



Photo: Jameson Atenta via Pexels



Photo: Pexels



# Research for Youth HIV / AIDS Prevention



**UCSF** Center for AIDS  
Prevention Studies  
Division of Prevention Sciences



## Research for Youth HIV / AIDS Prevention

This booklet is produced by UCSF Center for AIDS Prevention Studies and UCSF Prevention Research Center. You might use it to:

- Stay up-to-date on our latest research
- Provide materials in trainings and presentations
- Advocate for services and funding
- Write grants
- Develop new or modify existing HIV prevention programs
- Connect with us. The Investigators are listed for each study
- [Contact us](#)

## Acronyms

**NYHAAD:** National Youth HIV/AIDS Awareness Day.

**MSM:** We use the acronym MSM to include all gay, same gender loving, bisexual and other men who have sex with men.

**MSMW:** We use the acronym MSMW to refer to all men who have sex with other men and women. They may identify as gay, straight, bisexual, same gender loving, or prefer to use another term, or none at all.

# Message from the Director

This annual observance of National Youth HIV & AIDS Awareness Day (NYHAAD) reminds us of the importance of investing in young people's health and well-being. The Center for AIDS Prevention Studies (CAPS) and the UCSF Prevention Research Center (PRC) continue to work in partnership with local, national, and international organizations and communities to ensure that HIV prevention research continues to focus on youth.

This focus remains critical. In 2019 alone, over 460,000 young people between the ages of 10 to 24 were newly infected with HIV globally.<sup>1</sup> In the United States, 21% of new HIV diagnoses are among youth aged 13 to 24.<sup>2</sup> The majority of cases were among males who have sex with males (MSM, 92%), Blacks/African Americans (48%) Hispanics/Latinos (26%), and Whites (16%).<sup>2</sup> Youth are also less likely to benefit from HIV prevention and treatment.



About four in seven youth living with HIV know they had HIV. Compared to other age groups, youth have the lowest rates of viral suppression – for every 100 youth with HIV, 43 received some HIV care, 31 were retained in care, and 30 were virally suppressed. There are a number of challenges to HIV prevention and care among youth, including inadequate sex education; low rates for HIV testing, condom use, PrEP use; substance use; older partners; adverse socioeconomic conditions; psychosocial conditions (e.g., isolation); HIV stigma and misconceptions; other social determinants (e.g., poverty, lack of youth friendly care) and, high STD rates.<sup>2</sup>

However, youth are resilient and there have been many successes to build on, including our diverse research portfolio, which shows that youth are amenable to different strategies that support engagement and retention in care, and youth are empowered to make healthy decisions, reduce their HIV risk, and test for HIV.

I am excited to report that CAPS/PRC researchers will continue to address HIV disparities identified for youth and to share this Research and Resources Booklet with you. It highlights our current research portfolios of faculty who have committed their life work to collaborating with community based research partners to improve our knowledge and understanding of key HIV prevention issues that affect youth. With our dedication, scientific innovation, commitment to rigor, and commitment to community engaged partnerships, it is our continued goal to improve HIV prevention and care among this population and ensure that our most precious resource has the opportunity for a healthy, bright and prosperous future.

**Marguerita Lightfoot, PhD**  
CAPS/PRC Director  
Division of Prevention Science Chief

1. <https://data.unicef.org/topic/hivaids/adolescents-young-people/>
2. <https://www.cdc.gov/hiv/group/age/youth/index.html>

# HIV Testing and Care Engagement

## Adaptation of CRUSH to Sacramento County as part of the Ending the HIV Epidemic Initiative.

**Investigator:** Kim Koester

Sacramento's Zero Together Coalition (ZTC), Kim Koester and other researchers from the University of California, San Francisco are collaborating to identify how to best culturally tailor a proven-effective sexual health services delivery model called [CRUSH \(Connecting Resources for Urban Sexual Health\)](#) to better meet the needs of individuals most impacted by HIV and sexually transmitted infections in Sacramento County. The team is using a research method first developed in economics called a discrete choice experiment which will help them to understand how individuals prioritize and make trade-offs when considering using PrEP or other sexual health services. The goal is to create easily accessed, comprehensive sexual health clinic that is welcoming and safe for young people of color with an emphasis on gay, bi-sexual, same gender loving and other men who have sex with men in Sacramento.

This pilot study will allow for the development of locally-tailored implementation strategies to increase PrEP uptake and prepare the team for a larger effectiveness-implementation trial of CRUSH.

