Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments Plan

2020

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Missouri Department of Health and Senior Services,
Bureau of Reportable Disease Informatics

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Missouri Department of Health and Senior Services

This plan is accessible via the internet at:

http://health.mo.gov/data/opioids/assessments.php

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Executive Summary

The Missouri Department of Health and Senior Services (DHSS), Bureau of Reportable Disease Informatics, with funding from the Centers for Disease Control and Prevention's (CDC's) National Center for HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome), Viral Hepatitis, STD (sexually transmitted disease), and TB (tuberculosis) Prevention (NCHHSTP), conducted county-level vulnerability assessments for 1) opioid overdoses and 2) bloodborne infections. Multiple internal and external stakeholders and partners contributed to these assessments, which are available at https://health.mo.gov/data/opioids/assessments.php.

The overall purpose of the project is that awardees use the findings from the assessments to develop plans that strategically allocate prevention and intervention services and distribute findings to key stakeholders in formats that support action. This will allow the use of the assessments' findings to target services that will maximally reduce risk of overdoses and risk of bloodborne infections spread through nonsterile drug injection.[1] The *Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments Plan – 2020* describes how the Missouri DHSS plans to use findings from the vulnerability assessments and includes a list of suggestions for local-level activities provided by stakeholders and partners.

Project Background

During the summer of 2018, the CDC utilized the Cooperative Agreement for Emergency Response: Public Health Crisis Response – CDC-RFA-TP18-1802 mechanism to award Opioid Crisis Supplemental Funding to jurisdictions impacted by the opioid overdose epidemic. On August 31, 2018, Missouri was one of the states notified that it would receive one year of funding under this award for a project from the CDC's NCHHSTP. This project required awardees to develop and disseminate jurisdiction-level vulnerability assessments that identify subregional (e.g., county, census tract) areas at high risk for i) opioid overdoses and ii) bloodborne infections (i.e., HIV, hepatitis C, hepatitis B) associated with nonsterile drug injection. Missouri utilized this opportunity to create a state-specific vulnerability assessment methodology. The *Missouri Opioid Overdose and Bloodborne Vulnerability Assessments – 2020* have been completed and published at https://health.mo.gov/data/opioids/assessments.php.

The Opioid Crisis Supplemental Funding was awarded for the period from September 1, 2018, through August 31, 2019. Therefore, the vulnerability assessments, the plan for allocating prevention and intervention services, and all related activities were required to be completed during this timeframe. On June 27, 2019, CDC notified the Missouri DHSS that a 90-day no cost extension to the project was granted to all awardees. The award and project end date were extended until November 30, 2019. On November 5, 2019, CDC notified DHSS that a further 120-day no cost extension to the project was granted to all awardees. The award and project end date were further extended until March 29, 2020.

The overall purpose of the project is that awardees use the findings from the assessments to develop plans that strategically allocate prevention and intervention services and distribute findings to key stakeholders in formats that support action. This will allow the use of the assessments' findings to target services that will maximally reduce risk of overdoses and risk of bloodborne infections spread through nonsterile drug injection.[2]

State-level Activities

The Missouri DHSS plans to utilize the findings from the vulnerability assessments for a variety of activities. Some of these activities are being undertaken as part of the original opioid crisis grant, while others will be implemented or expanded under new funding sources such as the Overdose Data to Action and Ending the HIV Epidemic grants. Additional activities have been initiated in response to other events such as a hepatitis A outbreak.

Opioid Crisis Grant Activities

Dissemination Activities

The Bureau of Reportable Disease Informatics (BRDI) has promoted the vulnerability assessments through several events and publications and will continue to do so. To request a presentation at a meeting or event, please contact the BRDI main line at 573-526-5271.

- Missouri Public Health Association Conference Breakout Session and Exhibit – September 25, 2019[†]
- DHSS Epidemiology Grand Round (recording available at https://health.mo.gov/information/epigrandrounds/sessions.php) – October 21, 2019[†]
- Viral Hepatitis Stakeholder Workgroup Meeting – October 28, 2019[†]
- Viral Hepatitis Prevention Committee Meeting – November 7, 2019[†]
- Missouri DHSS Division of Community and Public Health All-in Meeting Exhibit – December 9-10, 2019[†]
- E-mail to Missouri Local Public Health Agency Administrators – February 5, 2020
- E-mail to Vulnerability Assessment Stakeholder Meeting Participants – February 6, 2020
- Message to State Targeted Response/State Opioid Response Listserv and Newsletter Mailing List – February 6, 2020
- Ending the HIV Epidemic Plan Discussion – February 7, 2020
- DHSS Friday Facts Article – February 7, 2020; February 14, 2020; February 21, 2020
- Missouri Nurses Association: 30th Annual Coming Together in Advanced Practice Conference – April 30, 2020 (exhibit planned)
- Missouri Comprehensive Prevention Planning Group (CPPG) – May 22, 2020 (presentation planned)

