

**National HIV Behavioral Surveillance (NHBS):
People Who Inject Drugs (PWID)**

NHBS-PWID2022 Formative Assessment Manual



**Behavioral Surveillance Team
NCHHSTP/DHP/BCSB**

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1

Formative Assessment Overview

1.0 Overview

The purpose of this document and the accompanying *NHBS-PWID2022 Formative Assessment Workbook* is to provide NHBS project areas with information *specific to the formative assessment process for the NHBS-PWID2022 cycle*, including the expected products and timelines. This document should be used alongside the *Formative Assessment Approach and Methods in NHBS* document which provides in-depth information about the overall approach to conducting formative assessment in NHBS and data collection methods.

1.1 Goals & Objectives of Formative Assessment for PWID2022

Goals

- Describe HIV epidemiology and prevention efforts among populations being surveyed
- Engage the PWID community and its partners
- Inform NHBS respondent-driven sampling (RDS) sampling and operations for PWID

Objectives

- Describe the social, demographic, and peer network characteristics of PWID.
- Garner the support of the PWID community and its partners.
- Identify potential “seeds,” or initial recruits, for RDS, and their willingness to use peer recruitment.
- Identify local injection drug use patterns.
- Obtain information needed for conducting field operations (e.g., accessible field site locations(s), ideal hours of operation, on-site remote interviewing, in-person HIV testing, and appropriate staff).
- Identify potential barriers to peer recruitment and participation among PWID and develop solutions to address them.
- Develop questions of local interest for HIV prevention among PWID.
- Develop a plan to monitor operations and recruitment through ongoing formative assessment.

1.2 Operational Considerations

Below are key operational considerations for formative assessment for the PWID2022 cycle.

Recruitment. Respondent-driven sampling (RDS) is used to recruit PWID in NHBS. RDS operations include in-person field sites, scheduling appointments to complete NHBS activities, and check-in/out with the Coupon Manager.

Interview. Interviews will occur on-site in field sites. To avoid prolonged close in-person contact, project areas should plan for interviews conducted remotely with the participant on-site in a private space with project equipment, and the interviewer in a separate location using video conferencing to complete the interview. Standard in-person interviews may be allowable should COVID-19 context allow and with CDC Project Officer (PO) approval.

HIV Testing. Testing will occur in-person at field sites on the same day as the interview. Testing will be done through a blood-based rapid-rapid algorithm.

COVID-19 Precautions for Formative Assessment. Project areas should adhere to local, state, and federal COVID-19 guidance and recommendations to plan and implement formative assessment, including which formative methods to use. For example, focus group interviews should be used with caution if in-person meetings are not possible given the potential difficulty of logistics and ensuring confidentiality during remote focus groups. Information on remote interviewing and implications for data security can be found in *NHBS-MSM2021 Remote Interviewing Guidance* and adapted for formative assessment as needed. Note that accommodations to facilitate formative interviews are likely necessary for interviewing community key informants (i.e., people who inject drugs), if they do not have access to personally owned computers or cellphones, or a private space to complete the interview.

2

Formative Assessment Products

2.0 Overview

As part of the formative assessment process, project areas are required to submit the products below to document timelines, formative assessment plans and findings. The purpose and content of each of these documents is described in this section. Models for these products are provided in the NHBS-PWID2022 Formative Assessment Workbook that accompanies this Manual as noted in the table below.

Product	Brief Description	Workbook Worksheet(s)	Due to CDC Project Officer
Implementation Timeline	Timeline of all major cycle milestones and benchmarks that need to be completed to start survey data collection on time. The timeline is updated as needed throughout the planning stage.	1	January 21
Description of Local HIV Epidemiology Report	Summary tables that provide the local HIV context and a description of key implications for planning formative assessment and survey data collection.	2-10	February 11
Formative Assessment Data Collection Plan	Table that outlines project area plans and methods for formative assessment.	11	February 18
Formative Assessment Tools	Package of materials used during formative assessment including consent forms, interview guides, and community engagement materials	N/A	TBD-To be proposed by project area in consultation with PO
Formative Assessment Report	Set of tables focused on results of formative assessment and recommendations for survey data collection.	12 and 10 (updated)	April 22

Note: CDC requires two weeks to review all documents.

