

# USING STRATEGIC PLANNING TO PREVENT OPIOID- INVOLVED OVERDOSES: CASE EXAMPLES

The U.S. continues to face a complex and ever-evolving opioid misuse and overdose epidemic, with communities across the country facing a wide variety of related negative health outcomes. Strategic planning processes such as SAMHSA’s Strategic Prevention Framework (SPF) can help ensure that communities implement prevention programs and practices that serve those populations disproportionately impacted by the epidemic and address the underlying causes of opioid misuse and overdoses within these populations.

This resource provides examples of three fictional communities—Santo Alto, Springfield, and Metropolis—each facing distinct challenges related to the opioid epidemic.

- **Santa Alto** is a prosperous suburban county in the southwest U.S. facing rising fentanyl use and overdose rates.
- **Springfield** is a rural, Appalachian town encountering new challenges from polysubstance methamphetamine and fentanyl use.
- **Metropolis** is a major coastal city witnessing an emerging trend of mixing xylazine into illicit opioid supplies.

Using a case-based approach, this resource illustrates how each community used the five steps of the SPF to address their opioid-related problems. The examples are meant to provide insight into the different ways the opioid epidemic might manifest and how the SPF might be operationalized on the ground. Prevention practitioners can use these cases:

- To learn more about what the SPF can look like in action
- To understand the basics of real evidence-based practices for addressing opioid overdoses

- To help inform future strategic planning activities

**Please note:**

To simplify the examples, we assumed that each community had already conducted a comprehensive needs assessment and, through that process, identified opioid-related misuse and consequences as key prevention priorities.

## SANTA ALTO

### **About Santa Alto:**

Santa Alto is an economically prosperous suburban county in the southwestern U.S. Residents are predominately White (45%) or Hispanic/Latino (40%) and well-educated: 48% have bachelor’s degrees, and 21% have graduate degrees. There are multiple colleges and universities within and near the county and a rapidly growing high-tech sector that fuels the local economy. Santa Alto is also home to numerous healthcare providers; most are consolidated within Vigor Health, a single integrated, managed care system.

Historically, the impact of the opioid epidemic on the county was minimal, with rates of prescription opioid misuse and heroin use significantly below national averages. In 2009, Santa Alto’s public health department (“Department”) mandated that all healthcare providers participate in the state’s prescription drug monitoring program and provide ongoing training to facilitate that participation. Other than that, the county lacked a strong prevention infrastructure, and community awareness and understanding of opioid misuse was low. The county was thus largely unprepared when fentanyl overdose rates in the region began to skyrocket.

After engaging in a comprehensive planning process, the Department decided to implement two overdose education and naloxone distribution (OEND) programs—harm reduction programs specifically designed to reduce the likelihood of fatal opioid-involved overdoses. OENDs educate participants on how to identify overdose signs and administer the opioid overdose reversal medication naloxone. They also provide naloxone supplies to participants. In addition, the Department decided to implement a community awareness campaign about the risks of fentanyl use.

Let’s see how the Department used the SPF to arrive at this decision.

## STEP 1. ASSESSMENT: IDENTIFY PREVENTION NEEDS AND READINESS TO ADDRESS THOSE NEEDS

### Learning About the Issue

The Department engaged in a three-part strategy to learn more about the scope of the problem and contributing risk and protective factors:

- They partnered with Vigor Health to **expand drug testing** of people seeking emergency medical care for overdose symptoms to see how often fentanyl was involved. Test results revealed that fentanyl was present in nearly all identified overdose events, indicating that the primary risk of overdose in the county was consuming fentanyl.
- They partnered with local law enforcement to **test their seized substances**. This allowed the Department to assess the frequency of fentanyl contamination in other substances. They learned that, while fentanyl contamination was occurring, the rates were relatively low compared to available statewide data. However, they were alarmed to discover that many seizures were of pure fentanyl—sometimes mislabeled as heroin.
- They contacted local opioid misuse treatment providers **to see if opioid use disorder (OUD) was on the rise**. Specifically, they wanted to assess whether the increase in fentanyl overdoses was correlated with an overall rise in opioid misuse. Providers indicated that OUD had not increased overall—but that more people were presenting with primary fentanyl use. Providers also said that a significant majority of people seeking treatment for OUD were White.

