Introduction

San Francisco HIV Prevention Plan 2010
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Background

Nearly thirty years into the U.S. HIV epidemic, San Francisco continues to develop innovative strategies and interventions to prevent and treat HIV. As one of the first and hardest-hit centers of HIV, San Francisco holds a unique place in history, from our community’s unprecedented mobilization in the 1980s to address the epidemic, to the development of prevention and care models, to our continued commitment to developing evidence-based, cost-effective, and community-supported prevention interventions. In 2010, there is an ongoing need to emphasize HIV prevention: infection rates among men who have sex with men (MSM), transfemales, and injection drug users (IDUs) remain unacceptably high. While new infections among non-injecting heterosexual men and women and perinatal transmission remain relatively rare, we must continue to be vigilant to ensure no HIV resurgence among these groups. In preparing this Plan, the HIV Prevention Planning Council (HPPC) members exhaustively reviewed local data, heard hours of community testimony, and have brought their own experiences in a concerted effort to determine how best to reduce new HIV infections in San Francisco. This Plan represents this commitment.

Our current community planning process is a concept that came of age here in the early days of the epidemic. San Francisco initiated an effort to ensure that community planning was formalized in federal legislation and administrative guidance. The result was the issuance of the Centers for Disease Control and Prevention’s (CDC’s) guidance on community planning, which requires health departments to work collaboratively with community planning groups to design local prevention plans that best represent the HIV prevention needs of their respective jurisdictions. Thus, in 1994, the San Francisco HPPC was formed. Since then, the HPPC has been a consistent and clear voice representing the communities affected by HIV.

From the early days of the epidemic, the role of community planning has been multi-faceted. Community planning helped identify the groups at highest risk for HIV infection. It helped empower many populations that previously had limited or no voice in determining the design and delivery of prevention and care services, including gay men and other MSM, transpeople, injection drug users, youth, and immigrants. It created a public forum for anyone to express ideas and concerns surrounding HIV. The principles of parity, inclusion, and representation that guide community planning ensure that all affected communities, including people of various sexual orientations, racial/ethnic backgrounds, incomes, genders, and life experiences have a place at the table. Our community planning process has always been based on the belief that determining the best way to respond to local HIV prevention priorities and needs is through local decision-making.

What Has Changed Since the Last Prevention Plan

Since the last HIV Prevention Plan was published in 2004, there are reasons for optimism with regard to HIV in San Francisco: The increasing trend seen in new HIV infections at the turn of the millennium appears to have leveled off and may even be on a downward trend; simpler and effective treatment options are now available for persons living with HIV; and AIDS-related deaths continue to decline. There is growing recognition that both prevention and treatment must go hand-in-hand and with further emphasis on integration of HIV prevention with other services needed by high-risk groups. These services include testing and care for other sexually transmitted infections (STIs), substance use treatment, housing, and mental health services. Efforts to develop innovative prevention interventions considered untenable by many just a few years ago are now underway, including those determining whether taking antiretrovirals on a regular basis before exposure to HIV (known as pre-exposure prophylaxis) is an effective prevention strategy. At the federal level, there is also reason for hope. The election of a President committed to health care reform represents the most promising opportunity in many years to revitalize health promotion and prevention efforts nationally. The President has endorsed the development of a national HIV/AIDS strategy that could profoundly affect how HIV prevention efforts are supported.

Nevertheless, optimism must be tempered by less promising developments. With the current economic crisis, HIV prevention programs/activities have experienced substantial budgetary cuts, and compared to 2004, our public health dollars are reduced, challenging us to prioritize
programs and target prevention efforts. Integration of HIV prevention with other services must not result in its being less emphasized. On the research front, multiple potential prevention interventions, including several vaccine candidates and intensive counseling interventions, have shown no efficacy in controlled research studies. While the estimated number of new HIV infections each year has gone from 1,082 in 2000 to 975 in 2006, we are nowhere near eradication of new HIV infections, and HIV prevalence continues to increase. Given our current estimates of risk behavior and HIV infection rates, it is estimated that a 20-year-old White gay man in San Francisco has a 60% chance of becoming infected by the age of 60; for an African American 20-year-old gay man, the risk is 80%. Such statistics are unacceptable; our society must rally its resources and reinforce its commitment to preventing and treating HIV. In doing so, we must not function in a vacuum. To be successful, HIV prevention must be integrated in the continued struggle to end disparities and achieve equality for all. Such work is particularly pertinent among groups most affected by HIV, including gay men and transpeople.