2.1 Implementation Timeline

The implementation timeline should present all activities conducted in preparation for field operations to help project areas plan and manage the process and initiate survey data collection on time. [Worksheet 1](#) of this manual contains a model Implementation Timeline for NHBS-PWID2022 that project areas can customize for local use.

The timeline should show the period when tasks will be performed and the dates when they will be completed. Project areas should include each formative assessment tool (e.g., professional key informant guide, observation tool) on a separate row in the timeline with a corresponding completion date (within 2 weeks of the formative assessment data collection plan submission). The timeline should also include any other tasks that may impact formative assessment or preparation for operations, especially those tasks that have delayed the start of survey data collection in the past (where applicable). If the timeline is modified after submission, project areas should discuss the needed changes with their CDC PO and submit a revised timeline.

2.2 Description of Local HIV Epidemiology Report

The Description of Local HIV Epidemiology provides information illustrating the HIV transmission and prevention context for NHBS. This product includes a set of tables described in more detail below; models can be found in the [Worksheets 2-10](#).

Project areas can customize each table to add other demographic and socioeconomic variables or information important to their principal city. Other tables not required may also be included as applicable (e.g., drug overdose data- see [Appendix A](#) for potential additional data sources). References should be provided for the sources of all data included in the Local HIV Epidemiology Report.

2.2A Data Tables

Data tables summarize information from secondary data sources including US Census data for the adult population residing in each principal city of the funded MSA or MSA Division, HIV surveillance data overall and for PWID, and data from previous NHBS cycles among PWID or other local research surveys. The list of data tables is below and model table shells that project areas can use to develop these tables are included in [Worksheets 2-6](#).

Data for new HIV diagnoses in [Worksheets 3-4](#) should be restricted to those HIV cases that were reported through December 2021 and were newly diagnosed with HIV between January 2016 and December 2020. If possible, cases should be adjusted for reporting delays and cases that do not have a known HIV transmission category should be adjusted using the multiple imputation (MI) method developed by CDC's HIV Surveillance Branch or a redistribution method developed by the local health department.

- Characteristics of the adult population in MSA or MSA Division
- New HIV diagnoses among adults in MSA or MSA Division
- New HIV diagnoses among PWID in MSA or MSA Division
- HIV-positive test results and HIV prevalence among PWID in previous NHBS cycles and [other local studies] in MSA [*If applicable*]

- Characteristics of PWID in previous NHBS cycles in [principal city, MSA or MSA Division] [*if applicable*]

2.2B Descriptive Tables

Descriptive tables provide a structure to summarize key contextual information to understand the local HIV policy landscape, prevention and social service programs. Additional information is provided below, and model table shells are included in the [Worksheets 7-10](#).

- HIV Policy Landscape
- Syringe Services Program (SSP) Table
- Key HIV and PWID Community Partners

HIV Policy Landscape. This table includes key policies which impact HIV prevention in the area, either directly (e.g., impacting service provision) or indirectly (e.g., promoting stigma), as well as those which may impact participation in NHBS. Examples include HIV criminalization laws, drug paraphernalia laws, HIV testing policies, SSP authorization, legal protections for sexual minorities related to employment non-discrimination, among others. Policy information specific to SSPs has been collected by the Policy Surveillance Program and can be found here: [Syringe Service Program Laws \(lawatlas.org\)](http://lawatlas.org).

Characteristics and Services of Syringe Services Programs (SSP) in the MSA. This table describes the SSPs in the MSA, both sanctioned and unsanctioned (as appropriate). Project areas will include information on service provision and other relevant and available data points. Program information should be gathered through contacts at SSPs. Project areas should consider adding tables or information on specific SSP-level data when it is available (e.g., # of syringes dispensed, client demographics). Project areas may also consider including information from surrounding MSAs, where relevant. Some descriptive information about many SSPs can be found here: <https://nasen.org/map/>.

Key HIV and PWID Community Partners. This table should present information about the community partners who have interest in programs for PWID and HIV prevention. The list should include organizations/people both with and without a defined relationship with the project area. This table should result in a list of potential professional key informants (PKIs) and characteristics of community key informants (CKIs) as well as partners who may be interested in NHBS findings. Names of CKIs, if collected, should never be included in the table or any other document submitted to CDC.

