

# Syringe Services Programs (SSPs) Assessing Local Injection Drug Use

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## Tools and Resources

Effective programs are based on an understanding of the extent of injection drug use in the community, who is injecting drugs, which drugs are being used, and the key risk behaviors among persons who inject drugs (PWID) related to transmission of HIV, viral hepatitis, and other blood-borne infections (e.g., type of injection equipment shared). Information is also needed on potential barriers and motivators to engaging PWID in SSPs. Because non-medical injection drug use is illegal, and PWID are a highly stigmatized and marginalized population, local data on injection drug use are often limited. However, triangulating data from multiple data sources may be useful in providing a more complete picture of injection drug use in a community that may not be possible to obtain with a single data source. Data may come from national and local surveillance systems, health and prevention service providers, law enforcement, published research findings, and local reports, surveys, or social or ethnographic community data.

Below are examples of national and local data sources, publications and other resources that may be used in assessing local injection drug use. Resources are organized into four tables: (1) Examples of National and Local Data Sources; (2) Examples of National and Local Data Sources Available Locally; (3) Example Surveillance Reports and Publications; and (4) Guides, Reports, Surveys, or Social or Ethnographic Community Data. The types of data and resources used in assessing local injection drug use may differ by availability, quality, and relevance of the data in the local setting. In most circumstances, data available locally (see Table 2, Examples of National and Local Data Sources Available Locally at Request) will be most relevant and timely. For example, characteristics of admissions for substance use disorder treatment are available at the national and state levels through public access on the Substance Abuse and Mental Health Services Administration (SAMHSA) web site; however, program managers in state health departments who report these data to SAMHSA will likely be able to provide data for more recent time periods and smaller geographic areas, that may include additional variables not required for SAMHSA reporting. Furthermore, in assessing local injection drug use, indicators that are more directly associated with drug injection (e.g., treatment admissions, arrests for drug injection paraphernalia, syringe service programs, overdose deaths) should be prioritized and indicators of more upstream events potentially leading to drug injection (e.g., prescribing and dispensing practices of controlled prescription drugs) may be examined as additional supporting evidence.

*Disclaimer:* The resources presented in this document do not all constitute official Centers for Disease Control and Prevention (CDC) advice and may not represent the views of CDC or the U.S. Department of Health and Human Services (HHS), nor does this document provide a comprehensive review of all relevant resources available.

**Table 1: Examples of National, State and Local Data Sources**

Name	Description	Web Link
Substance Abuse and Mental Health Services Administration (SAMHSA), Treatment Episode Data Set (TEDS)	Information collected by States from local alcohol and substance use disorder treatment facilities and reported to SAMHSA to characterize admissions to alcohol and drug treatment. Data include demographic and drug history information about individuals admitted to treatment. State level estimates are available through the online "Quick Statistic Tables" page on the SAMHSA.gov web link; estimates at lower geographic units can be obtained through the "Online Analysis & Public Use Files/SAMHDA" page.	<a href="http://www.samhsa.gov/data/client-level-data-teds">http://www.samhsa.gov/data/client-level-data-teds</a>
SAMHSA, National Survey on Drug Use and Health (NSDUH)	Annual survey of prevalence, patterns, and consequences of drug and alcohol use and abuse in the general U.S. civilian non-institutionalized population age 12 and over. Available data include demographic and drug use characteristics among participants. National and state level estimates are available.	<a href="http://www.samhsa.gov/data/population-data-nsduh">http://www.samhsa.gov/data/population-data-nsduh</a>

