National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends: SCE Narrative

The *SCE Narrative* is written by the Sentinel Community Epidemiologist (SCE) and provides their interpretation of important findings and trends based on available national data as well as sources specific to their area, such as data from local medical examiners or poison control centers. As a local expert, the SCE is able to provide context to the national and local data presented.

This SCE Narrative contains the following sections:

- ♦ SCS Highlights
- ♦ Changes in Legislation
- ♦ Substance Use Patterns and Trends
- ♦ Local Research Highlights (if available)
- ♦ Infectious Diseases Related to Substance Use (if available)

The *SCE Narratives* for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

National Drug Early Warning System (NDEWS) San Francisco Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016: SCE Narrative

Phillip Coffin, M.D., M.I.A. San Francisco Department of Health

Highlights

- Numerous indicators suggest increasing use and consequences of methamphetamine in the City and County of San Francisco (CCSF). Substance use disorder (SUD) treatment admissions for methamphetamine have been consistently rising, as have hospitalizations involving methamphetamine and deaths, including methamphetamine as a causal agent. Anecdotal reports indicate methamphetamine use is prevalent among homeless and marginally housed individuals, although less frequent among men who have sex with men (MSM).
- Evidence also suggests an increase in **heroin** use in CCSF. The proportion of all SUD treatment admissions involving heroin continues to increase, and anecdotal reports suggest that, notwithstanding treatment-on-demand, there are many out-of-treatment heroin users in CCSF. Mortality from heroin remains low, although 2013 witnessed a modest increase for the first time in several years.
- Prescription opioids remain an uncommon reason for SUD treatment admissions, and there is evidence to suggest declining street use of these agents. Data from the California State prescription drug monitoring program (CURES) shows declining prescription of opioids in CCSF, and overdose death involving prescription opioids has declined since 2010.
- **Fentanyl** has affected CCSF sporadically. Although there has been only one identified episode of fentanyl sold as heroin, which is a limited problem possible due to the challenges in adulterating black tar heroin with fentanyl, there have since been two episodes of counterfeit pills containing fentanyl that resulted in multiple overdoses and several deaths.
- Long-term homelessness is an increasing concern for people who use substances in CCSF and a potential deterrent to seeking help for SUD. In addition, the high rate of homelessness among people who use substances, which is a problem exacerbated by real estate development and limited housing options, has forced much drug use into the public eye. This trend continues to raise concerns and conflicts for both people who use substances and other community residents.
- Indicators for other substances in CCSF, including alcohol, cocaine, benzodiazepines, marijuana, and synthetics, suggest relatively stable use.
- Numerous research studies have contributed to understanding substance use patterns in CCSF and initiatives, such as the citywide Hepatitis C Elimination Initiative and the San Francisco Department of Public Health Drug User Health Initiative, have emerged to address substance user health issues.

Changes in Legislation

As of January 1, 2016, all providers authorized to prescribe controlled substances were required to register with the California State prescription drug monitoring program (CURES). As a result, CURES implemented a new website including enhanced functionality and ease of access. CURES is not integrated into electronic medical records, however.

The San Francisco Department of Public Health (SFDPH) initiated the Drug User Health Initiative (DUHI) in 2015 to address health issues related to substance use in the City and County of San Francisco (CCSF). DUHI is a collaborative, department-wide effort to align services and systems to support consistently the health of people who use drugs and alcohol in San Francisco. It was developed through a broad-based community engagement and strategic planning process that included input from substance use treatment experts, community service providers, and drug users. The DUHI strategic plan identifies four priority areas: (1) harm reduction education and systems capacity building; (2) overdose prevention, education, and naloxone distribution; (3) syringe access and disposal; and (4) HIV/hepatitis C virus (HCV) prevention, screening, and treatment. HIV/HCV prevention guides the initiative's activities and provides a common set of performance measures and outcomes. DUHI's accomplishments include establishment of a Harm Reduction Training Institute; incorporation of harm reduction objectives into service provider contracts; expanded overdose prevention education and naloxone access via collaborations with SFDPH Primary Care, Police Department, Jail Health, and other partners; building of community support for syringe access and disposal by combatting stigma around public drug use and homelessness; funded community-based HIV prevention binge-drinking intervention for gay men and transgender women; and strengthened community and clinical capacity for HCV prevention, screening, and treatment.