Additional CRUSH related studies, [CRUSH-PrEP for Women Project](#)

## Texas PrEP Implementation Study

**Investigators:** Susan Kegeles, Greg Rebchook, Robert Williams, Scott Tebbetts, Andres Maiorana

Texas has high rates of HIV infection despite the availability of PrEP. Young Black and Latino men who have sex with men (YBLMSM) are less likely than young white MSM to take PrEP, adhere to PrEP, and continue PrEP use over time. This study involves collaboration with two CBOs and an organization running two PrEP clinics. The three organizations will use Core Elements of the Mpowerment Project (MP), an evidence-based, community-level intervention to facilitate the empowerment of young MSM and reduce HIV risk. This project will assess the implementation strategies and outcomes of PrEP-enhanced activities.

**Research Finding.** The goal of this project is to learn how organizations can successfully implement innovative activities to increase the use of PrEP by YBLMSM engaged in MPs and that can also be implemented by PrEP clinics. We will share findings widely with PrEP clinics and MPs in Texas and throughout the US to help them successfully implement PrEP-enhanced MP activities.

Be sure to visit the [Mpowerment Project website](#)



Photo - The Mpowerment Project

# HIV Testing and Care Engagement Continued

## Perceptions of Risks and Benefits of Participating in HIV Cure-related Research among Diverse Youth and Young Adults Living with HIV in the United States

**Investigators:** Parya Saberi, Karine Dube

Parya Saberi and Karine Dube are investigating attitudes toward participating in HIV cure-related research among a diverse national sample of youth and young adults living with HIV (YLWH), using a mixed methods quantitative and qualitative approach. They aim to 1) explore the level of knowledge, interest, concerns, motivators, and deterrents of participating in HIV cure research among 18-29 year-olds living with HIV; 2) quantify willingness to participate in HIV cure research (addressing motivators and deterrents) and responses to real-world HIV cure research scenarios.

Study data will provide essential information and assist future researchers in the nuances of conducting HIV cure research with YLWH, informing them of recruitment strategies; guiding clinicians who wish to advise their patients about participation in HIV cure-related research; directing community leaders in community engagement methods; and allowing the voices of YLWH to be heard by the medical and research communities.

Visit the [Youth4Cure website](#)

## What does it mean to be youth-friendly? Results from qualitative interviews with health care providers and clinic staff serving youth and young adults living with HIV

**Investigators:** Parya Saberi, Kristin Ming, Carol Dawson-Rose

More research regarding youth living with HIV (YLWH) and tailoring of health care delivery to the unique and complex needs of this population is needed. Parya Saberi, Kristin Ming, and Carol Dawson-Rose conducted in-depth qualitative interviews with health care providers and staff members at clinics and organizations serving YLWH in the San Francisco Bay Area to examine facilitators of and barriers to engagement in care among YLWH at the system and provider/staff level, as well as the barriers to using technology-based forms of communication with YLWH to improve retention and engagement in care.

Various facilitators of and barriers to engagement in care among YLWH were noted: clinic location and service setting, flexible hours and use of technology, and nonjudgmental providers/staff. System-level challenges included the lack of technology use in organizations and clinics; provider/staff-level challenges included time constraints and familiarity with technology; and, youth-level challenges include changing of mobile telephone numbers and relationship with provider/staff. Results can provide guidance for clinics and institutions providing care for YLWH.



## HIV Testing and Care Engagement Continued

### Food Insecurity and Unmet Needs Among Youth and Young Adults Living with HIV in the San Francisco Bay Area

**Investigators:** Christian Reeder, Torsten B. Neilands, Kartika Palar, Parya Saberi

CAPS faculty Parya Saberi and Torsten Neilands collaborated with Christian Reeder and Kartika Palar to examine food insecurity and unmet subsistence needs and their association with antiretroviral therapy adherence among youth and young adults living with HIV (YLWH).

Results from a cross-sectional survey of 101 YLWH (aged 18-29 years) found that approximately 51.7% of participants experienced at least one unmet subsistence need (difficulty finding enough to eat [36.6%], clothing [22.8%], place to sleep [21.8%], place to wash [17.8%], and bathroom [15.8%]), and 64.2% reported being food insecure. For every additional unmet need, the risk of very good/excellent adherence was reduced by 15% (RR = .85; 95% CI = .72-.99; p value = .04). The risk of very good/excellent adherence was lowered by 39% (RR = .61; 95% CI = .43-.87; p value = .005) among food insecure youth, compared with those who were food secure.

## Technology

### Comparing Mobile Health Strategies to Improve Pre- exposure Prophylaxis Use (PrEP) for HIV Prevention

**Investigators:** Al Liu, Janet Myers, Kim Koester

Al Liu, Janet Myers, and Kim Koester are comparing the effectiveness of two mobile health (mHealth) strategies (PrEPmate and DOT Diary) based on different theoretical models and using different intervention components to support PrEP adherence and continuation. Both strategies are proven to be promising but patients, providers, and health system administrators lack evidence for selecting which approach is most effective for supporting PrEP use in different patient populations.