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CDC, Youth Risk Behavior Surveillance System (YRBSS)	National school-based survey conducted by CDC and state, territorial, and tribal governments, and local education and health agencies. Monitors health-risk behaviors and includes a question on ever injected any illegal drug (used a needle to inject any illegal drug into their body one or more times during their life). National, and select state, district, territorial, and tribal government results are available.	<a href="http://www.cdc.gov/healthyyouth/data/yrebs/">http://www.cdc.gov/healthyyouth/data/yrebs/</a>
CDC, National Center for Health Statistics (NCHS)/National Vital Statistics System (accessible through Wide-ranging Online Data for Epidemiologic Research [WONDER])	Provides data on vital events (births, deaths, marriages, divorces, and fetal deaths). For help abstracting drug overdose (poisoning) data from CDC WONDER's Multiple Cause of Death file, two guidance documents found on CDC's website can be consulted: 1) Guide to CDC WONDER multiple cause of death query system ( <a href="http://www.cdc.gov/drugoverdose/pdf/pdo_wonder_guide_mcod_dataset-a.pdf">http://www.cdc.gov/drugoverdose/pdf/pdo_wonder_guide_mcod_dataset-a.pdf</a> ), and 2) Guide to ICD9-CM and ICD10 Codes Related to Poisonings and Pain, version 1.3 ( <a href="http://www.cdc.gov/drugoverdose/pdf/pdo_guide_to_icd-9-cm_and_icd-10_codes-a.pdf">http://www.cdc.gov/drugoverdose/pdf/pdo_guide_to_icd-9-cm_and_icd-10_codes-a.pdf</a> ). See Table 3 for Underlying Cause Codes and Multiple Cause Codes (T-codes) for specific drugs and/or drug categories. For drug overdose deaths, all intents, you will use Underlying Cause Codes X40-44, X60-64, X85, and Y10-Y14. You may also optionally include T-codes for specific drugs, e.g., T40.1 for heroin. National, state, and county data are available subject to suppression rules. State and county-level drug-specific overdose death rates should not be compared due to variability in the specificity of drugs implicated in a death across jurisdictions.	<a href="http://wonder.cdc.gov/">http://wonder.cdc.gov/</a>
Healthcare Cost and Utilization Project (HCUP): State Inpatient Databases (SID)	Family of databases developed through a Federal-State-Industry partnership that contain encounter-level, clinical, and nonclinical information, including all-listed diagnoses and procedures, discharge status, patient demographics, and charges for all patients. The SID capture hospital inpatient stays in a given State. A number of States make their SID files available (1990-2013) for purchase through the HCUP Central Distributor. If purchasing state-level HCUP data from the HCUP Central Distributor is not an option, a jurisdiction may alternatively contact their respective state agency for hospital discharge data files, which may be more accessible and timely. Examples of variables that may be useful include: CM_DRUG (AHRQ comorbidity measure, drug abuse). Select state-level data are available.	<a href="http://www.ahrq.gov/research/data/hcup">http://www.ahrq.gov/research/data/hcup</a>  Some state-level HCUP data are also available through an online query system, HCUPnet, at <a href="http://hcupnet.ahrq.gov/">http://hcupnet.ahrq.gov/</a> . The user can query specific diagnostic codes, e.g., endocarditis (ICD-9-CM 421.0), to obtain number of discharges for diagnoses associated with injection drug use.