[†]Vulnerability assessment results were updated following these events due to discovery of revised data from one source. A revised file was provided to DHSS and the methodology was updated. Please refer to the document posted at https://health.mo.gov/data/opioids/assessments.php for the most recent results.

Vulnerable County Outreach

DHSS offered targeted outreach to each county identified as more vulnerable in at least one of the assessments.

County	Assessment	Agency	Outreach Format	Date/Time
Barry	Bloodborne	Barry County Health Department – Roger Brock	Webinar/Call to BRDI	December 3, 2019/December 5, 2019
Bates	Overdose	Bates County Health Center – Jody Welston	Webinar	November 15, 2019
Benton	Overdose	Benton County Health Department – Linda Viebrock	Webinar	November 14, 2019
Butler	Overdose/ Bloodborne	Butler County Health Department – Tracy Campbell, Sara Dollins	Webinar	December 6, 2019
Crawford	Overdose/ Bloodborne	Crawford County Nursing Service – Honor Evans, Hannah Booker	Webinar	November 14, 2019
Dent	Overdose/ Bloodborne	Dent County Health Center – Kendra Mobray	Webinar	November 12, 2019
Dunklin	Overdose/ Bloodborne	Dunklin County Health Department – Lisa Johnson	Webinar	November 14, 2019
Greene	Bloodborne	Springfield/Greene County Health Department – Clay Goddard	Webinar	November 12, 2019
Henry	Bloodborne	Henry County Health Center – Peggy Bowles	Webinar	December 4, 2019
Howell	Bloodborne	Howell County Health Department – Chris Gilliam	Webinar	December 6, 2019
Iron	Overdose/ Bloodborne	Iron County Health Department – Heidi Wharton	Webinar	December 3, 2019

County	Assessment	Agency	Outreach Format	Date/Time
Jefferson	Overdose/ Bloodborne	Jefferson County Health Department – Kelley Vollmar, Jackie Brown	Webinar	November 12, 2019
Madison[†]	Bloodborne	Madison County Health Department – Becky Hunt, Jackie Berry	Webinar	November 15, 2019
Maries[†]	Overdose	Phelps/Maries County Health Department – Ashley Wann and Linda Kozlowski	Webinar	November 12, 2019
Marion[†]	Overdose/ Bloodborne	Marion County Health Department – Olivia (Jean) McBride	Webinar	March 4, 2020
McDonald[†]	See note below table	McDonald County Health Department – Paige Behm	Webinar	November 16, 2019
Mississippi	Overdose/ Bloodborne	Mississippi County Health Department – Rachelle Johnson	Webinar	November 14, 2019
New Madrid	Overdose	New Madrid County Health Department – Jayne Dees	Webinar	December 4, 2019
Phelps	Overdose/ Bloodborne	Phelps/Maries County Health Department – Ashley Wann, Linda Kozlowski	Webinar	November 12, 2019
Polk	Overdose	Polk County Health Center	Invited but unable to participate	
Pulaski	Overdose	Pulaski County Health Center and Home Health Agency – Deborah Baker	Webinar	November 12, 2019

County	Assessment	Agency	Outreach Format	Date/Time
Ripley	Overdose/ Bloodborne	Ripley County Public Health Center – Jan Morrow	Webinar	December 3, 2019
St. Clair	Overdose	St. Clair County Health Center – Jeanne Beas	Webinar	November 12, 2019
St. Francois	Overdose/ Bloodborne	St. Francois County Health Center – Jessica McKnight, Amber Elliott	Webinar	November 16, 2019
St. Louis City	Overdose/ Bloodborne	City of St. Louis Department of Health	Invited but unable to participate	
Stone	Bloodborne	Stone County Health Department – Pam Burnett, Abby Pendergrass, Rose Moore	Webinar	November 12, 2019
Taney	Overdose/ Bloodborne	Taney County Health Department – Lisa Marshall	Webinar	November 14, 2019
Texas[†]	See note below table	Texas County Health Department – Angel Wells	Webinar/E-mail	November 14, 2019/November 22, 2019
Warren	Overdose/ Bloodborne	Warren County Health Department – Stacey White	Webinar	November 16, 2019
Washington	Overdose/ Bloodborne	Washington County Health Department – Nick Hughey, Shawnee Douglas	Webinar	November 14, 2019
Wayne	Overdose/ Bloodborne	Wayne County Health Center – RaeJean Crutchfield		
Wright	Bloodborne	Wright County Health Department – Tracy Hardcastle	Webinar/E-mail	November 14, 2019/November 19, 2019