2.2C Summary Table

Overall Key Findings and Implications for NHBS. This table summarizes key findings which could inform or impact any part of the NHBS process, including formative assessment, NHBS survey data collection, or community engagement and should be grouped by formative assessment goal. Sample findings may relate to (among other issues):

- How drug paraphernalia laws and other enforcement activities may impact participant willingness to disclose injection drug use or attend specific field site locations.

- Whether changing socio-economic factors in an area may shift PWID activities (e.g., locations where PWID purchase drugs).
- How robust the HIV prevention community is in the area (e.g., number of service providers/CBOs, clinics, planning councils).

Findings from this table should inform the development of the Formative Assessment Data Collection Plan presented in the next section. A model table is included in the [Worksheet 10](#).

2.3 Formative Assessment Data Collection Plan

Project areas must develop a plan for formative assessment data collection that identifies:

- 1) the most important gaps in knowledge for data collection in the field, including implementation of RDS among PWID, interviewing and HIV testing
- 2) the formative assessment methods and data sources they will use to collect the information (e.g., key informant interviews, focus groups, observations, and brief intercept surveys).

The plan will inform the development of the formative assessment documents (listed in the following section) and should be discussed with the project area's CDC PO during regular calls. PO approval of the plan is required prior to primary data collection activities. Some formative assessment documents may need to be developed before the formative assessment plan depending on local IRB processes which should be discussed with the project area's CDC PO. [Worksheet 11](#) provides a model formative assessment plan. Formative assessment methods are discussed in detail in the *Formative Assessment Approach and Methods in NHBS* document.

2.4 Formative Assessment Tools

Formative Assessment Tools include all documents that are part of the IRB submission (if applicable) for formative assessment, and/or those that will be used with participants. These should be submitted to the CDC PO for review prior to IRB submission (if applicable). These may include:

- Consent Forms for the types of interviews implemented: PKI/CKI/Focus Group (see the *NHBS Round 6 Model Surveillance Protocol*)
- Brief Intercept Survey Forms
- Observation Forms
- Interview Guides for the types of interview implemented: PKI/CKI/Focus Group ([Appendix B](#) provides sample questions)
- Formative Assessment Recruitment Materials

2.5 Formative Assessment Data Report

The Formative Assessment Data Report summarizes key findings from the formative assessment activities and outlines their implications for NHBS operations. To fulfill this deliverable, project areas will submit a package of tables with all the formative assessment information. This includes the following informational tables:

Formative Assessment Final Methods. Include information about the specific methods that were used during formative assessment (e.g., PKI, CKI, focus groups, observations, BSIs), along with the relevant demographic data about the participants. **Worksheet 12** provides a model template.

Updated Overall Key Findings and Implications for NHBS. Update the table (**Worksheet 10**) with additional data gathered during formative assessment. Project areas should ensure that all information is complete and comprehensive, and that the table includes all the key information learned from formative assessment and how it impacts NHBS, including survey data collection, testing and ongoing formative assessment.

3 Focus Areas Specific to RDS and Remote Data Collection

3.0 Overview

Formative assessment is key to informing implementation of RDS. It provides essential insight information necessary to implement RDS. This includes:

- Understanding characteristics of the peer networks of the local population of PWID
- Identifying necessary characteristics for seeds
- Identifying of optimal field site locations and operations
- Garnering community support for NHBS

3.1 Peer Networks

In NHBS, a “peer network” is defined as the group of people that a person knows in the project area. A person’s peer network is composed of friends, relatives, sex and drug use partners, and other people with whom the person associates. In NHBS-PWID, people in a person’s peer network must also inject drugs. Primary data can provide insight into the characteristics of the peer networks of the population of interest, which is critical to understanding how RDS sampling is likely to proceed and how recruitment can be optimized to enroll a representative sample from the population of interest. For example, in one city, members of the PWID population interact as a single peer network, while in a second city, members of the PWID population form two separate peer networks that rarely interact with each other. In the second city, project staff would have to recruit seeds from both peer networks in order to efficiently reach the entire PWID population. They would also have to ensure that their field site is equally accessible to members of both peer networks. Alternatively, they could set up two field sites, with one field site readily accessible to members of one peer network and the other field site readily accessible to members of the other peer network.