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Healthcare Cost and Utilization Project (HCUP), State Emergency Department Databases (SEDD)	Captures emergency visits at hospital-affiliated emergency departments (EDs) that do not result in hospitalization. Information about patients initially seen in the ED and then admitted to the hospital is included in the State Inpatient Databases (SID). The SEDD files include all patients, regardless of payer. States make their SEDD files available (1999-2012) for purchase through the HCUP Central Distributor. If purchasing state-level HCUP data from the HCUP Central Distributor is not an option, a jurisdiction may alternatively contact their respective state agency for emergency department data files, which may be more accessible and timely. Select state-level data are available; thirty-two States currently participate in the SEDD.	<a href="http://www.ahrq.gov/research/data/hcup">http://www.ahrq.gov/research/data/hcup</a> Some state-level HCUP data are also available through an online query system, HCUPnet, at <a href="http://hcupnet.ahrq.gov/">http://hcupnet.ahrq.gov/</a> . The user can query specific diagnostic codes, e.g., heroin poisonings (ICD-9-CM 965.01), to obtain number of ED visits for diagnoses associated with injection drug use.
Federal Bureau of Investigation (FBI), Uniform Crime Reports	Since 1930, the Federal Bureau of Investigation (FBI) has compiled the Uniform Crime Reports (UCR) to serve as periodic nationwide assessments of reported crimes not available elsewhere in the criminal justice system. With the 1977 data, the title was expanded to Uniform Crime Reporting Program Data. Each year, participating law enforcement agencies contribute reports to the FBI either directly or through their state reporting programs. National and state data are available.  Uniform Crime Reports may also be accessed via the Inter-university Consortium for Political and Social Research (ICPRS). The county-level data provide counts of arrests and offenses aggregated to the county level. County populations are also reported.	<a href="https://www.fbi.gov/about-us/cjis/ucr/ucr">https://www.fbi.gov/about-us/cjis/ucr/ucr</a> Table 69 presents drug abuse violations by State: <a href="https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/tables/table-69/table_69_arrest_by_state_2013.xls">https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/tables/table-69/table_69_arrest_by_state_2013.xls</a>  <a href="http://www.icpsr.umich.edu/icpsrweb/ICPSR/series/57">http://www.icpsr.umich.edu/icpsrweb/ICPSR/series/57</a>
National Forensic Laboratory Information System (NFLIS)	The Drug Enforcement Agency (DEA) systematically collects results from drug chemistry analyses conducted by state and local forensic laboratories. As a national drug forensic laboratory reporting system, NFLIS provides timely and detailed analytical results of drugs seized by law enforcement. It is a unique source of information for monitoring and understanding drug abuse and trafficking in the United States, including the diversion of legally manufactured drugs into illegal markets. Crime laboratory data can provide information on the proportion of items seized and analyzed that test positive for drugs typically injected, e.g., heroin. National, state, and county data are available and may be requested through the DEA or a participating local forensic laboratory.	<a href="http://www.deadiversion.usdoj.gov/nflis/">http://www.deadiversion.usdoj.gov/nflis/</a>
CDC, Web-based Injury Statistics Query and Reporting System (WISQARS™)	An interactive, online database that provides fatal and nonfatal injury data, including drug poisonings and adverse drug effects. National and state data are available.	<a href="http://www.cdc.gov/injury/wisqars/">http://www.cdc.gov/injury/wisqars/</a>

**Table 2: Examples of National and Local Data Sources Available Locally at Request**

Name	Description	Comments
HIV Surveillance System	Provides HIV and AIDS diagnosis data collected by State health departments. Diagnosis reports include information on mode of transmission, including injection drug use.	For all data sources listed in this table, refer to appropriate state/ local program coordinators and/ or data managers for information on obtaining data and availability by geographic level. In most circumstances, data available locally will be most relevant to the local settings, may include additional variables not required for reporting at the national level, and may be available for more recent time periods.
National Notifiable Disease Surveillance System (NNDSS)	Provides National Electronic Disease Surveillance System (NEDSS) standards, tools, and resources to support reporting jurisdictions – state, local, territorial, and tribal health departments – to help them implement integrated and interoperable public health surveillance systems. For viral hepatitis, NNDSS has contained case reports for acute hepatitis C virus (HCV) infections on rotating annual cycles since 1994 and for past and present HCV infection since 2003. The amount of demographic and risk behavior collected by NNDSS for acute cases, including injection drug use, varies by state.	
Syringe services programs	Provide program data on the local population of PWID enrolled in SSPs, including their drug injection practices and service needs. Program monitoring data is often collected on ongoing basis, thus may provide information on changes over time in key characteristics of local PWID. SSP data however may vary in scope, completeness and quality across programs.	
State treatment admissions data	Reflects information collected by States from local alcohol and substance use disorder treatment facilities characterizing the admissions to such facilities. Data include demographic and drug history information about individuals admitted to treatment as well as changes in treatment admissions. Unlike the SAMHSA TEDS database, data may be available for more recent years at the State level.	
State or county arrest records	Provides arrest data for drug and drug paraphernalia possession that may be available from local law enforcement agencies.	
State Vital Statistics System	Provides data collected by jurisdictions on vital events, including death certificate.	
State or county medical examiner/coroner files	Provides data collected by local medical examiner/ coroner on drug overdose deaths.	
State emergency department surveillance and EMS systems	Provides data from local emergency systems that may include drug-related health outcomes, including drug overdose.	
State hospital discharge data	Contains hospital discharge data collected by States that may be used to identify drug injection related hospital care, including drug overdose, endocarditis, soft and bone tissue infections.	