These three findings indicated that the overall scope of opioid misuse had not apparently increased within the county. However, increased use of fentanyl among people with OUD had increased the risk of overdose.

### Expanding Data Collection

Because opioid use had not (until now) been a major problem, investment in the Department's epidemiological surveillance capacity had been minimal. Few Department staff had epidemiology or evaluation expertise related to substance misuse. This capacity gap made it difficult for the Department to know what to do with the assessment information they collected. Specifically, they lacked the resources needed to identify and quantify the underlying opioid misuse risk and protective factors in the community or to understand why people who misused opioids had transitioned to fentanyl. They also lacked the ability to assess the readiness of the community to support expanded prevention efforts.

Aware of these limitations, the Department had applied for federal grant funding as soon as the initial spike in fentanyl overdoses was reported. Once this funding came through, they contracted with a local college to conduct additional data collection and analysis to fill their knowledge gaps. The college focused on three areas:

- **Review of public administrative data** related to the supply and misuse of opioids and the consequences of misuse
- **Community surveys**, developed and administered in both English and Spanish, to better understand the public's understanding of opioid misuse
- **Focus groups**, also conducted in both English and Spanish, with people with OUD to learn more about the shift to fentanyl use

Here's what they found:

- **The public data review** uncovered a series of annual reports on substance seizures produced by the county Sheriff's Office. These reports, together with data from the expanded testing of new seizures, indicated that the overall quantity of opioids trafficked into the community was essentially flat but that the proportion of opioids that were pure fentanyl had dramatically increased.
- **The community surveys**, administered by a trained group of students, generated responses from more than 900 county residents. Findings revealed that most community members were unaware of the rise in fentanyl overdoses and that many still considered the opioid epidemic "a problem in other counties but not here."
- **The focus groups** revealed that most people with OUD were not deliberately seeking out fentanyl but that they used it because it was the cheapest and most available opioid. Many had heard of the opioid overdose reversal medication naloxone but didn't know where to get it. Those who had used naloxone spoke positively of it. Many also shared "to help cope with stress" as the most common cause of their opioid use. Several Spanish-speaking participants said that they thought fentanyl use was as high among the county's Hispanic population as the White population, but that it was less visible because people whose first language was Spanish were less likely to be referred to treatment or to call emergency medical services in cases of suspected overdoses.

Overall, these findings confirmed that the scope of opioid misuse in the county was still stable. Further analysis of the college's needs assessment efforts identified numerous protective factors within the community against opioid misuse, including strong community disapproval of use,

high rates of economic stability, and a robust health care system. However, among people who did misuse opioids, the risk of overdose had substantially increased due to the supply of less potent opioids being replaced with fentanyl. County residents, overall, appeared unaware of this shift. Access to naloxone was a protective factor against overdoses becoming fatal; unfortunately, such access was limited.

At the Department's request, the college developed a basic model to project future increases in fatal fentanyl-involved overdoses. The model used data from demographically similar counties that had begun experiencing increases in overdose rates ahead of Santa Alta. The median projection was a 60% increase in such overdoses over the next year, with another 50% increase the following year.

## **STEP 2. CAPACITY: BUILD RESOURCES AND READINESS TO ADDRESS PREVENTION PRIORITIES**

Based on their assessment findings, the Department determined that new prevention efforts should focus on (1) improving overdose prevention efforts and (2) implementing and raising community awareness of fentanyl use.

### **Working with Community Partners**

To gauge their interest in supporting these efforts (and begin planning what these efforts might look like), the Department reached out to local community organizations—pharmacies, local businesses, law enforcement agencies, and town and village governments, as well as their existing partners at Vigor Health and the local college. They shared the assessment results and projection findings with them, tailoring their presentations to resonate with each organization's priorities.

Included among these potential partners were organizations serving Spanish language-speaking populations. The Department provided these organizations with additional details from the focus groups about the barriers facing Spanish-speaking residents seeking OUD treatment. They also shared this information with Santa Alto Health and Human Services Department (SAHHS), which oversaw the county's substance use disorder treatment budget. The Department pledged to support SAHHS in its efforts to address these issues. The SAHHS began its own strategic planning process, and a representative from the Department participated in all community partner meetings.