Multiple stakeholders in CCSF also created the HCV Elimination Initiative of San Francisco in 2015, aiming to eliminate HCV in CCSF. The long-term goal of the HCV Elimination Initiative is to establish (1) city-wide, HCV community-based testing coverage for highly impacted populations and augmented surveillance infrastructure to track the progress of the HCV Initiative; (2) linkage to care and treatment access for all people living with HCV infection; and (3) prevention of infection for those at risk of HCV and reinfection in those cured of HCV. The Initiative will use existing services and will attempt to coordinate city-wide efforts. Current Medi-Cal guidelines allow for liberal access to HCV treatment, including treatment of active persons who inject drugs (PWIDs), which is essential for reducing incident infections.

Substance Use Patterns and Trends

BENZODIAZEPINES

• Indicators for benzodiazepines in CCSF suggest relatively stable use.

Benzodiazepines have remained a rare indication for admission to substance use disorder (SUD) treatment in CCSF, representing just 0.1% of admissions in 2015. Most patients were White/non-Hispanic and 26–44 years of age; the most common secondary drug was alcohol. Benzodiazepines accounted for a similar proportion of drug seizures in both 2014 (7.3%) and 2015 (8.0%), which was higher than the U.S. proportion of 4.4% in the first half of 2015. Benzodiazepines are a causal agent in 20–50 deaths per year in CCSF, most of which also involve opioids (see Exhibit 1).





Source: Office of the Chief Medical Examiner, San Francisco, 2016. Mortality data from 2015 may be incomplete because of unclosed cases.

COCAINE

• Indicators for cocaine in CCSF suggest relatively stable use.

Treatment admissions involving cocaine/crack as the primary drug have been continuously declining in CCSF from a peak of 15.6% of admissions in 2012 to 9.0% of admissions in 2015. More than two thirds of admissions for cocaine use were male, nearly three quarters were Black/African American, and 71.5% were older than 45 years of age; 90.3% smoked the drug, and alcohol was the most common secondary drug. The rate of hospitalizations at the county facility (San Francisco General Hospital; SFGH) has been fairly stable, as has the number of deaths involving cocaine as a causal agent in CCSF (see Exhibit 2). Providers reported that, among persons who use stimulants and are homeless or marginally housed, crack/cocaine use is far less common than methamphetamine use, with the exception of those older than 60 years of age who may have a higher rate of crack/cocaine use. In contrast, there is evidence of increased cocaine use among men who have sex with men (MSM) in CCSF from the Centers for Disease Control and Prevention (CDC)-funded National HIV Behavioral Surveillance (NHBS; see Exhibit 3). Data from drug seizures seem unstable, as the proportion of seizures involving cocaine changed from 2.6% in 2014 to 6.3% in the 2015, which is slightly inconsistent with other indicators suggesting declining cocaine use. Cocaine was identified in 13.9% of drug seizures nationally in 2015.



Exhibit 2. Cocaine-Related Hospitalizations and Deaths in San Francisco

Source: Lifetime Clinical Record, San Francisco Department of Public Health, 2016; Office of the Chief Medical Examiner, San Francisco, 2016. Mortality data from 2015 may be incomplete because of unclosed cases.





Source: Centers for Disease Control and Prevention (CDC), National HIV Behavioral Surveillance (NHBS).

MARIJUANA

• Indicators for marijuana in CCSF suggest relatively stable use.

Marijuana remains an uncommon reason for SUD treatment admission in CCSF, representing 5.7% of admissions in 2015. Approximately two thirds of admissions for marijuana were male, and most were African American/Black or Hispanic/Latino; almost half were younger than 18 years of age, and the most common secondary drug was alcohol. The proportion of drug seizures involving marijuana increased somewhat from 2014 (11.3%) to 2015 (14.7%). Cannabis was found in 26.4% of drug seizures nationally, which was higher than in CCSF. Marijuana is a rare cause of death in CCSF, implicated in only one death in 2015 based on a review of records of the California Electronic Death Reporting System (see Exhibit 4).



Exhibit 4. Cannabis-Related Deaths in San Francisco City & County

Source: Office of the Chief Medical Examiner, San Francisco, 2016. Mortality data from 2015 may be incomplete due to unclosed cases.

