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May 11, 2018

City-County Council of Indianapolis-Marion County
241 City-County Building
200 E. Washington St,
Indianapolis, IN 46204

Re: Declaration of Hepatitis C Epidemic

I find and declare:

1. There is an epidemic of Hepatitis C (“HCV”) in Marion County;
2. The primary mode of transmission of HCV in Marion County is through intravenous drug use; and
3. A Syringe Exchange Program (“SEP”) is medically appropriate as part of a comprehensive public health response.

I ask the City-County Council of Indianapolis-Marion County to consider and act on this declaration pursuant to Indiana Code § 16-41-7.5-5. In addition to the attached program proposal, I offer the following information in support of my findings and this declaration:

- Marion County’s outbreak of HCV is evidenced by a tenfold increase in reported acute HCV rates between 2013 and 2017. The Center for Disease Control estimates true cases of HCV at 13.9 times those reported, resulting in 1000 new HCV cases in 2017.
- Between 2013 and 2017 Marion County has seen a 63% increase in newly reported chronic HCV infections among younger adults (ages 18-34).
- Intravenous drug use accounts for at least 86% of the new HCV infections and 58% of those newly infected reported sharing drugs and injection supplies.
- Drug treatment programs, testing and referral systems, mental health and addiction services, and alternative courts such as drug court and mental health court are available in Marion County, yet these measures alone have proven ineffective in preventing the HCV epidemic and the spread of other diseases such as HIV.

- A SEP as a part of a comprehensive public health response increases the capacity to prevent the spread of costly and potentially deadly diseases as well as connects people to healthcare and addiction and treatment services.

Sincerely,

Virginia A. Caine MD

Virginia A. Caine, M.D.

Director

Marion County Public Health Department

**Marion County Public Health Department
Safe Syringe Access and Support (SSAS)
Program Proposal**

Executive Summary

The United States is in the midst of a widespread opioid crisis, and Indianapolis ranks among the cities experiencing the most statistically significant increases in drug overdoses and blood-borne infections. In Marion County, Indiana, the multi-layered crisis has contributed to a hepatitis C virus (HCV) health emergency, and a slight increase in human immunodeficiency virus (HIV) diagnoses linked to injection drug use. Individuals who participate in intravenous (IV) drug use are 80% more likely to contract HCV and suffer costly complications associated with the disease. The re-use and sharing of blood-contaminated injection drug equipment creates a significant risk for the transmission of other serious infections, such as hepatitis B and staphylococcus aureus (MRSA). These illnesses not only affect drug users, but can also affect their sexual partners, and through maternal-to-infant transmission, their children. There are no vaccines or effective pre- or post-exposure prophylaxis to protect against HCV.

The number of persons who inject drugs (PWID) in Marion County is rising significantly, leading to a future burden of costly chronic diseases spanning their lifetimes and beyond. Current measures aimed at injection drug abstinence have been inadequate—surveillance, evaluation activities, and secondary prevention programs are insufficient methods for averting HCV transmission. Marion County is now faced with implementing harm reduction strategies to minimize the adverse outcomes of injection drug use while promoting the overall health and safety of injection drug users and their families. For individuals who will not or cannot stop injecting drugs, the one-time use of sterile syringes is the safest, most successful method for limiting the transmission of blood-borne infections. Moreover, evidence shows that individuals participating in syringe exchange programs (SEPs) are five times more likely to enter recovery services for substance use disorder (SUD).¹

Marion County's outbreak of HCV is evidenced by a 1000% increase in the number of reported acute cases from 2013 to 2017, a majority of which have been attributed to injection drug use. Doctors and public health officials fear increased IV drug use may also lead to a severe HIV outbreak, similar to what transpired in Scott County, where health officials diagnosed over 200 new cases of HIV with 90% HCV coinfection in 2015. The combination of increased IV drug use, syringe sharing, overdoses, and the rising number of HCV and HIV diagnoses is inducing a synergistic epidemic ("syndemic") exacerbating Marion County's existing public health burdens. Marion County Public Health Department (MCPHD) estimates that if a similar outbreak happened in Indianapolis, it would cost more than \$500 million to treat—nearly half of the city's 2018 budget. Waiting for such crises to occur in Marion County is illogical.

SEPs are proven to be effective at reducing the rates of HCV within communities while preventing outbreaks of HIV. The provision of an SEP through MCPHD would work to reduce the spread of infectious disease throughout the community while offering additional supportive services to adult substance users, such as engagement in SUD treatment, health care navigation, and overdose prevention education. The CDC supports that syringe exchange programs (1) curtail drug use; (2) reduce needlestick injuries among first responders; (3) decrease overdose deaths; (4) reduce new HIV and viral hepatitis infections; and (5) save healthcare dollars by preventing overdoses and new HIV/HCV infections.² MCPHD advocates for an SEP, which would ensure injection drug users have access to clean needles to prevent infections, keep used needles off the streets, and aptly connect individuals with needed health services. The proposed MCPHD Safe Syringe Access and Support (SSAS) Program would efficiently (1) reduce the incidence of infectious diseases; (2) link participants to appropriate care; (3) reduce emergency department (ED) visits; and (4) facilitate access to substance use and mental health services.