What is the role of community planning in these challenging times? It remains critically important locally, nationally, and internationally. Within San Francisco, three people per day become infected with HIV, in the U.S., a new HIV infection occurs every 9.5 minutes. With national data showing consistently high rates of new infections in the U.S.—especially among MSM and persons of color—communities must be full partners as we face the challenging task of treating and preventing HIV. In San Francisco, the HPPC plays a key role in illuminating community voices, providing training and support in the articulation of needs, and advocating for the resources necessary to meet those needs with appropriate, effective, and cost-efficient care and resources.

This Plan is the result of the work of the HPPC and its committees from 2004 through 2009. A broad spectrum of San Francisco community members have debated the principles and approaches contained in the Plan. Together the HPPC and SFPD HIV Prevention Section have established priorities for HIV prevention in San Francisco, and together we recommend strategies and interventions to meet the needs of our communities. We believe and fully support working in partnership with other stakeholders in the community, whether they be federal, state or local governments, elected officials, community members, community-based organizations, schools, private foundations, private or public hospitals, companies, or various other organizations. Together we can develop and implement a shared vision to recommend and provide services as articulated by those at risk for or living with HIV, and their families and friends. We are committed to ending this epidemic, eliminating the health disparities underlying the epidemic, and promoting health and wellness for all.

San Francisco’s Current HIV Epidemic

A cumulative total of 28,114 persons have been diagnosed with AIDS in San Francisco. As of December 31, 2008, a total of 18,866 deaths have occurred among San Francisco residents diagnosed with AIDS. Approximately 15,757 persons are estimated to be living with HIV/AIDS in the city. New HIV infections peaked around 1982, followed by a period of rapid decline that lasted into the early 1990s, when the rate of new infections stabilized at approximately 500 per year. From the mid-1990s to the early 2000s, rates of new infections rose again, to an estimated 1,082 per year by 2000 consensus estimates. The most recent consensus in 2006 estimated 975 new infections annually. A newer method of calculating new infections in San Francisco found there were approximately 792 new infections in 2007, although the range is as low as 552 to as high as 1,033 (SFPD 2008b). Taking into account the overall estimated trends, the resurgence in infection rates we witnessed at the turn of the millennium appears to have plateaued, and there is some indication that rates have declined somewhat in the last few years. However, this is no cause for complacency: if current behavioral and biologic indicators hold steady, we must now consider HIV to be endemic (persistent and established) in San Francisco, with HIV prevalence increasing every year due to longer survival and a rate of new infection that more than replaces deaths due to AIDS. In our most severely affected populations, such as MSM and transfemales, HIV may be considered “hyper-endemic” with prevalence rates rivaling many other infectious or chronic diseases. While “endemic” and “hyper-endemic” are important epidemiologic terms, historically the phrase “HIV epidemic” has been applied in describing HIV in San Francisco, and we will continue to use this phrase in the Plan to describe patterns of HIV rates in the city.

While HIV and AIDS remain concentrated among gay male communities, which represent approximately 80% of new HIV cases annually, it is important to remember that other groups are also disproportionately affected by HIV. From 2006 estimates, new HIV infection rates appear
to be very high among transfemales, emphasizing the need to support prevention efforts for this highly marginalized population. Thanks to early implementation of syringe access programs, the epidemic among IDUs in San Francisco was largely curtailed, although we still see very high rates of sexual transmission of HIV among MSM who inject drugs (Kral et al 2001). As is the case with MSM infections, IDU infections have stabilized over the past few years, with approximately 114 new infections occurring annually, with just over half among MSM-IDU. New HIV infections remain relatively rare among non-injecting women and among non-injecting men who have sex exclusively with women. Together, it is estimated that these two groups account for less than 0.1% of new infections in San Francisco. Moreover, the vast majority of infections in these populations are indirectly linked to IDU and males who have sex with males and females (MSM/F).