Most of the organizations contacted by the Department readily agreed to disseminate any prevention messaging from the Department. None, however, had the resources to develop their

own messaging campaigns. Additionally, none of the organizations indicated any willingness or ability to move beyond awareness and engage in more intensive prevention programming.

### **Building Additional Capacity**

Undaunted, the Department identified a key champion at Vigor Health whom they knew cared deeply about OUD and had participated in statewide prevention efforts. With her support, Vigor agreed to dedicate staff time and other resources to an overdose prevention intervention—if the Department could provide funding to cover costs.

The Department knew that the state had recently obtained a large federal grant to address opioid misuse, and that the funding was intended to be distributed to county governments. It applied to the state prevention office for funding and technical assistance (T.A.) for planning support. The state office approved the application and T/TA request.

## **STEP 3. PLANNING: PRIORITIZE RISK AND PROTECTIVE FACTORS, SELECT INTERVENTIONS, AND DEVELOP A COMPREHENSIVE PLAN**

The Department was now ready to begin developing their prevention plan. Their overarching goal was **to reduce the number of fatal opioid overdoses in Santa Alto**. But they needed more input to determine how they would get there, including identifying their specific objectives for achieving this goal.

To get this input, they convened another series of roundtable discussions with community organizations to define:

- Which type of overdose prevention intervention would be most appropriate for the county
- The scope and objectives of the prevention awareness campaign
- How to ensure the long-term sustainability of the interventions and/or their impacts

To ground these discussions, the Department emphasized the finding that overall opioid misuse rates remained low in the county and that numerous strong factors that protected against misuse continued to exist. For these reasons, they suggested that new efforts focus primarily on protecting individuals already misusing opioids from fatal overdoses. The Department again shared the complete needs assessment findings, posing questions such as the following:

- Are there feasible ways to reduce access to fentanyl in the county?
- What strategies are available to improve overdose responses by laypersons?
- What barriers might we encounter if we adopt those strategies?
- What information about fentanyl is most likely to be retained by county residents after an awareness campaign ends?
- What is the most important information about overdoses that county residents need to know?
- What are the best settings for conveying this information?

### Prioritizing Risk and Protective Factors

Most of the community discussions centered around the key overdose risk and protective factors identified in the needs assessment.

- Risk factors included that fentanyl is much more potent than other opioids, that fentanyl is cheaper and more available than other opioids, that fentanyl is sometimes mislabeled as a less potent opioid, that many people with OUD don't have access to naloxone, and that many people are unaware of the increased dangers posed by fentanyl.
- Noted protective factors included low overall rates of opioid misuse and opioid trafficking, low specific desirability of fentanyl (i.e., it was used because it was cheap and available, not because of its inherent characteristics like potency), and positive opinions of naloxone among community members familiar with it.

The discussions revealed that the greatest obstacle to improved overdose prevention in Santa Alto was a lack of understanding among laypersons (including people with OUD) on how to identify and respond to an overdose. Medical providers, including emergency medical services, were well-trained and equipped to address overdoses. However, many people experiencing overdoses did not receive emergency medical services, as many overdoses either occurred while alone, or with people who may be reluctant to call 911. Access to naloxone was considered an important, and under-utilized, protective factor against overdoses becoming fatal.

Based on these discussions, the Department identified this primary objective (#1) for its overdose prevention intervention: **Reduce the proportion of opioid overdoses that are fatal by 50% over the next two years among all county demographic groups.**

The Department's reasoning for choosing this objective was that it did not want to lose sight of the overall goal of the strategic planning effort, which was to reduce the number of fatal overdoses. An awareness campaign focused on fentanyl use overall (rather than specifically on fentanyl overdoses) would ideally impact fentanyl overdose rates.

### **Selecting Policies and Practices, Objective #1**

To address Objective #1 (Reduce the Proportion of Opioid-Involved Overdoses), the Department began investigating potential interventions. They knew they needed to find approaches that were evidence-informed, a good practical fit (given their needs and available resources), and a good conceptual fit. For example, because the county lacked a strong opioid overdose prevention infrastructure than other regions, any intervention they selected would need to be implemented from scratch—the Department wouldn't be able to rely on any existing programs to build on. To find appropriate options, they reviewed program databases available through the federal government, academic entities, and non-profit organizations. They supplemented this review with basic searches of academic publications.