The effectiveness of PrEPmate versus DOT Diary will be compared when implemented in diverse public health clinics and community health centers delivering a significant volume of PrEP to English and Spanish speaking African-American or Latinx MSM and TGW (ages 15 to 30), but with low and disparate levels of adherence and continuation. Study findings will provide information that will be useful to health care administrators, clinic directors, and patients in choosing optimal strategies to reduce disparities in HIV prevention outcomes.

# Technology

## Continued

# International

### **Video-Counseling Intervention to Address HIV Care Engagement, Mental Health, and Substance Use Challenges: A Pilot Randomized Clinical Trial for Youth and Young Adults Living with HIV**

**Investigators:** Parya Saberi, Caravella McCuistian, Emily Agnew, Angie R. Wootton, Dominique A. Legnitto Packard, Carol Dawson-Rose, Mallory O. Johnson, Valerie A. Gruber, and Torsten B. Neilands

Substance use (SU) and mental health (MH) hinder engagement in care and antiretroviral therapy (ART) adherence among youth and young adults living with HIV (YLWH) and potentially lead to increased HIV transmission and a future generation of immunodeficient adults with drug-resistant virus. Parya Saberi and colleagues implemented the Youth to Telehealth and Texting for Engagement in Care (Y2TEC) study to examine the feasibility and acceptability of a novel video-counseling series and accompanying text messages, designed to identify and address barriers to HIV care, and MH and SU challenges.

Fifty YLWH aged 18–29 enrolled and completed 455 (76%) video-counseling sessions; quantitative surveys were used to evaluate Y2TEC’s feasibility and acceptability at baseline and at 4 months (86% retained) and 8 months (75% retained). Y2TEC was feasible and acceptable with participants reporting high satisfaction with video counseling sessions (81-82%) and, at 4 months, slightly higher ART adherence and HIV knowledge, decreased depression and anxiety, and reduced stigma related to mental health and substance use.

### **In Our Own Words: Peer-to-Peer Messaging to Increase Uptake of HIV Prevention Strategies among Adolescents in Kenya**

**Investigators:** Hong-Ha Truong

In Kenya, the 2014 Demographic Health Survey revealed low levels of HIV knowledge and high levels of risk behavior among adolescent girls aged 15-19 years, generating a need to create a narrative that reflects what is salient to this population. Hong-Ha Truong and colleagues propose to leverage the cultural importance of role play and live theater in Kenya to inform the development of public service announcement (PSA) creation workshops for adolescent girls in Kisumu County to increase HIV knowledge and decrease risk behaviors among their peers.

The mixed-methods approach 1) elicits adolescents' narratives regarding sexual health and HIV prevention, as voiced to peers; 2) characterizes determinants shaping adolescents' mental and behavioral HIV prevention models; and 3) assesses the feasibility and acceptability of HIV prevention PSA creation workshops, with the intent of integrating with existing HIV prevention programs and synergizing with the planned roll-out of PrEP in the study region. Narratives will potentially be used to improve engagement with prevention messages by their peers, which can enhance the uptake of future combination bio-behavioral interventions.

# International Continued

## Addressing the Continuum of Care and Prevention among High-Risk Thai Men

**Investigators:** Susan Kegeles, Scott Tebbetts

The HIV epidemic in Thailand is escalating among young men who have sex with men (YMSM). Given suboptimal uptake of HIV testing and treatment services among YMSM, there are tremendous challenges in much needed prevention efforts to improve linkage to care and achieve individual and community viral suppression to prevent onward HIV transmission. Based on a cultural adaptation of the evidence-based Mpowerment intervention, Susan Kegeles and colleagues developed and piloted HUG-M, a multi-level, theory-based intervention that diffuses social support and empowers the YMSM community in order to establish social norms supportive of risk reduction and biannual HIV testing.

The project aims to (1) expand HUG-M to HUG-M+, a comprehensive, integrated, combination intervention that focuses on the entire Continuum of Prevention and Care, by adapting HUG-M to address YMSM living with HIV, and combining it with a Health System Intervention, (2) implement HUG-M+ for 2 years in collaboration with the Thailand Ministry of Public Health (MOPH) clinics, and (3) evaluate the efficacy of HUG-M+ in decreasing sexual risk behavior or using PrEP; increasing HIV testing; and increasing prompt, sustained engagement in care.