Organizational Background

For nearly 70 years, Health and Hospital Corporation of Marion County (HHC) has served the public health and hospital system of Marion County, Indiana. HHC is a municipal corporation and political subdivision of the state of Indiana that operates Marion County Public Health Department (MCPHD), which provides a full range of preventative and curative health services to the residents of Marion County. HHC's mission is to promote and protect the health of everyone in the community and provide health care to those who are underserved. Under the auspices of HHC, MCPHD provides a variety of public health services related to population and environmental health. MCPHD uses its knowledge, experience, history, skills and accessibility to serve as the community voice of public health.

Mission Statement

The mission of MCPHD's Safe Syringe Access and Support (SSAS) Program is to prevent the transmission of infectious disease by reducing high risk behaviors using a client-centered approach, evidence-based interventions, and enhanced access to healthcare services, including addiction recovery programs.

Objectives

- Reduce the incidence of infectious diseases, primarily HCV, HIV, hepatitis B, and sexually transmitted diseases.
- Prevent an outbreak of HIV related to injection drug use.
- Decrease high risk behaviors in PWID by providing clean, one-use syringe kits and education on safer injection practices.
- Provide on-site testing for HCV and HIV.
- Increase access to health care services by referring and linking participants to primary care, dentistry, prenatal care, and other services.
- Reduce the number of opioid-related overdose deaths in Marion County through the provision of the opioid-involved overdose antidote naloxone and overdose education to both participants and communities.
- Enhance access to SUD treatment services, as well as other mental and behavioral health services.
- Reduce emergency department visits related to bacterial infections secondary to injection drug use, such as abscesses and endocarditis, which can be prevented using clean techniques.
- Encourage and assist participants to initiate positive change in their lives.
- Remove hazardous needle waste from the community.
- Reduce the improper disposal of contaminated needles.
- Decrease the risk of exposure to HCV by first responders.

Statement of Need

Marion County and Injection Drug Use

The Center for Health Policy at Indiana University's Fairbanks School of Public Health estimates that approximately 1.6 percent of the United States population has injected drugs at least once in their lifetime; a survey in 2011 indicated that 2.7 percent (more than 1 in 40) of Indiana high school students had injected drugs at least once. Further estimates indicate that nearly 60 percent of U.S. PWID re-used needles and 21.5 percent shared needles with others during their last injection. The number of young persons between the ages of 15 to 29 who inject drugs continues to increase both nationally and in the state of Indiana.³

Risks of Injection Drug Use

Of all routes of administration, injection drug use poses the greatest number of threats to health. Improper injection techniques can lead to viral, fungal, and bacterial infections that are both costly and potentially fatal. During injection, users draw a small amount of blood into the syringe to ensure proper needle placement into a vein. This small amount of blood is capable of transmitting HIV and HCV if equipment is re-used for preparation and/or injection. Not only do needles and syringes serve as reservoirs for infectious agents, but the drug preparation equipment, such as rinse water, cotton, and heating devices, all may be contaminated by the blood residue of used syringes and further increase the spread of infection.^{4,5}

The prevalence of HCV and HIV infection typically increases with the duration of injection drug use; however, studies have demonstrated that younger, more recent initiates have higher rates of infection. Eighty-five percent of PWID will become infected with HCV within six years of initiating injection, and as many as 28 percent will become infected with HIV regardless of demographic characteristics.⁶ The estimated cost of treatment for HIV infection is \$379,668 to \$648,000 per person.⁷ The cost of HCV treatment ranges from \$54,600 to \$95,000 per 12-week course.⁸

Marion County and Infections Related to Injection Drug Use

The rate of reported acute HCV infection in Marion County rose from 0.6 to 7.6 per 100,000 population between 2013 and 2017. The Centers for Disease Control and Prevention (CDC) estimates that true cases of acute HCV are nearly 14 times what is reported, translating to approximately 1000 new cases in Marion County in 2017 alone. At least 86 percent of new cases in 2017 reported injecting drugs within the last six months, and at least 58 percent reported sharing drugs and paraphernalia. The number of chronic HCV infections continues to grow, particularly among persons ages 18 to 34 years. The CDC estimates a prevalence between 9,243 and 11,376 cases of chronic HCV for a population of Marion County's size; however 21,148 county residents with chronic HCV have been reported since 1990.⁹ MCPHD proposes the implementation of a syringe exchange program, or more aptly titled a syringe service program, to slow the growing number of HCV infections within the county and prevent an HIV outbreak, similar to what transpired during 2015 in Scott County, Indiana, which would come at a crippling cost.