After reviewing what they found, the Department (with support from its community partners) determined that the best way to reduce the proportion of opioid overdoses that were fatal would be to expand layperson knowledge and capacity to address overdoses. And the best way to do that would be through an OEND program.

They decided to implement two: one to be implemented by the Department and one by Vigor Health. This dual approach was the best fit—both practically and conceptually—because it was feasible and evidence-based. Furthermore, it made conceptual sense, as it would prepare community members to identify and respond to an overdose event they witness.

The Department decided to partner with Vigor Health for several reasons. First, the Department alone lacked the staff necessary to host all the OEND educational events, and it was less expensive (and more efficient) to pay Vigor Health to supply the added capacity. Also, by having Vigor focus on English-language events, the Department would be able to focus its own efforts on events for Santa Alto's Spanish-speaking residents (in addition to providing a limited set of events in English). Both programs would operate in parallel, with the Department providing overall oversight.

### **Selecting Policies and Practices: Objective #2**

To address Objective #2 (Reduce the Number of Fentanyl-Involved Overdoses), the Department began investigating potential community-wide fentanyl awareness campaigns. Rather than reinventing the wheel, the Department looked online for existing campaigns that would be a good fit for their county. From a link on the Drug Enforcement Administration's website, staff



discovered the [National Fentanyl Awareness Day](#) website. The site offered numerous resources, including billboards, posters, and sample emails that the Department could readily customize to meet their needs. These materials could provide the foundation for a series of live, in-person follow-up community events to further explore fentanyl risks and raise awareness of the OEND programs.

The Department shared its findings with those community partners who had expressed a willingness to disseminate prevention messaging and also introduced the idea of follow-up community events. The partners re-confirmed their commitment to help disseminate messaging. However, while they supported the idea of the events, they had little capacity to help plan or host them.

### **Developing a Logic Model**

With TA from the state prevention office, the Department created a logic model (see Appendix A) to serve as a roadmap for their implementation efforts and to confirm the veracity of their planning. It laid out what the Department planned to do, how it would achieve its objectives, and what resources it would use to do so. The model helped them see all the connections across the planning process and confirmed that they had (or could obtain) all the necessary resources. They shared the logic model with Vigor Health and the other community partners to help prepare them for the implementation process. They also shared it with the state prevention office to fulfill a funding requirement.

### **Planning for Sustainability**

The Department took several steps to plan for the long-term sustainability of the OEND programs and media/in-person campaign.

- First, it worked with the state prevention office to identify available and upcoming funding streams that could support the interventions once current funding ended.
- Second, it worked with Vigor Health to identify and implement strategies for OEND program staff retention. By preventing staff turnover, they could preserve institutional knowledge and avoid new hiring and training costs.
- Third, it tasked its evaluators (see Step 5 below) with assessing the long-term impact of the awareness campaign: this would be key to determining whether or not to continue the strategy.
- Finally, the Department's decision to implement an educational program that included naloxone distribution—rather than just distributing the naloxone alone, in

and of itself would help ensure that program benefits extended beyond the medication's shelf life.

## **STEP 4. IMPLEMENTATION: DEVELOP AND DELIVER STRATEGIES, ADAPTING THEM AS NECESSARY**

Guided by their logic model, the Department received T/TA from the state prevention office on how to create clear action plans for their OEND programs and awareness campaign.

### **Implementing the OEND Programs**

To facilitate the development of the OEND action plan, the Department reviewed research studies conducted with other communities to identify best practices for implementing OEND programs. This helped them identify the core elements they would need to maintain to achieve their desired outcomes (e.g., create a reliable naloxone procurement chain; develop sufficiently sized distribution sites; and create participant-centered, non-stigmatizing training materials). The Department also worked with Vigor Health to establish a contract and payment schedule for its participation. Vigor Health insisted that the contract be fully in place before it began any work.

