



CALIFORNIA HIV / AIDS POLICY RESEARCH CENTERS

TasP, PEP, and PrEP:

New Hope in the Fight Against HIV/AIDS

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?

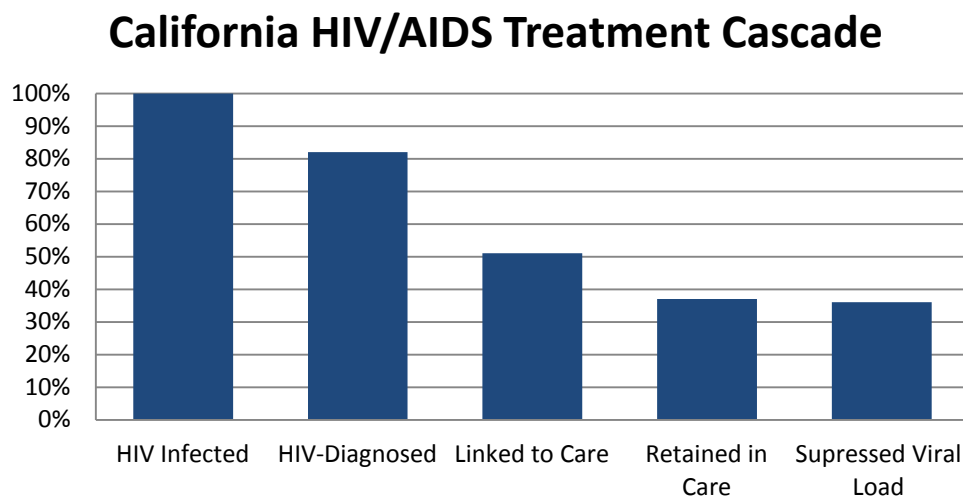
- **Treatment as Prevention (TasP)** – In TasP, people living with HIV/AIDS (PLWHA) use anti-retroviral (ARV) medications to reduce their viral load (the amount of HIV in the body) to undetectable levels.
 - **With an undetectable viral load, the amount of HIV in the body is so small it greatly reduces 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%.ⁱ**
- **Post-Exposure Prophylaxis (PEP)** – PEP uses ARV medications to prevent HIV from replicating 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.ⁱⁱ**
- **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.

- o 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.ⁱⁱⁱ
- o 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.
- o 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.ⁱⁱⁱ

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.^{iv}
- 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.

California HIV/AIDS Treatment Cascade



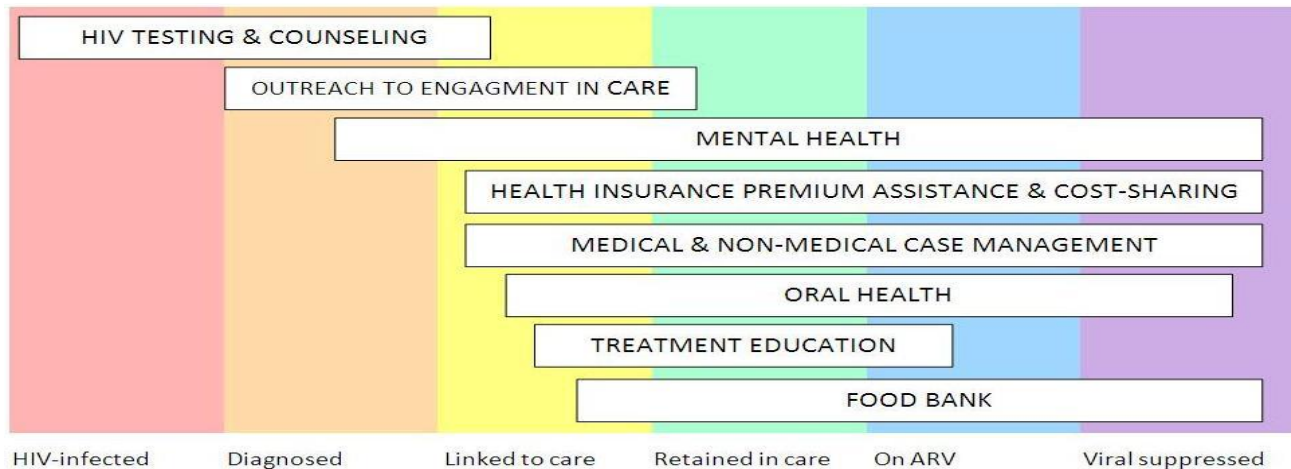
The HIV/AIDS Treatment Cascade illustrates how many individuals living with HIV are engaged in various levels of care from diagnosis through viral suppression. The treatment cascade serves as a tool for identifying where additional services are most needed to increase the number of PLWHA who are retained in care and to achieve widespread viral suppression.^v

TasP: Ryan White as a Critical Prevention Tool

- 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.