Adverse Health Effects Attributable to Injection Drug Use

Human Immunodeficiency Virus (HIV)
Hepatitis C Virus (HCV)
Hepatitis B Virus (HBV)
Abscesses, cellulitis, and other skin infections
Septicemia (blood infection)
Bacterial endocarditis
Respiratory problems
Drug-induced blood clots
Gangrene, limb loss
Non-fatal overdoses: further potential health issues of aspiration pneumonia, peripheral neuropathy, temporary limb paralysis, renal failure, rhabdomyolysis, seizures, hypoxic brain injury
Fatal overdoses

History of Syringe Exchange Programs

Comprehensive syringe exchange programs (SEP) have operated in the United States since 1988. To date, there are over 200 operating SEPs in the U.S.¹⁰ Seven (7) counties in Indiana are currently operating SEPs—Allen, Clark, Fayette, Monroe, Scott, Tippecanoe, and Wayne. Additionally, Madison County is expected to resume its former program through a contract with Aspire Indiana Health, Inc. Thirty years of research have proven that syringe exchange programs:

- Reduce the rate of HIV¹¹ and HCV;¹²
- Increase the number of injection drug users enrolled in substance abuse treatment;^{1,13}
- Reduce high risk behaviors in injection drug users; and¹⁴
- Do not lead to an increase in crime or drug use in the communities in which they operate.^{15,16,17}

SEPs are often viewed as the first step toward treatment; persons engaging in the exchange are willingly taking a step towards better health and disease prevention by participating while gaining access for further services to enhance their well-being.

Harm reduction is a practical approach to reducing the negative consequences of drug use. This strategy recognizes that abstinence, while preferred, is not always feasible, as addiction often extends beyond an individual's free will. Rather than ignoring the harmful effects of drugs, a client-centered approach works to educate and empower persons who use drugs to minimize the injury caused by drug use. Individuals are recognized as the primary agents of change in their lives; thus harm reduction strategies seek to incite safer practices in drug use while opening the door for rehabilitation.¹⁸

Cost-Effectiveness of Syringe Exchange Programs

The estimated cost savings per case of HIV infection prevented by an SEP is \$7.58 for every \$1 spent.¹⁹ Cities with SEPs have seen 6% decreases in HIV transmission annually, while cities without such programs are seeing a nearly 6% annual increase.²⁰ Increased utilization of SEPs is also associated with a decrease in the number of emergency department visits for abscess treatment, which cost approximately \$360 per visit, excluding medication and physician fees.²¹ Hospital admission for drug dependence-associated endocarditis, which results when bacteria introduced by injection penetrate the bloodstream and infect the heart, has a median cost of \$54,281 per hospital stay.²²

Program Description

A comprehensive syringe service program delivered by MCPHD will uphold the principles of harm reduction through client-centered care, providing clean supplies to prevent disease while removing hazardous waste from the community, and offering services to enhance the health and well-being of participants, such as viral infection testing, SUD treatment referrals, and health care navigation. The primary goal of the program is to reduce the incidence of HCV within the county, while preventing an HIV outbreak related to injection drug use. Furthermore, the program will serve as a pivotal point of entry for health care access, such as substance use rehabilitation and primary care.

Services Provided by SSAS

- Safe syringes and supplies
- Safer drug use practices
- Naloxone distribution and education
- Testing: Rapid HIV and HCV, STD referrals
- Mental health referral SUD treatment
- Social work services
- Health care navigation
- Wound care and education
- Immunizations

Logistics

I. Site Location and Hours of Operation

Initially, the program will operate solely as a mobile unit. A large van will be customized to fit the needs of the program, which include: adequate storage for syringes and other supplies, a private area for counseling and referrals, and adequate space for waste disposal. The mobile unit will travel to pre-determined locations in which a high number of overdoses and arrests have been observed. These locations are subject to change with shifts in the drug use landscape. Prior to entering a location, the mobile unit will be introduced before the corresponding neighborhood associations for approval. Initially, the mobile unit will focus on one neighborhood as a trial for procedural efficiency so that appropriate adjustments may be made prior to expansion.

Analysis of I-EMS naloxone administration by location and residence demonstrates high risk zip codes of 46201, 46203, and 46222 in Marion County (Appendix B). Zip codes of further risk include 46218 and 46219 in the east and 46227 in the south. MCPHD will work in conjunction with Indianapolis Metropolitan Police Department (IMPD) to further narrow location based on areas with a high number of drug-related arrests. Additional considerations for location of the mobile unit include proximity to community resources (e.g. churches, federally qualified health centers, and homeless shelters) and feasibility.

The program will operate at various hours throughout the week to meet the needs of participants. Exchange will occur in a two to five hour window as deemed appropriate.