Project areas can learn about peer networks by asking key informants and focus group participants about the characteristics of their social connections; and by asking key informants and focus group participants where they go to work, shop, socialize, and buy and use drugs. These places may be in person or virtual.

The locations where these activities occur can play an important role in shaping peer networks when segments of the population of interest are geographically isolated from one another. When people who live in different areas of the city go to the same areas to work, shop, socialize, or buy and use drugs, they increase the likelihood that they will meet and interact with one another. This, in turn, increases the likelihood that they will recruit one another to participate in NHBS. On the other hand, when people who live in different areas of the city work, shop, socialize, and buy and use drugs solely in their own communities, they decrease the likelihood that they will meet and interact with people from other areas. As a result, they will be less likely to recruit one another to participate in NHBS.

3.2 Seeds

There are multiple criteria to consider when identifying initial recruits, or seeds, in RDS (see Chapter 4 of the *NHBS Round 6 Model Surveillance Protocol*). Ideal seeds are dynamic individuals who are extremely knowledgeable about the population of interest, well-connected to it, and have a vested interest in its well-being. They should also have network ties to the major sub-populations in the project area. Since seeds are the initial recruiters in RDS, it is essential that they be highly motivated to provide support for the project and encourage others to participate. Selecting effective and well-connected seeds facilitates recruitment and promotes longer recruitment chains which help reduce bias in the sample.

During formative assessment, project areas should identify the demographic characteristics of individuals with network ties to the important sub-populations (e.g., young PWID) and choose seeds with those characteristics. Usually, seeds are selected from a variety of sub-populations. However, with strong justification and CDC PO approval, project areas may choose to select most, or all, of their seeds from a single sub-population if that sub-population is relevant to the local HIV epidemic, was underrepresented in previous NHBS cycles (as applicable), and is networked to the broader PWID population (i.e., has weak homophily).

Project areas can identify their seeds during formative assessment through key informant interviews, focus groups, and brief intercept surveys. After explaining the RDS methods and the seed criteria, project areas can ask interviewees if they could refer potential seeds to the project or if they would be interested in being a seed themselves.

In addition to using the referral card (see **Chapter 5** of the *NHBS-IDU5 Operations Manual*), formative assessment participants identified as potential seeds may be offered the option to provide a phone number to NHBS project staff so they can be re-contacted at the beginning of data collection to schedule their interview. This option could only be offered permitting local policy and necessary approvals (e.g., from the IRB). Contact information will need to be securely stored in a locked cabinet without any additional identifying information such as a name, and it will need to be kept separate from any formative data collected on the individual. A sample contact form that can be used to store the information is shown in **Figure 1**. If project areas choose to use this method of contact, they should work with their PO to get approval of their data security and confidentiality plans for securing the phone numbers. All phone numbers for potential seeds must be discarded prior to data collection so that no survey data can be linked to their phone numbers. Note that collecting contact information is limited to potential seeds and does not apply to other NHBS participants.

Figure 1. Sample contact form for potential seed participants

Seed Contact Form	
	Project Staff Name: _____
	Interview Location: _____
Phone #: _____	
Okay for us to identify ourselves as [Project Name] when we make the phone call?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Okay for us to text you at this phone #?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Unless we are instructed otherwise, our standard message is: <i>Example: Hello, this is (staff member's name) from [Project Name] contacting you to schedule an appointment for your interview. Please call [or text] me back at XXX-XXX-XXXX between 10:00 AM and 4:00 PM on Monday through Friday. Thanks and have a great day.</i>	
[If calling only] If no one answers, is it okay to leave this message on voicemail or an answering machine?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Add any additional instructions (no identifying information): _____	

3.3 Field Site Logistics and Operations

Field operations for PWID2022 will prioritize COVID-19 safety of project staff and participants. Project areas will operate out of field site(s) like an office or a van parked at a specific location. Project areas should plan for implementing onsite remote interviews, in which the participant completes the interview at a safe, private space in the field site using project equipment, while the interviewer is in separate location. Should COVID-19 recommendations allow in-person interviews, this could be discussed with your PO.