METHAMPHETAMINE

 Numerous indicators suggest increasing use and consequences of methamphetamine in the City and County of San Francisco (CCSF). Substance use disorder (SUD) treatment admissions for methamphetamine have been consistently rising, as have hospitalizations involving methamphetamine and deaths, including methamphetamine as a causal agent. Anecdotal reports indicate methamphetamine use is prevalent among homeless and marginally housed individuals, although less frequent among men who have sex with men (MSM).

Methamphetamine remains a significant contributor to SUD treatment admissions in CCSF, involving 14.4% of admissions in 2015. More than three quarters of admissions for methamphetamine were male, a plurality were White, most were 26–44 years of age, and nearly two thirds smoked the drug; the most common secondary drug was alcohol. The proportion of drug seizures involving methamphetamine was stable between 2014 (10.7%) and 2015 (11.2%), lower than the proportion of drug seizures including methamphetamine nationally (18.9%). These results are consistent with the steadily increasing number

of deaths involving methamphetamine. The number of SFGH hospitalizations involving methamphetamine has also increased consistently since 2009 as have the number of deaths involving methamphetamine as a causal agent; methamphetamine-involved deaths exceeded cocaine-involved deaths for the first time in 2015 (see Exhibit 5). Methamphetamine use is highly prevalent among homeless and marginally housed individuals in CCSF, as reported by more than 50% of new patients for homeless services during a three-month period in 2015. These data suggesting increased use or consequences of methamphetamine do not translate to the MSM community, which seems to have declining rates of methamphetamine use based on NHBS data.





Source: Lifetime Clinical Record, San Francisco Department of Public Health, 2016; Office of the Chief Medical Examiner, San Francisco, 2016. Mortality data from 2015 may be incomplete because of unclosed cases.

NEW PSYCHOACTIVE SUBSTANCES (OTHER THAN OPIOIDS)

• Indicators for synthetics in CCSF suggest relatively stable use.

Synthetic stimulants continue to represent a rare cause for SUD treatment admissions in CCSF, including 0.1% of cases in 2015; there have been no cases of treatment admissions for synthetic cannabinoids. Synthetic cathinones were somewhat more frequently involved in drug seizures, increasing from 0.6% of seizures in 2014 to 2.4% in 2015. Synthetic cannabinoids represented 1.0% of drug seizures in 2014 and none in 2015.

OPIOIDS

- Evidence also suggests an increase in heroin use in CCSF. The proportion of all SUD treatment admissions involving heroin continues to increase, and anecdotal reports suggest that, notwithstanding treatment-on-demand, there are many out-of-treatment heroin users in CCSF. Mortality from heroin remains low, although 2013 witnessed a modest increase for the first time in several years.
- Prescription opioids remain an uncommon reason for SUD treatment admissions, and there is evidence to suggest declining street use of these agents. Data from the California State prescription drug monitoring program (CURES) shows declining prescription of opioids in CCSF, and overdose death involving prescription opioids has declined since 2010.
- Fentanyl has affected CCSF sporadically. Although there has been only one identified episode of fentanyl sold as heroin, which is a limited problem possible due to the challenges in adulterating black tar heroin with fentanyl, there have since been two episodes of counterfeit pills containing fentanyl that resulted in multiple overdoses and several deaths.

Opioid use remains prominent in CCSF with ongoing evidence of increased heroin use. Heroin was the primary drug involved in 40.5% of SUD treatment admissions in 2015, which is a substantial increase from 30.0% of admissions in 2012. In contrast, prescription opioids were the primary drug involved in just 4.9% of SUD treatment admissions in 2015, which is a nominal increase from 4.0% in 2012. Two thirds of admissions involving heroin were male, nearly half were White, most were older than 45 years of age, and the majority injected the drug; cocaine was the most frequently cited secondary drug. For prescription opioids, most persons admitted were White, 26–44 years of age, and consumed the drug orally; heroin was the most frequently cited secondary drug. Opioids were involved in an increasing proportion of drug seizures from 2014 (26.5%) to 2015 (31.8%), which was higher than the proportion of seizures involving heroin (11.5% in CCSF and 12.2% nationally) were similar, although a larger proportion of seizures locally involved morphine (5.2% in CCSF and 0.5% nationally) and a smaller proportion involved fentanyl (0.3% in CCSF and 1.0% nationally).