Once these financial steps with Vigor Health were completed, the Department shared its OEND research with them. Vigor Health operated in other counties besides Santa Alto, including ones where OEND programs were already in place. They brought in staff from those counties as temporary consultants and trainers. The Department and Vigor Health worked together to create parallel action plans for establishing and operating their respective programs. Each plan included clear assignment descriptions, the staff responsible for each assignment, resources necessary for completing each assignment, measurable milestones, associated timelines, and desired results.

To inform the planning and delivery of their Spanish-language events, the Department drew on the expertise and experience of Santa Alto's Hispanic service organizations. It also solicited feedback on the appropriateness of program content and language. Their partners shared that the content was acceptable but recommended that they adapt its "packaging." For example, to illustrate the appropriate response to an overdose, the original program included a video of a staged overdose event. Rather than adding Spanish subtitles, partners suggested that the Department create a new video with Spanish-speaking actors. Connecting with these organizations not only strengthened the intervention but also helped to build support and awareness of the new program.

Guided by its action plan, the Department established the location and schedule of its OEND program, identified and prepared staff to be program trainers, purchased naloxone and

accompanying instructions in both English and Spanish, and assembled naloxone take-home kits. The Department's first event occurred approximately four months after the end of the needs assessment; Vigor Health's first event launched three weeks later. The Department established recurring bi-weekly meetings with Vigor Health to facilitate communication around OEND implementation challenges and solutions.

### **Implementing the Fentanyl Awareness Campaign**

The Department developed a separate action plan for its fentanyl awareness campaign. Initially, it assumed this would be a straightforward process (since much of the campaign involved reusing publicly available materials). However, it belatedly realized that these materials were only available in English.

To address this issue, they again reached out to the county's Hispanic-serving organizations for translation advice. They also sought input on optimal dissemination channels. Partners suggested that they make several adaptations to the materials—most notably, to shift the focus of one of the posters from personal fentanyl risks to community risks. They also suggested to the Department that the live events include not only education but also a free outdoor movie. And that they highlight this component, as well as the family bonding aspect of the events, in their flyers.

The Department revised their original action plan to reflect these adaptations. The new plan included activities related to adaptation, printing, and dissemination, as well as logistics planning and implementation of the follow-up events. The first campaign materials were visible in the community five months after the end of the needs assessment, and the first community event was hosted two weeks later.

## **STEP 5. EVALUATION: CONDUCT PROCESS AND OUTCOME EVALUATIONS, MAKE MID-COURSE CORRECTIONS (AS NEEDED), AND SHARE RESULTS**

Though the Department supported an in-staff evaluation office, its evaluators had limited experience evaluating substance misuse prevention services. To build their capacity, the evaluators attended a series of federally sponsored trainings on evaluating OEND programs. These trainings also put them in contact with staff from several nationally recognized harm reduction programs. The evaluators spoke with these staff to learn more about appropriate data collection techniques and common evaluation metrics for OEND programs.

## Developing and Following an Evaluation Plan

Together with program staff, the evaluators developed an evaluation plan that included both process and outcome measures.

- The process evaluation focused on implementation metrics such as the use of available resources (e.g., whether the Department engaged Vigor Health’s consultant experts), adherence to the action plan steps, and fidelity to program models.
- The outcome evaluation focused on measurable program impacts on protective factors against fatal overdoses, such as the number of OEND attendees and kits disseminated. The outcome evaluation also sought data on the program’s goal of reducing fatal and non-fatal overdoses in the county, such as how many 911 calls were made for suspected overdoses, how many hospital emergency department visits occurred for suspected overdoses, how many fatal overdoses occurred, and how many people attended more than one OEND events to obtain additional naloxone kits due to their initial ones being used.

To assess the implementation of the OEND programs, the evaluators collected data from Department and Vigor Health staff, community partner staff, and program participants. To assess outcomes, they obtained data from a variety of administrative databases, including from the county medical examiner. They obtained additional overdose data from Vigor Health, law enforcement agencies, fire departments, other first responders, and program participants. As needed, they developed data-sharing agreements prior to collecting these data.