II. Staffing

Staff will consist of a full-time program manager supported by a registered nurse, social worker, and at least two peer support specialists. A medically licensed professional (physician or registered nurse) will provide oversight and consultation as necessitated by IC 16-41-7.5-6. Peer support specialists should be well-versed in harm reduction strategies, statutory requirement of SEPs, motivational interviewing, infectious disease transmission, naloxone administration, and media response. Preference will be given to persons with a background in nursing and/or social work in substance abuse. Peer support specialists will work closely with MCPHD Substance Use Outreach Services (SUOS) and the Social Work Department, among other local agencies, to provide appropriate referrals for care.

Communication with local law enforcement will help ensure staff safety. Local law enforcement will be aware of SEP operating hours and locations so that any potential police presence will not hinder the exchange, but the police can be close enough to the mobile unit to respond quickly in the event of an emergency. A panic button will be available on the mobile unit for rapid response from IMPD. Furthermore, the mobile unit will always be staffed with a minimum of three persons. Presence of a security or safety officer at the site of an SEP has been demonstrated to be detrimental for such programs, as participant trust is compromised. No violent events at an SEP in the United States have been recorded to date. Staff will be trained in a comprehensive safety plan and de-escalation techniques.

III. Confidentiality

Step 1: Create an anonymous participant ID code for tracking purposes.

IC 16-41-7.5-6 mandates that syringe and needle distribution and collection be performed without the collection of personally identifiable information. Participants in the program will engage in the exchange using a randomly-generated, unique identification number as provided by the Indiana State Department of Health (ISDH) SEP Database. If a participant desires additional services, such as HCV or HIV testing, treatment referral, health insurance enrollment, etc., that participant will be taken to a private area within the mobile unit for further registration.

IV. Syringe Exchange, Distribution, and Collection

Step 2: Assess frequency of injection drug use and collect contaminated needles and syringes.

At a participant's initial visit, staff will explain the reasons for using a clean needle, syringe, and other equipment for every injection. With this background information, staff and the participant will then discuss the participant's frequency of injection and availability for return to the SEP to determine the appropriate amount of supplies to be distributed; this is known as a needs-based negotiation. At subsequent visits, staff will distribute the number of needles and syringes returned rounded up to the next tenth number. This method is known as a One-to-One Plus Exchange Model. Returned sharps containers will be weighed to estimate the number of syringes returned. Staff will estimate the number of returned syringes using a ready-made chart with weights and corresponding number of syringes. Negotiation is allowed for additional syringes if the participant was unable to return syringes for valid excuses (e.g. law enforcement confiscation, homelessness, etc.) or if a longer period of time will occur before the participant can return to the mobile unit.

Step 3: Distribute sterile syringes and clean supplies in consideration of injection habits.

The program will supply participants with sterile/clean equipment as needed to allow for safe injection. Infectious agents can survive in used needles, syringes, and other equipment used in the preparation of intravenous drugs for prolonged periods of time ranging from days to weeks depending on environmental conditions. It is therefore best practice to use new supplies for each injection. A variety of one unit needle and syringe sizes will be available through the program with guidance on best use. Additional supplies necessary for clean injection include sterile water, alcohol swabs, cotton, heating devices, and tourniquet bands. These supplies will be provided in a harm reduction kit with each visit; additional units of any of these items requested by participants will be provided. To further prevent the transmission of infectious diseases, the program will also supply condoms and hand sanitizer/soap as needed. Additional supportive materials include, but are not limited to, hand warmers, healthy snacks, lip balm, and wound care kits (e.g. band aids, gauze, antibiotic ointment, alcohol swabs). Participants will also be provided with a sharps container for disposal of used needles and syringes; the sharps (needles and syringes) container(s) provided

will be capable of safely handling the number of needles and syringes distributed (e.g., one quart-sized container holds approximately 60 syringes).

Step 4: Assess participant need and utilization of naloxone. Distribute naloxone as needed.

The SEP will provide naloxone to each participant as needed. Staff will assess at each visit if a participant has used naloxone since it was last distributed. Participants will be supplied with take-home naloxone kits if their previous supply has been used to reverse an overdose. Naloxone administration and rescue breathing education can be provided in approximately 10 minutes. Distributing and providing education about naloxone engages patients who may not be in favor of sobriety-based treatment, but are responsive to harm reduction strategies.

Participants will be provided with a Participant Bill of Rights and Responsibilities which outlines expectations of participants. Selling supplies provided by SSAS, using or dealing drugs during operation of the exchange, and acting inappropriately towards staff members will not be tolerated. Persons violating these expectations will be discharged from the program. Only adults age 18 years and older are eligible for participation in syringe exchange.

V. Support Services

Step 5: Assess participant readiness for additional services, such as viral infection testing, SUD treatment referrals, and health care navigation, and provide services as indicated.