There are ethnic/racial disparities in HIV in our city. As in the rest of the country, African Americans bear a disproportionate burden of the disease in San Francisco: this is the case for HIV cases among MSM, IDU, and heterosexual women, and may well be the case for transpersons. While it is estimated that 6% of San Francisco’s population is African American, 14% of reported HIV cases are among African Americans. Importantly, most African American HIV cases are among MSM, with over 40% of African Americans reported with HIV being MSM. These troubling data reinforce the need to strengthen our HIV prevention efforts among African Americans in coverage, intensity, and appropriateness.

In summary, the state of HIV in San Francisco 2010 is:

1) Hyper-endemic HIV in MSM populations.
2) Endemic HIV in IDU populations.
3) Hyper-endemic HIV in transfemale populations.
4) Disproportionate burden of HIV in the African American community compared to other races/ethnicities.
5) Few, sporadic cases in non-IDU heterosexual women and men, and near elimination of perinatal cases, indirectly linked to the above populations.

These trends must be taken into account in determining how to best deliver HIV prevention services in San Francisco.

EXHIBIT 1 Trends in HIV and AIDS, San Francisco, 1980 – 2008*

Source: San Francisco Department of Public Health, HIV/AIDS Epidemiology Annual Report 2008 and special data request, November 2009

* The earliest data available for number of new HIV infections is from 2002 when HIV reporting was first implemented in California.
San Francisco’s Approach to HIV Prevention

The largely endemic state of HIV in San Francisco calls for a renewed commitment to HIV prevention. While our efforts have stemmed the rise in HIV infections, we must now determine how best to drive infections down even further. San Francisco has shown extraordinary leadership in creating cutting-edge, community-focused prevention interventions and services that have been successful locally and adapted throughout the US and internationally. Much is known: HIV remains concentrated in certain populations in San Francisco, specifically among MSM, transfemales, and IDUs. Due to years of high-quality research and evaluation in San Francisco and elsewhere, we know that providing HIV testing and care reduces risk behavior and improves health. We know that syringe access programs work to prevent HIV and other drug-related harm and have been responsible for greatly reducing HIV infection rates among IDUs. We know that specific factors are associated with a risk for HIV, including the use of methamphetamine, having multiple sex partners, or having a sexually transmitted infection (STI). We know that having a lower plasma viral load is associated with a lower risk of HIV transmission, emphasizing the need to reduce viral load not only for the health of the individual living with HIV, but also for prevention purposes.

To fulfill our vision of reducing HIV infections, our approach is based on the following principles:

1. Health and wellness for individuals and communities: Health is “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (WHO Constitution). Health is influenced by multiple factors, including psychological, physical, social, structural, and political. HIV prevention efforts must consider health in this broad context to have a lasting effect on individuals and communities.

2. Prevention with both HIV-uninfected and persons living with HIV: HIV prevention should reach those at risk for HIV, as well as those who are living with the virus. Specific and different messages and interventions may be appropriate for these two groups; on the other hand, common interventions salient to both groups are also important because affected individuals co-exist in common communities.

3. Prevention and treatment go hand-in-hand: A comprehensive prevention approach recognizes that treatment is a vital part of prevention, whether treatment is for substance use, mental health, or HIV. With regard to HIV specifically, a reduction in HIV viral load not only increases lifespan and quality of life, it also reduces infectiousness and the likelihood of HIV transmission.

4. End disparities: We know who is at highest risk for HIV in San Francisco: MSM, transfemales, and IDUs. Our efforts must be prioritized to focus on these populations and communities for us to have the greatest chance of reducing HIV incidence.

5. Evaluation is key to the success of prevention: We must evaluate our programs to know what is working and how to best serve the people we need to reach. Evaluation is critical in determining whether prevention resources are being used most effectively.