Project areas must select field sites that are readily accessible to all members of the PWID population. The locations of field sites should not create a barrier to participation for any sub-populations, especially those sub-populations that have been underrepresented in previous cycles (e.g., young PWID). Project areas should ask members of the PWID population which days and hours of operation would be most convenient for them to participate in an interview. Project areas should conduct interviews at a variety of times to accommodate PWID who work or are busy during those times. Project areas should also determine whether potential participants will be allowed to “walk-in” to be interviewed anytime during operating hours, and how to provide incentives remotely.

Project areas will also need to assess what is feasible, safe, and acceptable for HIV testing. For example, project areas will need to identify whether DBS can be safely collected. Project areas

will also want to collect information on how to ensure acceptance of their methods and operations.

When assessing the suitability of field sites, project areas should consider the following questions:

Is the field site accessible, safe, and appropriate for the PWID population? Project areas should investigate whether there are any barriers that would keep PWID or specific sub-populations from coming to the field site. For example, can all members of the PWID population easily access the field site using public transportation? Project areas should determine if the community (residents, local businesses, law enforcement, etc.) around the field site is accepting and welcoming of PWID and NHBS activities. A field site must also be safe for both the participants and the project staff.

An appropriate field site will not bias the sample of participants. Therefore, a field site should not be located in a facility that primarily or exclusively provides a specific service to PWID, such as medical or mental health care, HIV or STD testing, HIV care or prevention, or drug treatment or prevention. A facility that exclusively provides social services to PWID is also not appropriate. Based on previous RDS studies, it is likely that placing a field site in a facility that provides a specific service to the population of interest would bias the sample toward those who receive that service. For example, a field site in an HIV clinic would likely bias the sample toward HIV-positive participants. On the other hand, a field site may be located in a facility that provides a vast array of services since it is not likely that the sample would become biased toward those who receive any one particular service.

What is the proper number of field sites? While there should be a sufficient number of field sites so that all members of the PWID population have access to a field site, there should not be too many field sites that the chance of cross-recruitment of participants between field sites is reduced. When there is no cross-recruitment of participants between field sites, separate RDS samples are generated at each field site, which is very challenging to analyze. Based on experience from previous NHBS cycles and other RDS studies, project areas should operate as few field sites as are necessary to reach the sub-populations that are most important to the local HIV epidemic or that have been underrepresented in previous NHBS cycles.

What are the ideal logistics for field site operations? Project areas should ask members of the PWID population which days and hours of operation would be most convenient for them to go to the field site for an interview. Field sites should be open outside normal business hours at least one day per week to accommodate PWID who work or are busy during those times. Project areas should also determine whether PWID would prefer to set up appointments to be interviewed or to walk-in to be interviewed anytime during operating hours.

Are special accommodations necessary? A field site should meet the needs of the participants. For instance, implementing COVID-19 precautions such as on-site remote interviews.

Appendix A: Sample Sources of Data for Additional Tables

Data Sources	Description	Data Contents	Web link
The Policy Surveillance Program	A cross-sectional dataset that presents state-level statutes and regulations that impact SSPs in effect as of August 1, 2019.	The map identifies the method of authorization for SSPs, requirements for the establishment of SSPs, the types of services provided directly and by referral, drug paraphernalia possession laws, and whether an SSP is operating in the jurisdiction.	Syringe Service Program Laws (lawatlas.org)
North America Syringe Exchange Network (NASEN)	A regularly updated directory of SSPs who have authorized NASEN to publish their information solely for NASEN directory purposes. It is not, nor is it intended to be, a comprehensive listing of all SSPs in the United States.	Directory of SSPs (including map) which can be filtered by state, by type, and by service.	https://nasen.org/map/
National Drug Early Warning System (NDEWS) Reports	A synthesis of available data describing the epidemiology of drug abuse for both the country and participating metropolitan areas.	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. Local contacts with expertise on drug abuse could be obtained from the list of epidemiologists from sentinel sites.	http://www.ndews.org
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, non-	Demographic and drug use data among individuals.	http://www.samhsa.gov/data/population-data-nsduh