CCSF has a robust program of community distribution of naloxone as well as a co-prescribing initiative for patients in safety net primary care clinics. The community distribution program has substantially increased naloxone distribution in recent years and has reported a growing number of overdose

reversals reported by program clients (see Exhibit 6). In addition, the number of SFGH hospitalizations involving opioids has increased modestly since 2009 (see Exhibit 7). However, the number of deaths involving opioids as a causal agent has been stable. The number of deaths involving heroin reached a nadir of 10 cases in 2010 and rose to 35 in 2014 and 30 in 2015, whereas deaths involving prescription opioids declined from 111 in 2010 to 69 in 2015. Of note, there may be additional cases from 2015 that are not yet closed by the Office of the Chief Medical Examiner.

Exhibit 6. Naloxone Enrollments, Refills, and Reversal Reports to the Drug Overdose Prevention and Education Project, 2003–2015



Source: Drug Overdose Prevention and Education Project, 2016.



Exhibit 7. Opioid-Related Hospitalizations and Deaths in San Francisco

Source: Lifetime Clinical Record, San Francisco Department of Public Health, 2016; Office of the Chief Medical Examiner, San Francisco, 2016. Mortality data from 2015 may be incomplete because of unclosed cases.

Notwithstanding opioid use disorder treatment-on-demand, providers anecdotally reported a large and growing number of out-of-treatment heroin users who are homeless or marginally housed, with a notable proportion using both heroin and methamphetamine. The use of both heroin and

methamphetamine adds challenges in accessing SUD and other healthcare services, particularly for those who are homeless or marginally housed. The limited supply of affordable housing and the elimination of places such as vacant lots and squats have led to more heroin and other substance use by injection and smoking on streets, which have increased its public visibility. The chronicity of homelessness raises additional challenges for those with SUDs, and some providers believe this may impact motivation to seek or sustain abstinence.

Several shifts continue to occur in the local opioid market. First, opioid prescribing substantially declined from a peak in 2010 according to data from CURES (see Exhibit 8). The decline in CCSF has been steeper than in surrounding counties, which generally maintained a similar level of prescribing during this period. More recent data are expected to be available soon.





Source: California State Prescription Drug Monitoring Program (CURES).

Second, the illicit drug market continues to evolve. There were two substantial episodes of fentanyl overdoses in 2015 and one in 2016 by the time of this writing.

1) On August 13, 2015, the San Francisco Department of Public Health issued a Health Advisory in response to more than 75 opioid overdoses that were reversed by lay witnesses in the month of July. These overdoses were related to use of a white powder sold as heroin, which was determined to be fentanyl by laboratory testing. People who use drugs initially alerted providers at syringe access and naloxone distribution programs to this concern, and interest in the product seemed to decline quickly as potential buyers learned that the high was short-lived and the risk of overdose was high.

2) On October 22, 2015, SFDPH issued a second Health Advisory responding to four individuals who had purchased Xanax[®] tablets off the street, one of whom died and one of whom required intensive care. The tablets were found to be counterfeit, containing primarily fentanyl. Although some tablets

contained only fentanyl, others also contained at least trace amounts of several other drugs, including etizolam, methadone, cocaine, methamphetamine, oxycodone, hydrocodone, alprazolam, acetaminophen, and levamisole. During the same time period, there were several similar cases of overdose involving counterfeit Xanax tablets in neighboring Marin and Pinole counties; the pills in these cases were not tested to confirm the presence of fentanyl.

3) Finally, in 2016, counterfeit "Norco" tablets containing fentanyl were implicated in at least 48 overdoses in Sacramento County, leading to a request from the California State Department of Health that hospitals and healthcare providers report any nonfatal or fatal overdoses involving fentanyl to local health departments, which would then forward them to the state. Several other northern California counties also reported counterfeit "Norco" overdoses, including two in CCSF. SFDPH issued a Health Advisory May 3, 2016, including this request for overdoses to be reported. Each health advisory disseminated in 2015 and 2016 also contained requests that providers encourage those who might access pills or drugs sold on the street to discourage the practice, ensure there is access to naloxone, and refer appropriate persons to substance use disorder treatment.