6. Collaboration between science and community: The best HIV prevention happens when community input and science work together to create a full picture of what is going on and what needs to happen. The community planning process is one way this occurs. The HPPC is committed to providing leadership to make sure that San Francisco always takes both science and community values into account.

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1 The World Health Organization’s Constitution was adopted by the International Health Conference held in New York from 19 June to 22 July 1946, signed on 22 July 1946 by the representatives of 61 States (Off. Rec. Wild Hlth Org., 2, 100), and entered into force on 7 April 1948. http://www.who.int/governance/eb/who_constitution_en.pdf
Using these principles, we must continue our efforts to eliminate new HIV infections. Of course, we must take into account the many challenges involved in achieving this ultimate goal, including fiscal constraints, and the need to deliver prevention interventions to more high-risk persons. In balancing these challenges with our community experience and evidence-based perspective, the HPPC has set the following specific objectives:

**Our overall goal is to reduce new HIV infections by 50% by 2015. Our specific objectives are to:**

- Reduce new HIV infections among MSM by 50%;
- Reduce new HIV infections among transpersons by 50%;
- Eliminate new infections among IDUs; and
- Eliminate perinatal infections.

In reaching the above objectives, we believe we will also achieve the goal of keeping HIV infection rates among non-injecting biological women and men who have sex exclusively with women extremely low, because most transmission within these groups is due to transmission from MSM or IDUs.

**Our Priority Areas**

It is important to acknowledge that the above goals are similar to those in the 2004 HIV Prevention Plan; to achieve them in the next five years, this Plan expands beyond the HPPC's past priority-setting model and resource-allocation recommendations to focus on five content areas that the HPPC has determined are necessary to meet our objectives for reducing HIV infections. This focus is the result of the recognition that over the past six years both science and community experience have helped us better focus on HIV prevention interventions. After an extensive review of the prevention literature and local data, and input from a variety of community sources, the HPPC has agreed that San Francisco's prevention efforts should emphasize the following five areas:

**HIV Status Awareness**

HIV status awareness is the umbrella term for any strategy or service that helps people learn their HIV status. Status awareness is highlighted in the Strategies and Interventions Chapter, pp. 170 - 279, and the Evaluation Chapter, pp. 282 - 307.

Status awareness is a cornerstone of our reinvigorated approach to HIV prevention. Recent advances make the status awareness approach more feasible: new testing technologies are being rolled out; expansion of routine HIV testing into medical and other settings is a reality; and more efforts to test social networks of persons at risk for HIV are in progress. Status awareness includes an emphasis on frequent HIV antibody testing among high-risk persons, partner services, and linkages to care. As testing technology has evolved, it has become easier to conduct and obtain HIV testing, especially with the advent of rapid testing. Studies demonstrate that testing positive for HIV results in decreased sexual risk behavior, and with effective treatments for HIV available, it is critical for us to identify persons infected with HIV as soon as possible. Testing for very recent HIV infection before antibodies develop, is also feasible, and in some populations, may efficiently identify persons at extremely high risk for transmitting HIV due to high viral loads and lack of awareness of their status. Partner services and linkages to care remain critically important to meeting the needs of people newly diagnosed and with longstanding HIV infection.
Prevention with Positives

Prevention with Positives (PWP) is defined as any strategy or intervention that addresses the specific prevention needs of persons living with HIV. PWP is highlighted in the Strategies and Interventions Chapter, pp. 170 - 279.

Persons living with HIV must be actively engaged in HIV prevention efforts. We know that prevention efforts with individuals living with HIV can effectively reduce risk behavior, and provide them with the support they need to live healthy, sex-positive lives. Integrating prevention and treatment efforts by providing people living with HIV with resources and skills to keep themselves and their sexual and syringe-sharing partners healthy, is a critical component of PWP efforts. Persons living with HIV must be involved in the planning and implementation of all PWP programs. In our emphasis on PWP, we include interventions to reduce sexual risk behavior, but also encourage programs to expand to include interventions to link persons with care, help persons living with HIV adhere to medication regimens, and reduce viral load.