Be sure to visit the [Mpowerment Project website](#)

## Social Media Messaging for HIV Testing in Zimbabwe

**Investigator:** Marguerita Lightfoot

Zimbabwe is one of the countries hardest hit by HIV/AIDS. However, youth continue to have low levels of HIV testing (45% of young women and 24% of young men who had sexual intercourse in the preceding 12 months were tested for HIV and received their result). Identification of novel strategies for HIV testing among adolescents, particularly those at most risk, in sub-Saharan Africa is paramount.

Our study examines an innovative strategy to increase the number of high-risk adolescents receiving HIV screening that creates the opportunity to subsequently be linked to prevention, care and treatment services. We used a peer-driven, social media HIV-testing strategy using social networks of youth aged 16 - 24 years. In partnership with Pangaea Zimbabwe AIDS Trust, we implemented the intervention in an adolescent medical clinic and followed the clinic for 2 years to examine differences in the number of HIV tests conducted and the percentage of patients reporting risk behaviors. Our study found the intervention strategy successfully increased the number of youths getting tested for HIV and the proportion of patients that reported risk behaviors.

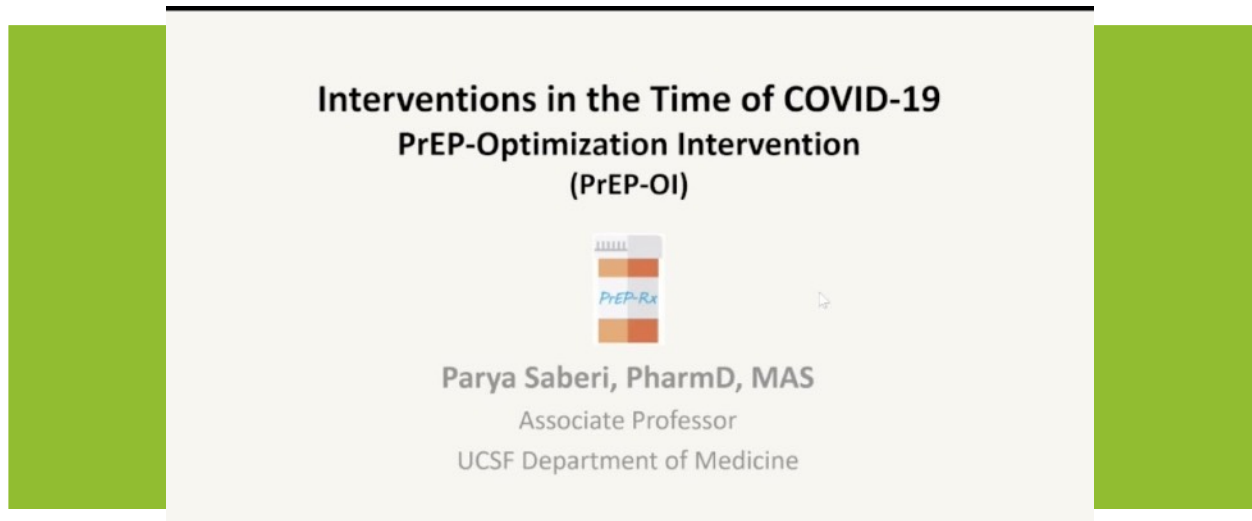




## Additional Resources

[Resources and Guidance Related to HIV and COVID-19](#)

**VIDEO.** PrEP-Optimization Intervention (PrEP-OI) in the time of COVID-19 - Parya Saberi, PharmD, MAS, AAHIVP [PrEP RX website](#)



### Fact Sheets

- [What is the role of the family in HIV prevention?](#)
- [What works best in sex HIV education?](#)
- [See our complete list of Fact Sheets](#)

### Intervention Curricula

- [The Mpowerment Project for young adult African American and Latino men](#)
- Project Style - [Services developed to engage and retain men of color living with HIV in high-quality care.](#)

**Survey Instruments and Scales-** [Topics include counseling and testing, healthcare providers, risk behavior, adherence, coping, substance use and knowledge/attitudes.](#)

**Transgender Resources -** [The HIV Testing Toolkit, Transgender Health Factsheets and Recommendations for Inclusive Data Collection of Transgender People in HIV Prevention.](#)

### UCSF Anti-Racism Initiative

<https://diversity.ucsf.edu/antiracism-initiative>



Center for AIDS Prevention Studies  
Prevention Research Center  
Division of Prevention Science



---

CAPS | PRC  
Mission Hall  
550 16th Street, 3rd Floor  
San Francisco, CA 94143  
UCSF Box 0886

<https://prevention.ucsf.edu>  
E-mail [caps.web@ucsf.edu](mailto:caps.web@ucsf.edu)  
2021