Of these three episodes of fentanyl overdoses in CCSF, the first affected persons seeking heroin and the other two affected persons seeking benzodiazepines or low-dose prescription opioids. The populations affected by these separate means of distribution were also distinct, with the former affecting persons largely linked with low-threshold drug service programs (i.e., syringe access programs, community naloxone distribution, and treatment-on-demand) and the latter affecting persons largely not connected with such services. The prevalence of black tar heroin in CCSF, which is more difficult than white powder heroin to adulterate with other powders, may provide some protection from fentanyl-laced heroin as seen in other parts of North America. Included in efforts to respond to counterfeit pills was reaching out to schools and universities, as well as to organizations such as DanceSafe, which provides harm-reduction services at parties.

ALCOHOL

• Indicators for alcohol in CCSF suggest relatively stable use.

Alcohol use remains a major issue in CCSF and is the second leading cause of SUD treatment admissions. Alcohol was the primary drug for 22.4% of SUD treatment admissions in CCSF in 2015, which is a stable figure compared with prior years. Nearly three quarters of SUD treatment admissions for alcohol were male, a plurality were White, and most were older than 45 years of age; the most common secondary substances were cocaine/crack and methamphetamine. Alcohol remained the most common substance resulting in hospital admissions at SFGH, with some evidence of increasing admissions in recent years but a fairly stable rate of alcohol-related deaths (see Exhibit 9).



Exhibit 9. Alcohol-Related Hospitalizations and Deaths in San Francisco

Source: Lifetime Clinical Record, San Francisco Department of Public Health, 2016; Office of the Chief Medical Examiner, San Francisco, 2016. Mortality data from 2015 may be incomplete because of unclosed cases.

CCSF also has the Sobering Center, a 24/7 nurse-managed program providing support to individuals who are actively intoxicated on alcohol. A team including registered nurses, medical assistants, health workers, and respite workers serve clients through a pre-hospital diversion unit accepting clients 18+ years of age from both ambulance and police services. The Sobering Center has had a high, and a fairly consistent, number of clients in recent years.





Source: Smith-Bernadin S, Kennel-Williams M. San Francisco Sobering Center Annual Report 2015. San Francisco Department of Public Health, San Francisco, CA, 2016.

Local Research Highlights

CCSF has a robust cadre of researchers focusing on substance use. The following includes a selection of relevant research conducted or published since early 2015.

SFDPH completed a pilot study of low-threshold, extended-release naltrexone (XR-NTX) for persons who heavily use emergency medical services and have alcohol use disorder. XR-NTX was delivered as a standalone intervention, and although the sample size was small, findings were consistent with prior studies in suggesting that a significant minority of patients receiving therapy experienced benefit, including a reduced urge to drink and reduced utilization of emergency medical services.

Results from an analysis of a naloxone co-prescribing initiative at safety net primary care clinics in CCSF have begun to be released. Investigators found that co-prescribing naloxone to patients treated with opioids long term for chronic pain was widely acceptable to patients, providers, and pharmacists and may result in ancillary benefits to the practice regarding opioid prescribing and opioid safety behaviors.

In-depth evaluation of lay naloxone data has provided insights into service provision in CCSF. First, data on clients returning for refills and reporting reversals demonstrate a strong correlation between being an active heroin or methamphetamine user and using naloxone to reverse an overdose (see Exhibit 11).¹ These results emphasize the importance of getting naloxone to substance users, who are the most likely to be present when an overdose occurs.

		Reversal†		
	AOR**	95% CI	p Value	
Intercept	0.03*	(0.01, 0.05)	<0.001	
Age	1.00	(0.99, 1.02)	0.620	
Gender				
Male	_	_	_	
Female	0.96	(0.70, 1.33)	0.825	
Transgender/other	1.27	(0.42, 3.84)	0.666	
Race				
European background/White	_	_	_	
African American	0.62	(0.37, 1.03)	0.063	
Latino	0.58	(0.31, 1.09)	0.091	
Mixed/other race	1.13	(0.70, 1.82)	0.614	
Homeless	0.95	(0.69, 1.30)	0.734	
Prior overdose	1.14	(0.83, 1.57)	0.411	
Witnessed overdose	2.73*	(1.73, 4.30)	<0.001	
Use heroin	2.19*	(1.54, 3.13)	<0.001	
Use methadone	0.99	(0.71, 1.37)	0.934	
Use benzodiazepines	1.35	(0.94, 1.94)	0.108	
Use other opioids	1.25	(0.89, 1.75)	0.203	
Use cocaine/crack	1.04	(0.74, 1.46)	0.833	
Use alcohol	0.72*	(0.52, 1.00)	0.049	
Use methamphetamine	1.61*	(1.18, 2.19)	0.003	
Use other drugs	0.97	(0.66, 1.43)	0.875	