Drivers of HIV in San Francisco

A driver is an underlying condition that is directly linked to a large number of new HIV infections in San Francisco. By definition, drivers affect the populations at highest risk for HIV. Drivers of HIV are highlighted in the Strategies and Interventions Chapter, pp. 170 - 279.

In our endeavors to add a more evidence-based focus to our intervention efforts, a new concept, “drivers,” emerged as central to our new prevention strategy. Drivers are factors that are implicated in a large number of HIV infections in San Francisco, even after taking into account other factors. Focusing evidence-based interventions and resources on drivers is an efficient, prioritized use of resources to reduce HIV infections. In an extensive review of the literature, the HPPC has identified the following drivers: methamphetamine use, cocaine/crack use, poppers use, heavy alcohol use, gonorrhea infection, and having multiple sex partners. As an example of how the driver concept helps focus our efforts, treatment programs would do well to concentrate HIV prevention efforts on high-risk groups that report use of substances that qualify as drivers, rather than addressing all substance users in HIV prevention interventions. Similarly, interventions that address safer sexual behavior should focus on individuals within high-risk groups who have multiple partners. Importantly, as more data emerges about HIV in San Francisco, drivers may change and new ones may emerge—and interventions should be developed and prioritized accordingly.

Syringe Access and Disposal Programs

Syringe access and disposal programs (syringe access) ensure access to sterile syringes and injection equipment in order to eliminate the transmission of blood-borne viruses among people who inject drugs and their sexual partners. Syringe access programs are highlighted in the Strategies and Interventions Chapter, pp. 170 - 279.

Formerly known as needle exchange, syringe access programs remain critical to our HIV prevention efforts and must be supported. Due to San Francisco’s leadership in implementing syringe access programs in the early 1990s, a larger epidemic among IDUs was avoided; in fact, due to the success of our syringe access programs, most HIV transmission among injectors is thought to be sexual (Kral et al 2001). Multiple studies demonstrate the effectiveness of community-based syringe access programs, and the HPPC remains committed to providing this evidence-based, cost-effective practice to prevent HIV infection and other blood-borne pathogens.
Structural Change

Structural changes are new or modified programs, practices, or policies that are logically linkable to preventing HIV transmission and acquisition and can be sustained over time even when key factors are no longer involved. Structural changes are highlighted in the Strategies and Interventions Chapter, pp. 170 - 279.

There is growing recognition that for many, individual and group-level interventions are insufficient to reduce HIV risk and improve health over the long term. Structural changes may do so, and are able to effectively reach many more people than interventions tailored for the individual. As we support a prevention model to eliminate new HIV infections, the HPPC offers a renewed emphasis on structural changes as very important to our efforts, especially as a way to effectively and efficiently address the needs of the most underserved populations at risk for HIV. Structural change may include, but are not limited to, HIV prevention efforts. For instance, Healthy San Francisco, the municipal health coverage program for people without private or public insurance, represents a major structural change that provides comprehensive health care for vulnerable populations. Changes in HIV testing laws and policies have resulted in increased HIV testing and detection of infections. The HPPC has recommended that a variety of structural changes be implemented; these appear in the Strategies and Interventions Chapter, pp. 170 - 279.

Conclusion

This HIV Prevention Plan presents the information needed to implement our vision of what the best prevention efforts should entail. It represents the work of the HPPC since 2006, which approved the Plan in July 2009.

The following chapters tell the story of HIV in San Francisco and what we believe should be done to reduce new infection rates. The Epidemiologic Profile Chapter tells the detailed story of the local HIV epidemic using HIV, AIDS, and other data. The Community Assessment and Priority Setting Chapters follow, describing the priorities for where and how HIV prevention should be focused. The Strategies and Interventions Chapter provides information and resources for designing programs. The Evaluation Chapter provides a roadmap for how we measure what our programs are doing to achieve our objectives.

This HIV prevention Plan is for all of San Francisco. We offer it after many hours of careful, thoughtful, and respectful dialogue with each other, other community members, researchers, and community providers. We hope that it provides what HIV prevention providers need to deliver the best HIV prevention possible, with the goal of ending HIV.