Following the exchange, staff will ask participants if any other assistance can be provided, such as testing, treatment, linkage to care, and housing services. Participants receiving services in addition to the distribution and return of syringes will require registration with MCPHD for those services separate from the exchange itself. For participants wishing to enroll in services without the aid of MCPHD, a booklet of services available in central Indiana will be available. Common support services provided by MCPHD through SSAS will include:

- *HCV/HIV and STD Testing*
Rapid HCV and HIV testing will be performed on the mobile unit within a private area. Participants will be encouraged to be tested every six months to detect new infection. Rapid HCV testing takes approximately 20 minutes for results; participants will be allowed to receive results at the time of testing or the next visit to the mobile unit. Participants with positive results will be encouraged to complete a short interview regarding possible routes of disease transmission consistent with the Indiana Communicable Disease Rule. Infected individuals will be referred to community resources for follow up care. MCPHD Bellflower Clinic will provide comprehensive sexually transmitted disease (STD) testing and treatment at their office location. Disease intervention specialists are also available for contact identification and risk reduction.
- *Substance Use Disorder Treatment*
Staff will be trained to assess stages of change (readiness for treatment) in participants. Participants ready to engage in SUD treatment will be referred to

MCPHD SUOS, who will contact the patient within 48 hours regarding treatment options. SUOS has established relationships with a variety of inpatient and outpatient treatment centers throughout Marion County to meet the needs of any participants ready to engage in services. Referrals for medication assisted treatment (MAT) will also be provided.

- *Immunizations*
MCPHD Public Health Nurses (PHNs) are available at district health offices (DHOs) throughout the county to provide immunizations and general health counseling. Immunizations of priority for PWID include hepatitis B, hepatitis A, and influenza, though all immunizations are available as needed. Hepatitis A and B vaccines will be available on the mobile unit for administration year round, while influenza vaccines will be available on the mobile unit during influenza season.
- *Wound Assessment and Care*
Basic wound assessment will be provided by the SEP staff. Staff will be trained to recognize high risk abscesses and other wounds secondary to injection drug use. Wound care kits will be provided to participants, and participants will be referred to an urgent care center or ED for wounds requiring immediate medical attention.
- *Social Work Services*
Participants in need of immediate housing will be assisted by staff to reserve a bed at a nearby shelter. They will be referred to MCPHD Social Work and contacted within 48 hours for further assistance. Social Work will provide housing assistance, career counseling and assistance, transportation assistance, and mental health (depression, anxiety) counseling within limits. More extensive services will be referred to community agencies. SEP staff will be trained to conduct on-site depression, anxiety, and suicide risk screenings on site as indicated.
- *Financial Counseling and Health Navigation*
HHC Covering Kids and Families (CKF) will assist with health coverage enrollment for participants. CKF can be on site as needed for this service. Participants may also be referred to federally qualified health centers (e.g., Eskenazi Health Center, a division of HHC), which are able to provide financial counseling and health navigation services in addition to primary care, dental services, enabling/empowering services, nutrition education, mental health care, rehabilitation services, optometry, and other supportive services.

Further MCPHD programs available for participant support include Ryan White HIV Services, Dental Health, WIC, and Tuberculosis Control, among others.

VI. Waste Management

Staff will not personally handle any loose sharps (needles and syringes). Participants will be responsible for ensuring used sharps are placed in an appropriate container prior to the exchange. Staff will then dispose of the entire sharps container within a larger, puncture resistant, leak proof container to be transported to MCPHD Public Health Laboratory for disposal. All sharps intended for disposal must be enclosed in an approved sharps container, which is puncture resistant, leak proof, color-coded and labeled with the biohazard symbol. Bulk biohazard waste will be kept in a locked location. The program will utilize MCPHD's current contract with Stericycle for biohazard waste disposal.

Staff will follow current MCPHD protocol for waste management and disposal as outlined in MCPHD Policies and Procedures. This protocol includes immediate disposal of any

contaminated material in a closable, labeled, leak proof, puncture resistant, disposable container; universal precautions for blood and body fluid exposure; practice of appropriate hand hygiene and use of personal protective equipment; and workspace decontamination.

VII. Funding

The program will require no additional funds from taxpayers. Funds will be procured from the current MCPHD budget and supplemented by both private and public grants. Federal and state law mandates that no federal or state funds may be used in the purchase of syringes and needles for the use of syringe exchange. Initial costs are estimated to be higher due to the procurement of a mobile unit and other start-up costs. However, supply and staff costs may increase over time as the program's participant-base expands.

VIII. Evaluation and Monitoring

Data collected at each visit will include the participant ID code, number of syringes distributed, number of syringes returned, education provided, services provided, and reported naloxone administration. Participants will report the intended use of syringes (i.e. drug of choice, insulin, or other use) and the average number of times they inject per day. Participants will also report the date and result of their last HCV and HIV testing. Equipment sharing habits will be assessed at each testing. This information will be recorded both in the ISDH SEP Database and in a separate MCPHD database.