**Table 2: Examples of National and Local Data Sources Available Locally at Request**

Community poison control data	Reflects information on potential poison exposures reported to local poison centers, free, confidential hotlines, including data on prescription drug and heroin overdoses.	
Prescription drug monitoring programs (PDMPs)	<p>State-run electronic databases used to track the prescribing and dispensing of controlled prescription drugs to patients. PDMPs are designed to monitor this information for suspected abuse or diversion (i.e., channeling drugs into illegal use). PDMPs are housed in different statewide regulatory, administrative or law enforcement agencies and the housing agency may vary by state. PDMP data are distributed to authorized individuals under state law. There is considerable variability across states in PDMP procedures and practices, including the data PDMPs collect, data quality assurances, analyses and reports that may be produced, and to which users and under what conditions data may be available. Contact your state PDMP to assess whether it is feasible to use these data for documenting local drug abuse patterns and trends.</p> <p>Additional information may also be found at: <a href="http://www.deadiversion.usdoj.gov/faq/rx_monitor.htm">http://www.deadiversion.usdoj.gov/faq/rx_monitor.htm</a>  <a href="http://www.pdmpexcellence.org/sites/all/pdfs/Brandeis_PDMP_Report.pdf">http://www.pdmpexcellence.org/sites/all/pdfs/Brandeis_PDMP_Report.pdf</a></p>	

**Table 3: Example Surveillance Reports and Publications**

Name	Description	Web Link
CDC, ATLAS	An interactive platform for accessing data collected by CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP). Currently, the Atlas provides interactive maps, graphs, tables, and figures showing geographic patterns and time trends of HIV, AIDS, viral hepatitis, tuberculosis, chlamydia, gonorrhea, and primary and secondary syphilis surveillance data. This tool provides trends in overall (all modes of transmission categories combined) by county. Trends in cases for the injection drug transmission category are provided by State.	<a href="http://www.cdc.gov/NCHHSTP/Atlas/">http://www.cdc.gov/NCHHSTP/Atlas/</a>
CDC, National HIV Behavioral Surveillance (NHBS)	Provides data on HIV-related risk behaviors, including injection drugs use, HIV testing, and use of HIV prevention services. NHBS has been conducted in rotating annual cycles since 2003 in three different populations at high risk for HIV infection recruited in 20 cities in the U.S., including persons who inject drugs. Health Departments participating in NHBS have access to their local data.	<a href="http://www.cdc.gov/hiv/statistics/systems/nhbs">http://www.cdc.gov/hiv/statistics/systems/nhbs</a>
Suryaprasad AG, White JZ, Xu F, et al. (2014) Emerging epidemic of hepatitis C virus infections among young nonurban persons who inject drugs in the United States, 2006–2012. Clin Infect Dis;59:1411–9.	This article demonstrates national increases in acute hepatitis C infection in young persons throughout the U.S., with a particular concentration east of the Mississippi river. These data indicate an emerging epidemic of HCV Infection among young, white persons residing in non-urban areas.	<a href="http://www.ncbi.nlm.nih.gov/pubmed/25114031">http://www.ncbi.nlm.nih.gov/pubmed/25114031</a>