[†]Revised data were received from one source after DHSS had already begun outreach calls. As a result of the data revision, rankings for a few counties changed. Marion County was added to the list of vulnerable counties for both opioid overdoses and bloodborne infections. Maries County was added to the list for opioid overdoses. Texas County and Madison County were removed from the list of counties more vulnerable to opioid overdoses, and McDonald County was removed from the list of counties more vulnerable to bloodborne infections.

List of HIV, Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV) Test Sites in Vulnerable Communities

BRDI prepared a list of HIV, HBV, and HCV test sites in each of the counties identified as more vulnerable. This information has been included in fact sheets available at https://health.mo.gov/data/opioids/assessments.php.

These fact sheets were requested by stakeholders during a series of meetings utilized to collect feedback during the vulnerability assessment process. Stakeholders from across the state indicated that a compilation of data and available resources related to opioid overdoses and bloodborne infections would be useful. Stakeholders requested a variety of different indicators and types of resources for inclusion. If the resulting documents are too long for audiences or purposes, stakeholders are encouraged to utilize the information in documents of their own creation with an appropriate citation crediting the DHSS fact sheets. A sample citation is included on the fact sheets.

Overdose Data to Action Activities

Overdose Data to Action (OD2A) "is a 3-year cooperative agreement that began in September 2019 and focuses on the complex and changing nature of the drug overdose epidemic and highlights the need for an interdisciplinary, comprehensive, and cohesive public health approach. Funds awarded as part of this agreement will support state, territorial, county, and city health departments in obtaining high quality, more comprehensive, and timelier data on overdose morbidity and mortality and using those data to inform prevention and response efforts."[3] This new funding opportunity builds upon work completed under previous grants, including the Opioid Crisis Supplemental Funding from the Cooperative Agreement for Emergency Response: Public Health Crisis Response (CDC-RFA-TP18-1802) used to fund the completion of the *2020 Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments*. Missouri's proposed activities under the first year of OD2A funding were developed based on available surveillance data and include an emphasis on services that can be tailored to address the needs of disproportionately impacted and emerging populations. Work under OD2A is structured under several different strategies, with projects proposed by Missouri for the first year of funding briefly described beginning on the next page.[4] Due to the nature of cooperative agreements, these projects may change as Missouri works with CDC and partners.

- Strategy 1 (Surveillance): Collect and disseminate timely emergency department data on suspected all drug, all opioid, heroin, and stimulant overdoses
    - Collect, analyze, and disseminate data on all drug, all opioid, heroin, and all stimulant emergency room (ER) visits from syndromic surveillance data based primarily on hospital chief complaints.
    - Collect, analyze, and disseminate data on all drug, all opioid, heroin, and all stimulant emergency room (ER) visits from hospital billing data.
    - Collaborate with CDC and other partners to increase data quality and refine surveillance case definitions and activities.
- Strategy 2 (Surveillance): Collect and disseminate descriptions of drug overdose death circumstances using death certificates and medical examiner/coroner data
    - Maintain and expand the number of coroners and medical examiners participating in data collection projects.
    - Maintain and create new forms of reports to disseminate data.
    - Provide training to key stakeholders to improve interventions and increase knowledge.
- Strategy 3 (Surveillance): Implement innovative surveillance to support notice of funding opportunity interventions
    - Establish an Opioid Data Coordinator position to coordinate interagency data sharing and explore barriers to data sharing.
    - Test clinical samples from suspected non-fatal overdoses for fentanyl and fentanyl analogs.
    - Link toxicology data with other data sets to identify morbidity and mortality patterns
    - Identify neonatal abstinence syndrome (NAS) cases and facilitate linkages to treatment and other services.
    - Conduct data matches between overdose records from hospital billing data and syndromic surveillance data to evaluate case definitions.
- Strategy 4 (Prevention): Prescription Drug Monitoring Programs
    - Educate prescribers and publish CDC opioid prescribing guidelines.
    - Investigate providers who may be prescribing inappropriately.
    - Discuss potential collaboration with the St. Louis County Prescription Drug Monitoring Program.
- Strategy 5 (Prevention): Integration of State and Local Prevention and Response Efforts
    - Expand upon current overdose/bloodborne infection vulnerability assessments to help partners use findings to tailor opioid misuse prevention activities.
    - Establish a Harm Reduction Coordinator position.
    - Coordinate a Harm Reduction Conference.
    - Conduct a statewide needs assessment to identify gaps in and/or barriers to substance use disorder treatment (SUDT) and supportive services.
    - Explore creation of a statewide opioid data hub.
    - Hold regional meetings with local public health agencies (LPHAs) in counties at increased risk for opioid overdoses.