A comprehensive report of the above information will be developed annually. Quarterly reports will be compiled in accordance with ISDH guidelines. Data that may be reported for grant purposes includes: (1) total number of registered participants; (2) gender of participants; (3) decade age range of participants; (4) number of participants identifying as HCV and/or HIV positive; (5) estimated number of participants engaged in SUD treatment; (6) total number of syringes distributed; (7) estimated number of syringes returned; and (8) referrals provided. The reported cases of HCV and HIV in Marion County will continue to be monitored for program impact.

Some logistics may change as the program is developed. Regardless of potential changes, the objectives and mission of SSAS will remain the same.

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Appendix A. Visit Flow for Safe Syringe Access and Support Program

1. Each participant will be given a randomly-generated identification number and ID card.

2. Staff will engage participants in education on safe injection practices and determine participant's needs. If return visit, syringes will be weighed.

3. Participants will receive sterile/sterile/clean equipment to allow for safe injection. Syringes will be issued based on the number of syringes returned.

4. Naloxone will be provided along with education on its use and rescue breathing.

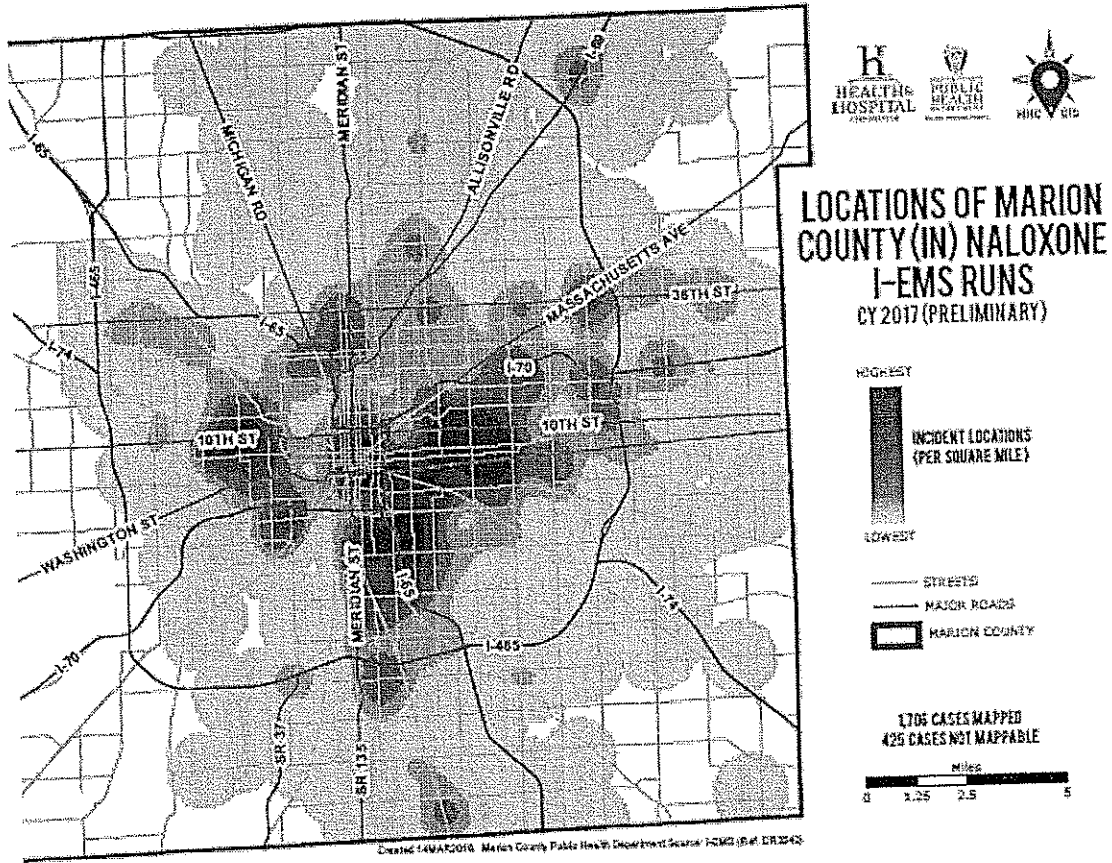
5. Participants will be offered additional support services based on readiness and need.