Exhibit 11. Multiple Logistic Regression Models Predicting Naloxone Refills and Reversals Among DOPE Project Participants Registered 2010– 2013 (N = 1,972; Adapted from Rowe et al., 2015¹)

*All considered refills and reversals occurred between January 1, 2010 and December 31, 2013; * $p \le 0.05$; **AOR=adjusted odds ratio

Second, as shown in Exhibits 12 and 13, most naloxone reversals occur close to naloxone distribution sites, whereas an increasing number of opioid overdose deaths in CCSF occur in regions of the city that lack naloxone services.²

Exhibit 12. Naloxone Reversals by Lay Persons Reporting to the Naloxone Distribution Program in CCSF from 2010 to 2012 (Adapted from Rowe et al., 2016²)





Exhibit 13. Opioid Overdose Deaths and Proximity to Census Tracks With Naloxone Distribution Programming in CCSF from 2010 to 2012 (Adapted from Rowe et al., 2016²)

Local investigators have also conducted epidemiologic investigations regarding opioid use in CCSF. A study of 483 PWIDs in CCSF found that those born before 1980 were more likely to initiate opioid use through prescription opioids than through heroin,³ which is consistent with findings from other U.S. sites.⁴ A study of 921 patients prescribed opioids for chronic pain found that 9% of urine samples were positive for promethazine, whereas only 50% of those individuals had prescriptions for promethazine. The same study also found that using methadone or having urine positivity for benzodiazepine without a prescription were both associated with promethazine-positive urine samples. As promethazine can potentiate and increase the risk of morbidity and mortality related to opioids, these results raise concerns.⁵

Preventing the initiation of injection is a public health goal in managing substance use. In a cohort of 602 PWIDs in CCSF and Los Angeles, investigators examined predictors of PWID-initiating people who use noninjection drugs in the process of injecting drugs. Having injected in front of noninjectors and having described injection to noninjectors were both independently associated with having initiated a person who used noninjection drugs into the practice of injecting drugs.⁶

Trauma is highly prevalent among persons who use drugs. In a cohort of 322 women who use methamphetamine in CCSF, investigators found an independent association between level of dependence on methamphetamine, history of rape as an adult, and elevated levels of trauma symptomology.⁷

Preliminary results from the NIH-funded pre-exposure prophylaxis (PrEP) demonstration project in CCSF; Miami, FL; and Washington, DC did not find an association between alcohol or stimulant use and poor adherence to PrEP.⁸ Although sample size and follow-up were limited, these results are notable given the established links between substance use, in particular binge alcohol and stimulant use, and HIV risk. The results suggest that substance use may not adversely affect PrEP adherence, which has implications for efforts aiming to expand PrEP availability and uptake.

Infectious Diseases Related to Substance Use

Annual HIV diagnoses have been declining steadily for more than ten years. As of December 31, 2015, there were 235 new diagnoses in 2015; nevertheless, this may be an underestimate because of delays in case reporting. The end-of-year numbers for 2013 and 2014 ultimately increased by 33 and 39, respectively, when incorporating cases that were reported after the end of each calendar year. If a similar increase is assumed for 2015, it is probable that the number of new HIV diagnoses in 2015 will continue the declining trend in San Francisco, from 312 diagnoses in 2014. In 2015, males accounted for the majority of new HIV diagnoses (88.1%). With regard to race/ethnicity, White individuals accounted for the largest proportion (40.0%), followed by Latinos (26.4%) and African Americans (17.0%). With regard to transmission category, gay or bisexual males accounted for 71.5% of diagnoses, whereas gay or bisexual PWIDs and other PWIDs accounted for 8.9% and 7.2%, respectively. Heterosexual transmission made up only 5.5% of new HIV diagnoses in CCSF in 2015.