	institutionalized civilian population ages 12 years and over in the U.S.		
Treatment Episode Data Set (TEDS)	Information collected by states from local alcohol and drug abuse treatment facilities characterizing admissions to alcohol and drug treatment.	Demographic and drug history information about individuals admitted to treatment; changes in treatment admissions.	http://www.samhsa.gov/data/client-level-data-teds
Behavioral Health Treatment Services locator	Searchable database of treatment facilities in the U.S. for substance abuse/addiction and/or mental health problems.	Location of the programs in a map of the city as well as general information about each program.	https://findtreatment.samhsa.gov/locator/home
Youth Risk Behavior Surveillance System (YRBSS)	National school-based survey conducted by CDC and state, territorial, and tribal governments, along with local education and health agencies. National and select state, district, territorial, and tribal results are available.	Data on health seeking and risk behaviors, including injection drug use.	http://www.cdc.gov/healthyyouth/data/yrbss/

Appendix B Model Formative Assessment Topics and Interview Questions

Below is a list of model formative assessment topics and interview questions that project areas can use to develop interview guides and brief intercept surveys. Project areas should adapt the questions to the type of interview being conducted and to the background of the individual(s) being interviewed.

Before interviewing each source, project areas should briefly describe NHBS, including the respondent-driven sampling (RDS) method and the process of recruiting survey participants through their peer networks.

A.1 Garnering Community Support

Project areas can modify these questions for local use to identify collaborators and to identify other programs or organizations with similar research or services.

Identifying collaborators

- Who are the community leaders among **[PWID]**?
 - Do they represent any specific sub-populations? *If yes:* What sub-populations do they represent?
- Which key individuals or groups provide services to **[PWID]**?
 - Do they provide services to any specific sub-populations? *If yes:* To which sub-populations do they provide services?
- Which key individuals or groups advocate for issues affecting **[PWID]**?
 - Do they advocate for any specific sub-populations? *If yes:* For what sub-populations do they advocate?
- Which key individuals or groups could advocate for our survey?
 - Who could promote our survey among **[PWID/specific sub-population]**?
 - Who could promote our survey among community leaders, service providers, and advocates?
- What is the best way for us to gain support for our survey?
 - What is the best way for us to gain support from **[PWID/specific sub-population]**?
 - What is the best way for us to gain support from: community leaders, service providers, and advocates?
- What study findings would be beneficial to you or your organization?
 - Are there any key HIV risk or prevention topics that we should explore with local questions?
 - Are there any topics we should explore with local questions that could help with the development or evaluation of policies or programs?
 - Who would be interested in learning the findings from our survey?

Establishing collaborations

- Is your program or organization currently conducting research among ***[PWID/specific sub-population]*** in ***[project area]***?
 - *If yes:* How can we coordinate so that we are not operating in the same location at the same time?
- Does your program or organization conduct prevention outreach or provide other health care or social services to ***[PWID/specific sub-population]*** in ***[project area]***?
 - *If yes:* How can we collaborate so that appropriate referrals are provided to participants in our survey?

A.2 Learning about PWID and Sub-Populations

Project areas can modify these questions for local use to learn about demographic, peer network, and other key characteristics of PWID and specific sub-populations. This information will help project sites develop and implement NHBS methods and field operations.

Demographics

- What are the demographic characteristics of ***[PWID/specific sub-population]*** (e.g., age, race/ethnicity, gender, income, residence)?
- What specific sub-populations among ***[PWID]*** are most important to the HIV prevention efforts in ***[project area]***?
 - Are there any sub-populations that are particularly difficult to reach? What strategies have been successful in reaching them?
- How do the different sub-populations of ***[PWID]*** interact with one another (e.g., 18-29 year olds, 30-39 year olds, 40-49 year olds, 50 year old and older)?
 - *For sub-populations that do not interact:* Why not? How could this impact peer recruitment in our survey?

Peer networks

A “peer network” in the NHBS-IDU cycle is defined as the group of people that a person knows in ***[project area]*** and who ***also*** inject drugs. This includes friends, relatives, sex and drug use partners, and other people with whom the person associates.