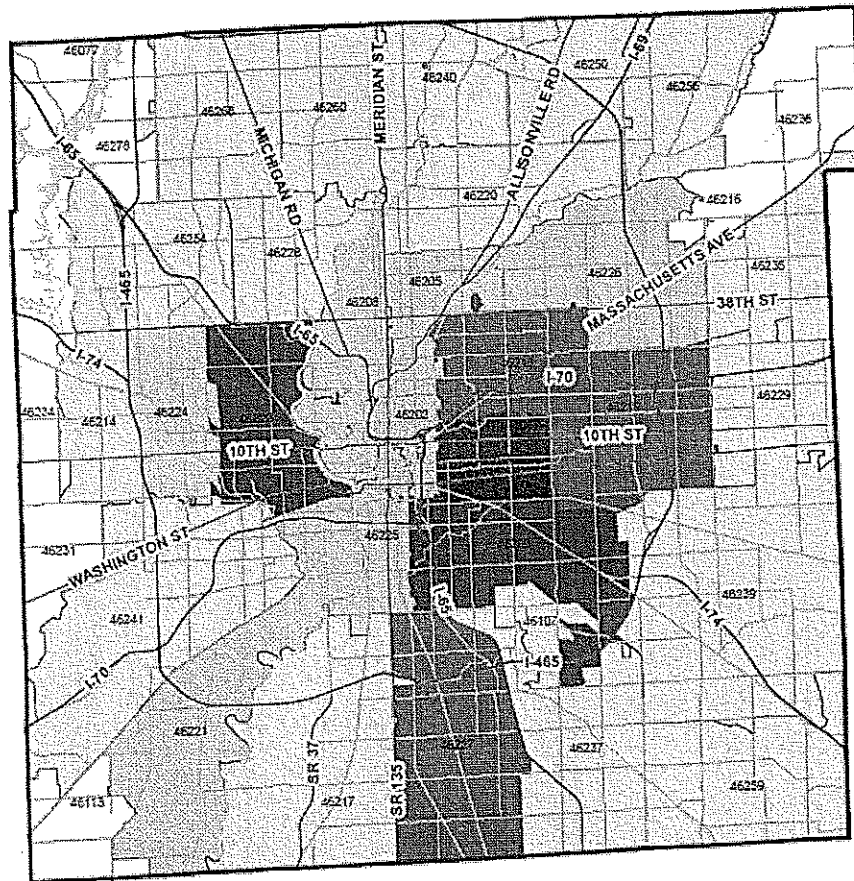
Prevent. Promote. Protect.

S.S.A.S Vision: To prevent the transmission of infectious diseases through evidence-based practice and client-centered care.

Appendix B. Areas of Consideration for Location of Mobile Unit



LOCATIONS OF MARION COUNTY (IN) NALOXONE I-EMS RUNS BY ZIP CODE CY 2017 (PRELIMINARY)



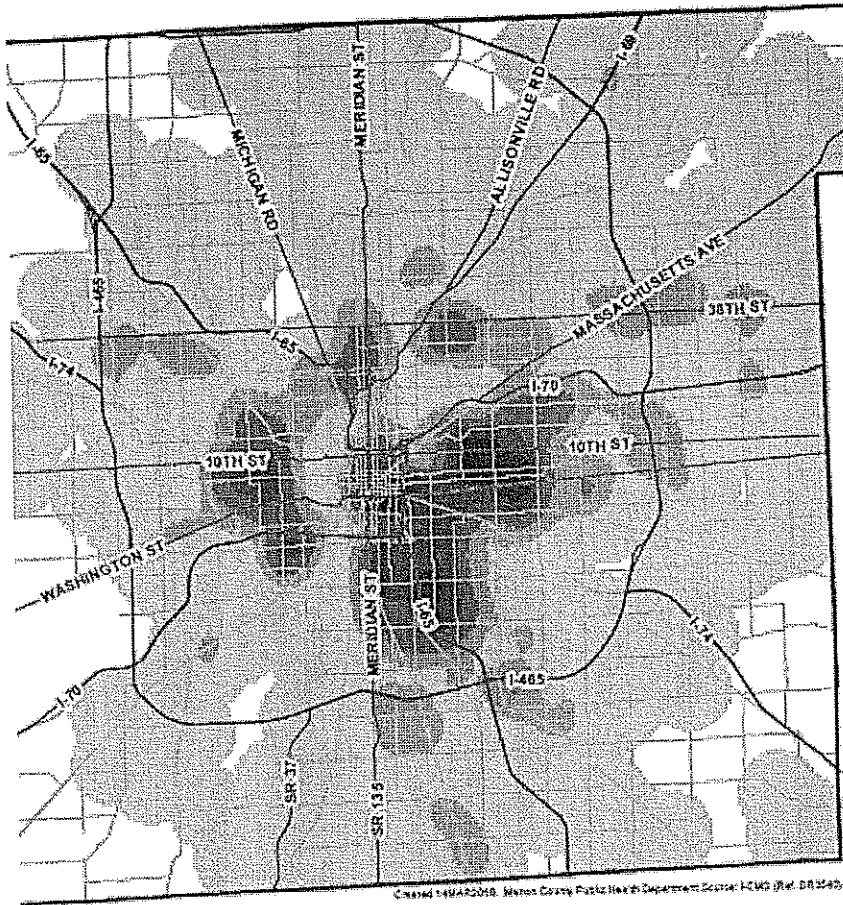
STREETS
 MAJOR ROADS
 RIVERS
 MARION COUNTY