The evaluators developed a separate evaluation plan for the awareness campaign. The plan was designed to assess the scope and impact of both the campaign materials and the live events:

- To assess online dissemination of campaign materials, metrics focused on items such as frequency of viewing and re-sharing of images on social media.
- To assess dissemination of print materials, metrics included items such as how many flyers were handed out and billboards placed.
- To measure participation in the live events, evaluators counted the number of participants who attended.
- To assess campaign impact, event participants were asked to complete a survey with questions about whether they had seen the campaign materials, and whether the materials (online, print, or provided at the event) had affected their fentanyl knowledge.

- To assess engagement with the content, they counted how many survey respondents reached out with follow-up questions.

## Reporting and Responding to Evaluation Findings

Through these efforts, the Department learned that more than 750 county residents participated in the OEND programs in their first six months of operation: 655 attended English-language events and 95 attended Spanish-language events. However, 182 of the English-language attendees were Hispanic, meaning that 36.9% of attendees overall were Hispanic—which nearly reflected the county demographic (40%).

During this period, the Department handed out more than 2,000 flyers, placed 92 posters and billboards, and posted semi-weekly online messages and ads. The online content was viewed over 12,000 times and re-shared 412 times.

The Department also held three community events that collectively reached 1,280 people. Of the 138 people who completed the event survey, most said that their knowledge of fentanyl had increased by attending the event and more than 80% said they had seen at least one poster, billboard, or online message.

The Department shared these findings with community partners and began discussing what improvements could be made, particularly related to flyer distribution.

During the first six months of the program, fatal fentanyl overdoses in Santa Alta increased by 18% increase—a rate that was nearly half of what the Department had originally been projected. They attributed this increase to a variety of external factors that had worsened during this period—most notably, further reductions in the street price of fentanyl. To address this change in the landscape and better achieve their goal of reducing fatal overdoses, the Department is preparing to begin the planning process again, drawing on the strong partnerships and processes developed during the first round of planning.

## SPRINGFIELD

### About Springfield:

Springfield is an economically distressed, rural town in the Appalachian U.S. The town is 94% White and 81% Protestant. The unemployment rate is over 6%, and 22% of residents live below the federal poverty line. Public services in the town, much like the surrounding towns, are

limited. Over half of the town budget is for public safety, and most of the remaining funds go to the transportation and parks departments.

The town has three primary care practices, each independently owned and operated. The nearest college is almost a two-hour car drive away. Most organizations in the town with an interest in public health participate in the town's substance misuse prevention coalition (the "Coalition"). These include other town agencies, local law enforcement, the local district attorney's office, the town's three primary care practices, the school district, some main street businesses, and others. Funded by a state-subgrant from the federal Strategic Prevention Framework- Partnerships for Success (SPF-PFS) program, the Coalition has historically focused on youth alcohol and tobacco use.

Over the past two years, Springfield has faced a marked increase in methamphetamine use. Testing revealed that more than half of the methamphetamine seized by Springfield law enforcement was laced with fentanyl. The town suspects that this lacing is responsible for the recent rise in fatal fentanyl-involved overdoses among people using methamphetamine. The town had previously experienced significant prescription opioid misuse and high rates of methamphetamine use. However, use of each had been in a continual decline, due in part to concerted efforts—by local law enforcement, the state police, and the state attorney general's office—to reduce "doctor shopping" and "pill mills," and expanded use of the state's prescription drug monitoring program. Law enforcement also received training from the federal Drug Enforcement Agency (DEA) on identifying and shutting down local methamphetamine production laboratories.

After engaging in a comprehensive planning process, the Coalition decided to implement a fentanyl test strips distribution program. Fentanyl test strips are simple paper strips that can detect the presence of fentanyl when dipped into drug residue dissolved in water. The purpose of the strips is to prevent people from unintentionally consuming fentanyl when using other substances. Fentanyl test strips are legal at the federal level and in some states, though other states criminalize them as drug paraphernalia.

Let's see how the coalition used the SPF to arrive at this decision.