    - Establish contracts with LPHAs to support local opioid/illicit drug use prevention and response efforts. (Death data from 2018 in combination with vulnerability assessment findings were used to determine counties for which contracts were offered.)
    - Solicit proposals demonstrating innovative opioid misuse and/or overdose prevention projects from LPHAs.
    - Continue the work of the St. Louis Community Resource Response Team to provide wraparound services following nonfatal overdoses.
- Strategy 6 (Prevention): Establishing Linkages to Care
    - Develop provider resources related to medication assisted treatment (MAT).
    - Educate HIV/HCV testing program clients and HIV case management program clients on opioid misuse and provide needed linkages to care.
    - Offer Missouri Credentialing Board Medicated Assisted Recovery (MAR) training for HIV peer navigators to increase their ability to promote, educate, and refer as needed.
    - Match data between syndromic surveillance and HIV/STD data systems to support disease intervention services staff interventions with clients.
    - Support LPHA staff in obtaining Missouri Recovery Support Specialist credentials.
    - Establish contracts with LPHAs to partner with and provide outreach to community organizations.
    - Support LPHAs in establishing local outreach teams.
    - Contract with a transportation services provider or coordinator to establish transportation programs in select areas in order to improve access to SUDT and related services.
- Strategy 7 (Prevention): Providers and Health Support Systems Support
    - Establish partnerships with regulatory and enforcement agencies, providers, and health systems to develop a standardized referral system to connect pain management patients to SUDT or alternate pain management services following displacement due to enforcement activities that result in facility closure or treatment suspension.
- Strategy 8 (Prevention): Partnerships with Public Safety and First Responders
    - Link mortality data with Department of Corrections data and perform analysis to inform linkage services.
    - Link opioid overdose mortality and morbidity data with high intensity drug trafficking area (HIDTA) drug seizure data.
    - Explore possible data sharing opportunities between DHSS and public safety.
- Strategy 9 (Prevention): Empowering Individuals to Make Safer Choices
    - Disseminate CDC Rx Awareness campaign materials.
    - Contract with a media/marketing firm to develop and place opioid misuse/overdose awareness campaign materials, inclusive of stigma reduction.
    - Conduct a harm reduction campaign aimed at linking people who are currently using drugs to SUDT and bloodborne infection prevention services.
    - Contract with LPHAs to address stigma, overdose prevention, disclosure, linkage to treatment, naloxone availability, prescribing practices, public safety and first responder

partnerships, fentanyl messaging, harm reduction, risk reduction for vulnerable populations, HIV testing and linkage to care partnerships, etc., dependent upon LPHA services offered and local needs identified through surveillance data and needs assessments.

Ending the HIV Epidemic Activities

The Ending the HIV Epidemic "initiative seeks to reduce the number of new HIV infections in the United States by 75 percent within five years, and then by at least 90 percent within 10 years, for an estimated 250,000 total HIV infections averted."[5] The Ending the HIV Epidemic initiative focuses on four pillars:

- Diagnose all people with HIV as early as possible.
- Treat people with HIV rapidly and effectively to reach sustained viral suppression.
- Prevent new HIV transmissions by using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).
- Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.[6]

"The Plan will focus first on 50 local areas that account for more than half of new HIV diagnoses (48 counties; San Juan, Puerto Rico; and Washington, D.C), and seven states with a substantial rural burden. If additional resources become available, the initiative will eventually expand nationwide."[7] Missouri qualified for the initial round of funding as one of the seven states with a substantial rural burden. Missouri has 92 counties that fit CDC's rural definition, with 55 of these counties reporting a new HIV diagnosis at least once in 2016-2018. Additional information about HIV in Missouri is available from the Epidemiologic Profiles of HIV and STDs in Missouri at https://health.mo.gov/data/hivstdaids/data.php.