Data on the number of hepatitis B virus (HBV) and hepatitis C virus (HCV) acute and chronic infections in San Francisco are not available for 2015. The most recent data available that are specific to chronic infections are from 2010 when there were 3,630 reported cases of chronic of HBV (rate of 452.8 cases per 100,000) and 3,101 reported cases of chronic HCV (rate of 386.6 cases per 100,000). These numbers represent the incidence of newly reported cases in 2010, not incidence of infection. Although data on the number of chronic infections attributable to injection drug use are unavailable, 56% (*n* = 50) of a random sample of 90 persons with past or present HCV in 2010 reported injecting drugs in their lifetime. The most recent data available that are specific to acute infections are from 2012 when there were 3 new reported cases of acute HBV (rate = 0.4 per 100,000) and 1 new reported case of acute HCV (rate = 0.1 per 100,000). Data on the number of acute infections attributable to injection drug use are unavailable. In 2013, there were 1,282 reported cases of past or present HCV (rate of 153.1 cases per 100,000). Sixty-nine percent of these cases were male, and 47% were 55 years of age or older.

The U-Find-Out (UFO) study of PWIDs younger than 30 years of age estimates HCV incidence in this population to be 25.1/100 person-years; this rate did not significantly decline from 2000 to 2013.⁹

Data Sources

Data for this report were drawn from the following sources:

Treatment admissions data for San Francisco County were provided by the Community Behavioral Health Services Division of the San Francisco Department of Public Health (SFDPH) for calendar years 2011–2015. Treatment episodes include clients admitted in prior years who are still receiving services in a particular year (e.g., methadone maintenance clients).

Nonfatal overdose episode data and naloxone reversals were provided by Eliza Wheeler of the San Francisco Drug Overdose Prevention Education (DOPE) Project, a program of the Harm Reduction Coalition, 2015; with analyses conducted in Rowe C, Santos GM, Vittinghoff E, Wheeler E, Davidson P, Coffin PO. Predictors of participant engagement and naloxone utilization in a community-based naloxone distribution program. *Addiction.* 2015;110(8):1301-1310. DOI:10.1111/add.12961. PMID: 25917125.

Drug seizure data were provided by the National Forensic Laboratory Information System (NFLIS), Drug Enforcement Administration (DEA). Data were retrieved on Identified Drugs of Total Analyzed Drug Reports, San Francisco, 2014 and 2015, NFLIS, DEA. NFLIS methodology allows for the accounting of up to three drugs per item submitted for analysis. The data presented are a combined count including primary, secondary, and tertiary reports for each drug. The San Francisco catchment area used for the 2014 and 2015 NFLIS data includes only San Francisco County, whereas previous years included data for the five-county metropolitan statistical area.

Acquired immunodeficiency syndrome (AIDS) surveillance and human immunodeficiency virus (HIV) data were provided by the SFDPH, HIV Epidemiology Section, Quarterly HIV/AIDS Surveillance Report, HIV/AIDS Cases Reported Through December 2014, accessed at http://www.sfdph.org/dph/files/reports/default.asp.

Viral hepatitis data were provided by the SFDPH, Communicable Disease Control. *Chronic Hepatitis B* and Hepatitis C Infection Surveillance Report 2010, San Francisco, February 2012, accessed at http://www.sfcdcp.org/document.html?id=749.

Data for the top prescribed drugs were not yet available for this report at the time of writing because of recent changes in data sharing. The data will be provided by the California Department of Justice, Law Enforcement Support Program, Bureau of Criminal Identification and Investigative Services, from the Controlled Substance Utilization Review and Evaluation System (CURES), California Prescription Drug Monitoring Program (*http://oag.ca.gov/cures-pdmp*).

Drug use and health indicators among persons who inject drugs (PWIDs) and men who have sex with men (MSM) were provided by Henry Fisher Raymond of the San Francisco Department of Public Health from the Centers for Disease Control and Prevention-funded National HIV Behavioral Surveillance (NHBS).

Drug mortality data were taken from the National Vital Statistics System-Mortality data, with additional information provided by the California Electronic Death Record System; analyses conducted in Rowe C, Santos GM, Vittinghoff E, Wheeler E, Davidson P, Coffin PO. Neighborhood-level and spatial characteristics associated with lay naloxone reversal events and opioid overdose deaths. J Urban Health. 2016;93(1):117-130.

Other Sources:

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For additional information about the drugs and drug use patterns discussed in this report, please contact Phillip Coffin, M.D., M.I.A., San Francisco Department of Public Health, 25 Van Ness Ave, Suite 500, San Francisco, CA 94102, Phone: 415-437-6282, E-mail: phillip.coffin@sfdph.org.