- What are the typical demographic compositions of the peer networks of ***[PWID]***?
 - How do the demographic compositions (e.g., age groups) of the peer networks vary among different sub-populations?
- What are the typical sizes of the peer networks of ***[PWID]***?
 - How do the sizes of the peer networks vary among different sub-populations?
- How could the demographic composition (e.g., age, race/ethnicity) or size of the peer networks of ***[PWID /specific sub-population]*** impact peer-recruitment in our survey? For example, if younger and older people do not associate with one another, efforts

will be needed to ensure that younger and older seeds are selected and produce chains of peer recruits.

Drug use

- What are the major injection and non-injection drugs used by people who inject drugs in **[project area]**?
 - Are the types of drugs used different for **[specific sub-population]**?
 - What are the local terms or brand names used for different types of drugs?
 - Within the past 12 months, have there been any new brand names on the drug market?
- Where do people who inject drugs live in **[project area]**?
 - Where do **[specific sub-population]** live? Does this vary by type of drug used or demographic characteristics (e.g., younger vs. older)?
- Where do people who inject drugs buy their drugs in **[project area]**?
 - Where do **[specific sub-population]** buy drugs?
- Where do people who inject drugs use their drugs in **[project area]**?
 - Where do **[specific sub-population]** use drugs?
- Are there particular “hotspots” of drug use activity or related issues (e.g., overdoses)?
- Where do people who inject drugs obtain new, sterile needles and syringes in **[project area]**?
 - Where do **[specific sub-population]** obtain new, sterile needles and syringes?
- Are there other places than syringe exchange programs where PWID access health and social services **[project area]**?
 - Where do **[specific sub-population]** receive services?
 - How do we reach **[specific sub-population]** who do not access services directly?

Syringe exchange programs

- Do syringe exchange programs operate in **[project area]**? *If yes:* Where?
 - What are the demographic and drug use characteristics of the syringe exchange program attendees?
 - Is secondary exchange used (i.e., syringe exchange clients provide sterile syringes to people who cannot or will not attend the program) by people who inject drugs in **[project area]**? *If yes,* what are the demographic characteristics of those who receive sterile syringes in this way (e.g., age, race/ethnicity, county/city of residence)?
- What are the local and state laws prohibiting or permitting syringe exchange in **[project area]**?

Knowledge of drug injection

- What is the local terminology used to talk about drugs and drug paraphernalia in **[project area]**?
- What criteria should we use to determine if someone injects drugs or not?

- How is *[drug type]* prepared for injection? Describe the process of injecting it?
 - Have there been any recent changes in the drugs injected or how they are prepared for injection?

A.3 Exploring Field Operations

Project areas can modify these questions for local use to ensure successful field operations by assessing the feasibility of potential field site locations and hours of operation; identifying acceptable incentives for the survey and HIV test; determining ideal staff characteristics; and identifying which local prevention, health care, and social services are available for making referrals and linkages to care.

Field site locations and hours of operation

- Do you know of an appropriate office space or storefront or location where we can conduct this survey in *[project area]*?
- We're thinking of using *[proposed field site location]* as a survey site.
 - Would *[PWID/specific sub-population]* feel comfortable going there to do an interview? *If no:* Why not?
 - Is *[proposed field site location]* accessible to *[PWID/specific sub-population]*?
 - Is the area around *[proposed field site location]* safe for participants and project staff?
 - Are the people in the area around *[proposed field site location]* accepting of *[PWID/specific sub-population]*?
 - What kinds of barriers would keep *[PWID/specific sub-population]* from coming to *[proposed field site location]* for an interview?
 - What could we do to make it easier or more appealing for *[PWID/specific sub-population]* to come to this site?
 - Are there other field sites we should consider that would be more accessible for *[specific sub-populations]*?
- What days of the week and times of the day would be best for *[PWID/specific sub-population]* to go to *[proposed field site location]* to do an interview?
- Should we set up appointments for participants to do the interview or should we allow them to walk-in anytime during operating hours?

Incentives

- We will give participants an incentive for completing the survey and another incentive for taking the HIV test. The survey takes approximately 40 minutes to complete and the HIV test, 20 minutes. What would appropriate incentive amounts be for each?
- What type of incentive, like cash, Visa gift card, or retail gift card, would be most desirable to the participants?
- We are also going to give incentives to participants for recruiting their peers to come in and take the survey. What would be an appropriate incentive for recruiting another person?