Ending the HIV Epidemic resources have been offered through several different funding opportunities. Following is a brief description of each funding opportunity for which Missouri has applied and/or been awarded as of February 26, 2020. Activities could change as Missouri continues to work with CDC and other partners.

- Missouri has been awarded funding under CDC Funding Opportunity PS19-1906: Strategic Partnerships and Planning to Support Ending the HIV Epidemic in the United States, Component B: Accelerating State and Local HIV Planning to End the HIV Epidemic.[8]
    - Funding is being used to conduct a rapid planning process that engages the community, HIV planning bodies, HIV prevention and care providers, and other partners in aligning resources and activities to develop a jurisdictional End the HIV Epidemic plan.
    - The proposed program will strengthen current HIV prevention and care activities at the local and state levels through engagement of local providers and individuals in the prioritized populations as well as support current surveillance activities as Missouri implements the necessary programs and initiatives to reduce new HIV infections.

- The funding will support improved ability to rapidly implement activities to meet the HIV prevention and care needs of local jurisdictions and prepare an Ending the HIV Epidemic plan for Missouri.

- Missouri has also been awarded funding under Health Resources and Services Administration (HRSA) Funding Opportunity HRSA-20-078: Ending the HIV Epidemic: A Plan for America – Ryan White HIV/AIDS Program Parts A and B.[9]
  - This opportunity will expand access to HIV care and treatment in Missouri for people with HIV, both those who are newly diagnosed and those who are not engaged in care, and/or not virally suppressed, by addressing unmet needs, improving client-level health outcomes, and responding quickly to HIV cluster detection efforts for people needing HIV care and treatment.
  - Missouri will focus on expanding access to HIV care through telehealth, outreach to people living with HIV who are not enrolled or do not quality for Ryan White services, and outreach to non-Ryan White partners. Unmet needs and improvement of client-level health outcomes will be addressed through a statewide needs assessment, access to a clinically validated medication adherence application, and creation of an evidence-based incentive program to increase viral load suppression among target populations.
- As of the writing of this plan, DHSS was in the process of applying for CDC funding opportunity CDC-RFA-PS20-2010: Integrated HIV Programs for Health Departments to Support Ending the HIV Epidemic in the United States.[10] Expected outcomes for this funding opportunity include:
  - Diagnosing all people with HIV as early as possible through expanding or implementing routine opt-out HIV screening, developing locally tailored HIV testing programs to reach persons in non-healthcare settings, and increasing at least yearly re-screening of persons at elevated risk for HIV. Increased identification of new HIV infections in STD specialty clinics will occur as part of efforts to diagnose all people with HIV as early as possible.
  - Treating people with HIV rapidly and effectively to reach viral suppression by ensuring rapid linkage to HIV medical care and antiretroviral therapy (ART) initiation for all persons with newly diagnosed HIV and supporting re-engagement and retention in HIV medical care and treatment adherence. Increased rapid linkage to care for individuals newly diagnosed with HIV infection, increased identification of virally unsuppressed people, and increased re-engagement to care will occur at STD specialty clinics as part of efforts to treat people with HIV rapidly and effectively.
  - Preventing new HIV transmission by using proven interventions such as accelerating efforts to increase PrEP, particularly for populations with the highest rates of new HIV diagnoses and low PrEP use among those with indicators for PrEP. Increased screening and initiation of PrEP will occur as part of efforts to prevent new HIV transmissions.
  - Responding quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them by developing partnerships, processes, data systems, and policies to facilitate robust, real-time cluster detection and response, investigating and intervening in networks with active transmission, and identifying and addressing gaps in programs and services revealed by cluster detection and response.

Improving Hepatitis B and C Care Cascades: Focus on Increased Testing and Diagnosis

The Bureau of HIV, STD and Hepatitis receives grant funding from the CDC's Improving Hepatitis B and C Care Cascades grant. The purpose of this grant is to address the prevention, testing, and treatment of viral hepatitis and identify resources to care for viral hepatitis in Missouri. The program provides technical assistance and expertise to LPHAs, federally qualified health centers (FQHCs), state agencies, and community based organizations (CBOs).