**Table 3: Example Surveillance Reports and Publications**

<p>CDC. (2015) Increases in Hepatitis C Virus Infection Related to Injection Drug Use Among Persons Aged ≤30 Years — Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012. <i>MMWR</i>; 64(17);453-458.</p>	<p>This report highlights significant increases in cases of acute HCV infections identified among persons aged ≤30 years in Kentucky, Tennessee, Virginia, and West Virginia at the same time as treatment admissions for opioid dependency increased across the four states. These increases indicate a strong correlation among opioid abuse, drug injecting, and HCV infection in these four Appalachian states.</p>	<p><a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6417a2.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6417a2.htm</a></p>
<p>CDC. (2008) Use of Enhanced Surveillance for Hepatitis C Virus Infection to Detect a Cluster Among Young Injection-Drug Users --- New York, November 2004--April 2007. <i>MMWR</i>; 57(19);517-521.</p>	<p>Is one of the earliest reports to identify a high number of new HCV Infections among persons ≤30 years to injection drug use. This outbreak occurred in Long Island, NY between 2004 and 2007. The authors call for more enhanced surveillance to identify additional clusters and outbreaks of HCV infection where IDU is widespread.</p>	<p><a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5719a3.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5719a3.htm</a></p>

**Table 4: Guides, Reports, Surveys, or Social or Ethnographic Community Data**

Name	Description	Web Link
<p>National Institute on Drug Abuse (NIDA), Community Epidemiology Work Group (CEWG) (1976-2014) and National Drug Early Warning System (NDEWS) (2015-present)</p>	<p>Synthesizes available data describing the epidemiology of drug use for both the country and participating metropolitan areas. Data include drug abuse indicator data, findings from surveys, and other quantitative information compiled from local, State, and Federal sources. Data are enhanced with qualitative information obtained from ethnographic research, focus groups, and other community-based sources.</p>	<p><a href="http://www.drugabuse.gov/about/organization/CEWG/CEWGHome.html">http://www.drugabuse.gov/about/organization/CEWG/CEWGHome.html</a> <a href="http://www.ndews.org/">http://www.ndews.org/</a></p>
<p>World Health Organization (WHO). (1998) Rapid Assessment and Response Guide on Injection Drug Use (IDU-RAR).</p>	<p>Provides guidance for conducting a rapid assessment of injection drug use, including the extent, nature and diffusion of injection drug use, extent of HIV and other adverse health consequences, and risk behaviors. The rapid assessment also aims to identify and initiate effective interventions to reduce adverse health consequences associated with injection drug use.</p>	<p><a href="https://www.unodc.org/documents/hiv-aids/IDU%20rapid%20ass.%20and%20resp.%20guide.pdf">https://www.unodc.org/documents/hiv-aids/IDU%20rapid%20ass.%20and%20resp.%20guide.pdf</a></p>
<p>HIV/STD Program, Maine Bureau of Health. (2003) HIV Prevention and Injection Drug Use in Maine – A Statewide Needs Assessment.</p>	<p>Presents an assessment of the HIV prevention needs of PWID in Maine. The purpose of the assessment was to describe the scope of injection drug use in Maine and to identify the HIV prevention needs of PWID in Maine. Data from multiple existing sources were triangulated with information from interviews with key community stakeholders, including service providers for PWID and current and former PWID.</p>	<p><a href="http://www.maine.gov/dhhs/mecdc/phdata/non-dhp-pdf-doc/hiv-prevention-and-injection-drug-use-in-maine-a-state-need.pdf">http://www.maine.gov/dhhs/mecdc/phdata/non-dhp-pdf-doc/hiv-prevention-and-injection-drug-use-in-maine-a-state-need.pdf</a></p>
<p>U.S. Department of Health and Human Services (HHS). (2013). Hepatitis C Virus Infection in Young Persons Who Inject Drugs. Consultation Report, February 26-27, 2013.</p>	<p>Summarizes a meeting that brought together federal partners, health de-partment officials, researchers, staff of community-based organizations, and other stakeholders to explore the complex factors influencing the HCV epidemic and to prioritize surveillance initiatives and epidemiology, prevention interventions, and research questions to more effectively target efforts to reduce new HCV infections among young persons who inject drugs in the United States.</p>	<p><a href="https://www.aids.gov/pdf/hcv-and-young-pwid-consultation-report.pdf">https://www.aids.gov/pdf/hcv-and-young-pwid-consultation-report.pdf</a></p>