How Will HIV-Positive Californians Access TasP Under the ACA?

- More than 70% of Californians living with HIV/AIDS who now rely on Ryan White for care and treatment are in the process of transitioning to private insurance plans or the expanded Medi-Cal program.^{iv}
 - None of these insurance plans will provide the comprehensive wrap-around services provided by Ryan White that have helped this vulnerable population progress toward viral suppression.

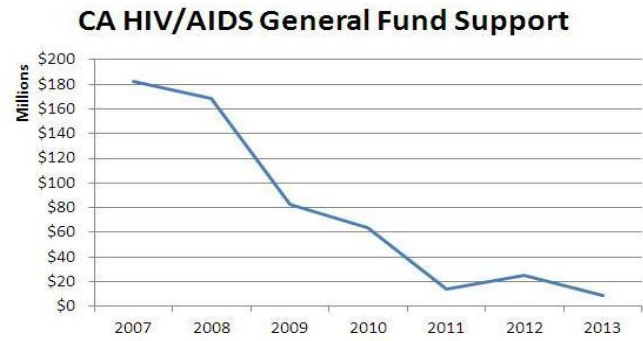
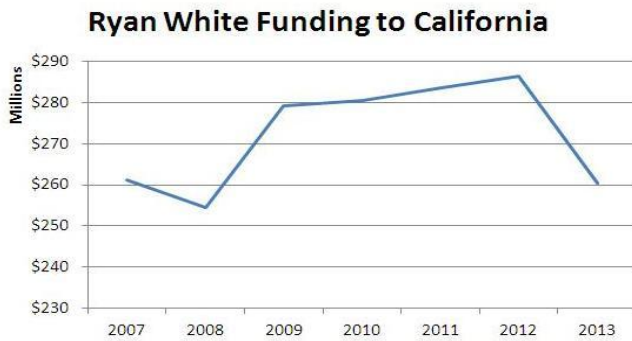
- o Cost-sharing may be a barrier to accessing ARVs, although California's ADAP will cover cost-sharing for many of the PLWHA enrolled in Covered California's private insurance plans.
- o The residually uninsured will still rely on Ryan White for treatment, support services and the medications that will help them remain healthy and achieve viral suppression.

How Will HIV-Negative Californians Access PEP & PrEP Under the ACA?

- HIV-negative Californians enrolled in private insurance plans or the expanded Medi-Cal program will have coverage for PEP and PrEP.
 - o Studies have documented low utilization of PEP and PrEP among individuals at-risk of contracting HIV/AIDS.
 - o Community knowledge about PrEP remains low^{vi} and physicians have been slow to use the intervention^{vii} demonstrating the need for increased education and outreach efforts.
 - o Individuals accessing PEP or PrEP through private insurance may face significant out-of-pocket costs.
 - o Some assistance is available through pharmaceutical company patient assistance programs to subsidize co-pays for the insured as well as provide PEP and PrEP coverage for the residually uninsured, but awareness of these programs is low.
 - o Some 3 to 4 million Californians could remain uninsured by 2019, and those at-risk for HIV will have little access to routine health care, including coverage for PEP and PrEP.^{viii}

TasP, PEP, and PrEP: Ensuring Access Post-ACA Is a Cost-Effective Prevention Strategy

- Every averted HIV infection saves hundreds of thousands of dollars in lifetime treatment costs, lost productivity, and decreased quality of life.
 - o PLWHA have an estimated life expectancy of 32 years after infection and that number is increasing. With treatment costs averaging \$23,000 per year, lifetime treatment is currently estimated at approximately \$740,000 or more per person.^{ix}
 - o With that estimate, the 6,000 new infections per year in California will cost an estimated \$4.5 billion to treat.
 - o Although TasP requires a significant up-front financial investment, studies have shown that the strategy is cost-effective longer term.^x
 - o Studies have also shown PrEP^{xi} and PEP^{xii} to be cost-effective when targeted to individuals at highest risk of contracting HIV.



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.

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.

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California HIV/AIDS Policy Research Centers

- University of California, San Francisco
- Project Inform
- San Francisco AIDS Foundation
- University of California, Los Angeles
- AIDS Project Los Angeles
- Los Angeles LGBT Center