As part of this grant, a Viral Hepatitis Prevention Stakeholder Workgroup focuses on addressing barriers and strengths in Missouri and developing an elimination plan related to viral hepatitis. This workgroup consists of members from around the state who represent LPHAs, hospitals, CBOs, and other invested stakeholders.

Outbreak Response Plan

DHSS is developing outbreak response plans for other conditions that could be used as foundations for the preparation of overdose and bloodborne infection outbreak response plans. For example, the Bureau of HIV, STD, and Hepatitis has drafted an HIV outbreak response plan. The Bureau of Immunizations is currently working with LPHAs to develop response plans related to hepatitis A. Since September 2017, DHSS and LPHAs have received increased reports of hepatitis A linked to an ongoing outbreak in Missouri. As of February 29, 2020, 682 cases of hepatitis A virus infection have been linked to the outbreak. Although hepatitis A is not a bloodborne condition, based on current information, persons who use injection and non-injection illicit drugs are at increased risk for hepatitis A during this outbreak.[11] Questions about the availability of response plans for specific conditions can be directed to the Missouri DHSS or a jurisdiction's LPHA.

Local-level Activities

DHSS staff collaborated with local partners through the vulnerability assessment stakeholder meetings (described on pages 6-8 of the *Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments – 2020* report at https://health.mo.gov/data/opioids/) and through the vulnerability assessment outreach calls discussed under State-level Activities in this document. Local partners suggested the following activities regarding use of the vulnerability assessment results to better target services. Some of these activities are already underway in some jurisdictions. DHSS encourages jurisdictions to consider their specific situations and resources when determining the activities most appropriate in their local communities.

Community Partnerships

- Develop community workgroups and/or task forces composed of a variety of stakeholders (e.g., public health personnel, clinicians, law enforcement, first responders, mental health providers, substance use treatment providers, education). These groups can undertake activities such as:
    - Determining activities, priorities, etc.
    - Identifying funding opportunities.
    - Advising policy makers.
    - Asking for more resources.
    - Addressing data reporting, security, completeness, and quality issues within the local area.
    - Preparing a consistent message to share with the media, elected officials, etc.
- Organize focus groups to discuss concerns of community members.
- Conduct focus groups with local opioid overdose survivors or family members to identify local factors or variables that contribute to vulnerability.
- Form a coalition of more vulnerable jurisdictions for combined political/economic strength. Some areas on their own may not have the workforce capacity or other resources needed to address these conditions. Some stakeholders noted that even when funding opportunities are available, their jurisdiction may not be able to utilize those funds due to a lack of staff capacity. Maps in the vulnerability assessments report as well as in the additional profiles may reveal the location of regional issues that could be opportunities for such partnerships.
- Study the more vulnerable counties to identify common characteristics beyond the indicators included in the vulnerability assessments to determine if there are other important vulnerability factors.
- Partner with other local stakeholders to collect additional data if existing sources are not able to provide the information needed. Some examples of partners that may be able to collect and share additional data include 911 call centers, emergency rooms, pharmacies, dispatch, care and treatment providers (e.g., related to waiting lists for services), etc.
- Strengthen reporting of naloxone distribution and use in order to justify additional funding requests.
- Partner with faith-based organizations on programs such as Celebrate Recovery.
- Conduct comprehensive mental health and substance use assessments and develop improvement plans.
- Use data in the vulnerability assessments and related resources for grant and funding applications, especially in areas that do not have staff to help with data analysis for funding requests.
- Consider the impact of other substances in addition to opioids, such as methamphetamines and other stimulants.
- Prepare overdose and bloodborne infection response plans.
- Perform a cost-benefit analysis related to offering various services.

- Address transportation barriers to treatment for substance use disorder and bloodborne infections.
- Create support groups for family members impacted by substance use issues.
- Review CDC resources on evidence-based strategies to combat substance misuse.