INCIDENT LOCATIONS BY ZIP CODE
 0
 1 - 40
 41 - 100
 101 - 150
 151 - 200
 201 - 240

1,706 CASES MAPPED
 425 CASES NOT MAPPABLE



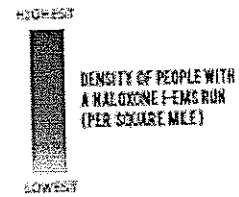
Created 14MAR2018, Marion County Public Health Department (Source: HEMS (Ref. CR3540)



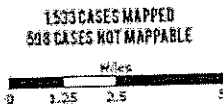
© 2018 MARION COUNTY, Marion County Public Health Department Section: PCMG (R.W. DR. 2018)



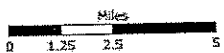
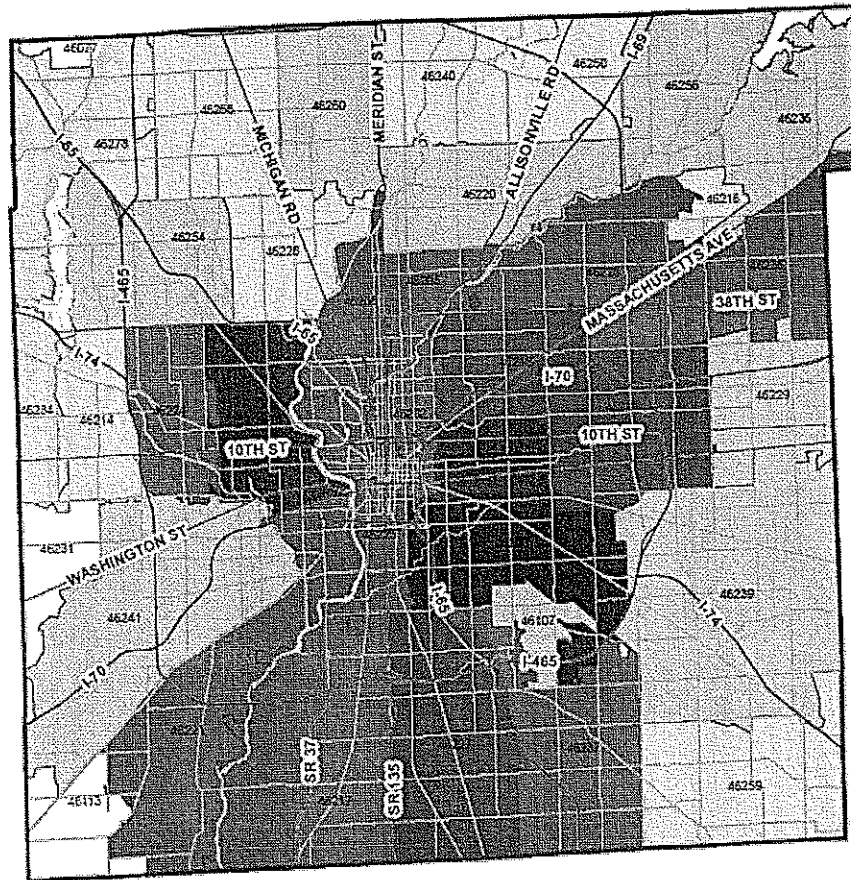
RESIDENCE OF MARION COUNTY (IN) NALOXONE I-EMS RUNS CY 2017 (PRELIMINARY)



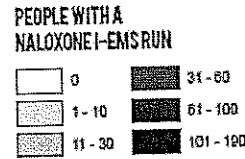
- STREETS
- MAJOR ROADS
- ▭ MARION COUNTY



RESIDENCE OF MARION COUNTY (IN) NALOXONE I-EMS RUNS BY ZIP CODE CY 2017 (PRELIMINARY)



- STREETS
- MAJOR ROADS
- RIVERS
- MARION COUNTY



1533 CASES MAPPED
598 CASES NOT MAPPABLE

Created 14/11/2018, Marion County Public Health Department. Source: HEMS (Ref. DR1940)

Appendix C. Glossary of Terms

CDC: Centers for Disease Control and Prevention

Cooker: Container used to break down drug with sterile water

HCV: Hepatitis C Virus; Bloodborne pathogen that infects the liver.

HHC: Health and Hospital Corporation of Marion County

HIV: Human Immunodeficiency Virus; virus that causes Acquired Immune Deficiency Syndrome (AIDS)

IDU: Injection Drug Use

IMPD: Indianapolis Metropolitan Police Department

MCPHD: Marion County Public Health Department

Mobile Unit: Mobile van that can be driven to various locations throughout the city for SEP purposes

Naloxone: Opioid-reversal drug; trade name Narcan

PWID: Person(s) Who Inject(s) Drugs

SEP: Syringe Exchange Program, also known as syringe service or access program

Sharps: Needles and syringes, lancets, etc.

SUOS: Substance Use Outreach Services, a MCPHD program