- Are there other things that we could provide that would encourage people to participate (e.g., prevention materials, hygiene kits)?

Staffing

- What criteria should we consider when hiring survey staff to work with *[PWID/specific sub-population]*?
- What are the characteristics of the ideal interviewer for this project?

Names of local public health insurance programs

This information is collected to help interviewers code the types of public health insurance reported by participants.

- What are the names of the public health insurance programs that are available in *[project area]*? Are there acronyms or “street names” for these programs?

Local prevention and social services

- We provide referrals to our survey participants for a variety of HIV prevention, health care, and social services. What HIV prevention, health care, or social service information would be most helpful to provide to *[PWID/specific sub-population]*?
- We also provide linkage to HIV care and treatment services. For participants who test positive for HIV, where would *[PWID/specific sub-population]* feel comfortable going for HIV care and treatment?

A.4 Identifying and Addressing Barriers to Survey Participation

Project areas can modify these questions for local use to identify barriers to survey participation and, HIV testing, and if applicable, hepatitis testing. Whenever a primary data source identifies a barrier to survey participation, project sites should follow-up and ask the source to propose a solution to overcome that barrier.

General

- What are the barriers to *[PWID]* participating in our survey or testing for HIV?
 - What suggestions do you have for overcoming these barriers?
- Are there any barriers to survey participation that are specific to any sub-populations?
 - What suggestions do you have for overcoming these barriers?
- What challenges have you encountered when working with *[PWID/specific sub-population]*? (e.g., trust, HIV testing, incentive type or amount, field site location, community support, law enforcement)?
 - How do you think these challenges will affect the success of our survey?
 - What suggestions do you have for overcoming these challenges?
- How can we foster trust among *[PWID/specific sub-population]*?

- Do *[PWID/specific sub-population]* perceive researchers or other community outsiders differently?
- How can we motivate *[PWID/specific sub-population]* to participate in our survey?
 - What is the best way to motivate *[PWID/specific sub-population]* to recruit another person for the survey? Are there ways aside from incentives (e.g., reminder card with recruiting messages)?

HIV testing, blood specimen storage, and additional testing

- What are the perceptions of HIV testing among *[PWID/specific sub-population]*?
 - Is there stigma or fear about being tested or receiving results?
 - What are the barriers to using *[testing method]* HIV tests?
 - Would *[PWID/specific sub-population]* avoid participating in the survey if HIV testing is offered?
 - What suggestions do you have for overcoming barriers to HIV testing in *[PWID/specific sub-population]*?
- What are the perceptions of HIV-positive persons among *[PWID/specific sub-population]*?
 - Is there stigma or fear about disclosing an HIV-positive status?
 - What suggestions do you have for overcoming barriers to disclosing an HIV-positive status among *[PWID/specific sub-population]*?
- *For project sites that plan on offering additional tests:* In addition to the HIV test, we plan on offering *[types of tests]*.
 - How will these tests be perceived by *[PWID/specific sub-population]*?
 - Will these tests present a barrier to participation in our survey or will they motivate *[PWID/specific sub-population]* to participate?
 - If yes to barriers:* Please describe the specific barriers. What suggestions do you have for overcoming these barriers?
 - If yes to motivation:* Please describe specific ways these additional tests will motivate *[PWID/specific sub-population]* to participate.
- *For project areas that plan on collecting blood specimens for long-term storage for future testing:* In addition to the HIV test, we plan on collecting blood specimens for storage for future tests, such as tests for HIV viral load, recent HIV infection, and antiretroviral drugs. Blood specimens will be collected with a fingerstick and saved on a card. Because the study is anonymous, we will not be able to return results from any future tests to participants.
 - How will the collection of blood specimens for long-term storage and future testing be perceived by *[PWID/specific sub-population]*?

- What are the barriers to agreeing to provide blood specimens for long-term storage and future testing? What suggestions do you have for overcoming these barriers?

Appendix C NHBS-PWID2022 Formative Assessment Workbook

Appendix C – NHBS-PWID2022 Formative Assessment Workbook is composed of model tables for each of the required formative assessment products and can be found in the Excel file accompanying this document.