Community-wide Prevention/Education

- Utilize the vulnerability assessment findings in combination with other data sources to target resources (especially in organizations that serve multiple counties) and tell the community's story.
- Assess the feasibility of joining the St. Louis County Prescription Drug Monitoring Program (https://pdmp-stlcogis.hub.arcgis.com/) if not already participating.
- Provide training to coroners and medical examiners to better identify deaths in which overdose played a role.
- Offer education on coping mechanisms.
- Collaborate with law enforcement to establish drug take-back opportunities. These could be permanent disposal boxes or occasional events.
- Provide harm reduction messaging to the community.
- Educate veterinarians about potential drug-seeking behavior by individuals who can no longer obtain opioids from physicians.
- Work with local educational systems and school resource officers to implement a prevention curriculum in schools as well as parent education nights or other activities. Free materials may be available or foundations may be able to provide funding. Suggested speakers include local public health staff, first responders, etc.
    - Some of the specific resources mentioned by stakeholders include Botvin LifeSkills such as Wise Owl's Drug Safety Kit, Smart Choices, Too Good for Drugs, University of Missouri Extension programs, and Addiction Is Real/Hidden in Plain View.
    - Please note that DHSS does not endorse any specific resource and is working with CDC to obtain a list of programs determined to be evidence-based.
- Distribute resource guides on where to find assistance. These may be developed locally or existing resources may be obtained from federal, state, or other organizations. Suggested locations for distribution include pregnancy resource centers, pharmacies, etc. Resource cards in particular are easy for at-risk individuals and their family members to carry at all times.
- Provide education and resources/supplies related to drug disposal kits and awareness of addiction risk, especially to populations who may be prescribed opioids, such as the elderly, veterans/military members, and persons with chronic disease or chronic pain.
- Host naloxone training for law enforcement, first responders, and others such as school nurses, teachers, university faculty/staff, and public librarians and provide information to the public at events.
- Provide education and outreach to raise awareness of the impact of overdoses and bloodborne infections in the community and address stigma through social media and popular events such as county fairs.

- Screen all prenatal patients/clients for drug use.
- Arrange programs to educate senior citizens.
- Organize drug-free workplace events with area employers.
- Partner with shelters to offer referrals to treatment and other services.
- Offer or increase HIV and hepatitis C testing within the jurisdiction, if possible.
- Implement harm reduction programs.

Targeted Prevention/Education for At-risk Groups

- Provide education to individuals frequently in contact with high-risk populations (e.g., parole officers, homeless shelter staff).
- Encourage PrEP usage among individuals at high risk for HIV to prevent disease transmission.
- Provide education on the risks of using opioids concurrently with certain prescribed medications.
- Increase education on other sexually transmitted diseases (e.g., chlamydia, gonorrhea, syphilis) in areas with high vulnerability to overdoses and/or bloodborne infections. Individuals impacted by any one of these conditions may be at higher risk for the other conditions.
- Screen individuals with substance use for bloodborne infections.
- Organize safe places for people to go when they need help.
- Use data to determine local at-risk populations (e.g., homeless persons, men who have sex with men, persons who have survived trauma, individuals recently released from incarceration), target specific interventions to at-risk population segments, and support community outreach and mobile services such as rapid testing for bloodborne diseases. Checklists could be developed to identify vulnerable groups in the local area and identify intervention targets.
- Offer medication assisted treatment (MAT) within the jurisdiction, if possible.
- Utilize a mobile MAT unit.
- Work with drug treatment courts to provide MAT treatment programs, education, HIV/hepatitis/STD testing, etc., on drug court days. Additional services such as hepatitis A vaccination could also be provided.
- Develop a continuum of care focused on prevention, treatment, and recovery.
- Increase availability of SUDT transitional services following in-patient drug rehabilitation.
- Promote the use of telemedicine to provide treatment for substance use disorder and bloodborne infections.

Endnotes

[1] CDC. Opioid Funding. Accessed February 6, 2019, from https://www.cdc.gov/cpr/readiness/funding-opioid.htm.

[2] CDC. Opioid Funding. Accessed February 6, 2019, from https://www.cdc.gov/cpr/readiness/funding-opioid.htm.

[3] Centers for Disease Control and Prevention. Opioid Overdose: Overdose Data to Action. Accessed February 26, 2020, from https://www.cdc.gov/drugoverdose/od2a/index.html.

[4] Grants.gov. CE19.1905NOFO.Final. Accessed February 26, 2020, from https://www.grants.gov/web/grants/search-grants.html?keywords=%22overdose%20data%20to%20action%22.

[5] HIV.gov. What Is 'Ending the HIV Epidemic: A Plan for America'? Accessed February 26, 2020, from https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview.

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