Along the HIV/AIDS Treatment Cascade

Because many of these services are not covered under both public and private insurance plans, Californians living with HIV/AIDS will continue to need essential wrap-around Ryan White services.
Funding for HIV/AIDS has dropped significantly in California over the past six years. Adjusting for inflation (since 2010), Ryan White funding has slowly declined and nearly all state general funds for HIV prevention have been eliminated.

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TasP, PEP, PrEP and the Roadmap to an AIDS-Free Generation

TasP, PEP, and PrEP are driving the conversation about ending AIDS. TasP will prevent ongoing transmission of the virus, PEP can prevent new infections after recent exposures, and PrEP is the first ongoing biomedical intervention to prevent infection for at-risk HIV-negative individuals.

A successful roadmap to ending AIDS will require all the prevention tools at our disposal—new biomedical interventions along with expansion of proven interventions such as HIV testing, condoms, and syringe-exchange programs.

In order for these three proven biomedical interventions to alter the course of the epidemic, national and state prevention efforts must at a minimum include:

- Intensified outreach and education about PEP and PrEP.
- Improved access to PEP and PrEP for all at-risk HIV-negative individuals.
- Continued support for Ryan White programs that protect the health and well-being of HIV-positive individuals, link and retain them in care, and move them toward viral suppression.

If California is to realize the promise of an AIDS-free generation, the state will need to renew its focus on existing prevention interventions and commit to maximizing the potential of TasP, PEP, and PrEP.

References:


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v. California State Office of AIDS, The Continuum of HIV Care in California: http://goo.gl/AxCsTr


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