## **STEP 1. ASSESSMENT: IDENTIFY PREVENTION NEEDS AND READINESS TO ADDRESS THOSE NEEDS**

To learn more about methamphetamine and fentanyl polysubstance use in the community, the Coalition engaged in three types of data collection:

- Surveying people who use methamphetamine to learn the causes (i.e., risk factors) behind why they were consuming fentanyl-laced methamphetamine and how they responded to witnessing an overdose among someone else using methamphetamine
- Interviewing law enforcement to learn why methamphetamine availability and use had begun increasing after the long period of decline
- Surveying town residents, in general, to assess overall knowledge of how to address a polysubstance overdose

Through these data collection efforts, the Coalition sought to learn more about why fatal fentanyl overdoses were increasing among people using methamphetamine and what it could do to help protect against it.

The Coalition did not collect data on risk and protective factors for methamphetamine use in general, as this was too large an issue for them to address at this time. The Coalition was specifically focused on the overdose aspect.

### **Surveying People Who Use Methamphetamine**

The Coalition began by reviewing a recent statewide survey on methamphetamine use prevalence; this revealed that methamphetamine use was highest among White males ages 21-35. Assuming (based on anecdotal findings) that use in the town mirrored these statewide findings, they directed their use survey toward White males in this age group.

They then reached out to its contact at a federally funded national training center serving SPF-PFS grantees. The contact shared a copy of a publicly available, short-form survey developed by another state that was also interested in addressing methamphetamine use. The Coalition modified the survey slightly to shorten its dissemination time and ideally increase the number of people willing to complete it. For example, the original survey included several questions about readiness to access substance use treatment services that, while important, were not directly useful to the Coalition.

When it came to administering the survey, the Coalition faced some challenges. All of its prior experience with survey delivery was with middle and high school students—a captive audience. They were less familiar with how to find members of their focus populations or how to administer surveys in a less structured setting.

After multiple false starts, the Coalition reached out to Springfield's religious community, which operated a communal food bank at a local church. The leadership allowed the Coalition to

administer the survey during food bank hours. The result was a “convenience sample” of respondents—that is, limited to only those people who came to the food bank and were willing to complete the survey. This was not ideal, as this group might be different in critical ways from those who did not. However, the survey did generate valuable information. Findings revealed that, among people who reported that they used methamphetamine, the vast majority were unaware that it was laced with fentanyl. In addition, most reported using methamphetamine alone and had not seen someone else experience an overdose of any type.

### **Interviewing Law Enforcement**

To learn more about methamphetamine availability, the Coalition conducted interviews with local law enforcement. They heard from both Springfield’s police department and the county sheriff’s office that new, out-of-state (and likely transnational) criminal organizations were producing vast quantities of methamphetamine. This methamphetamine flowed through illicit supply chains until it ended up in towns like Springfield. Crucially, this methamphetamine was much cheaper and stronger than the methamphetamine that had previously been produced locally.

Law enforcement officials posited that these factors (high availability, low cost, high potency) were the leading risk factors behind the recent increases in use. From trainings with the DEA, law enforcement had also learned that adding fentanyl to methamphetamine was a growing trend, designed to further lower its cost. Furthermore, by the time the methamphetamine reached towns like Springfield, it usually had changed hands multiple times and the sellers in town were unaware of how it was produced and whether it contained fentanyl or any other cost-reducing additives.

### **Surveying Town Residents**

The Coalition drew on lessons learned from administering the methamphetamine use survey to inform its community-wide survey. One such lesson was the importance of administering the survey in a high foot-trafficked location; another was the importance of working with the owners/management of that location to establish a quiet place for the survey to be conducted.

The Coalition identified three optimal locations for survey administration: Springfield’s two main parks and its largest grocery store. In seeking respondents, survey administrators discovered how important health privacy was to many of the people they approached. They revised their recruitment pitch to clearly explain—right away—how they would protect the information collected.



From the survey, the Coalition learned that community knowledge of naloxone and how to respond to an opioid-involved overdose was high. However, there was significant confusion about how to address an overdose that involved stimulants, or that involved both stimulants and opioids. There was also concern that the state’s Good Samaritan Law (which protected bystanders who contact emergency medical service during an overdose) would not cover methamphetamine use paraphernalia.

Overall, these findings indicated that the primary risks of fentanyl-involved overdoses stemmed from unintentional use. This meant that any intervention the Coalition implemented would need to focus on building protective factors to prevent unintentional fentanyl use and/or the intentional methamphetamine use that led to it. Any strategies focused on intentional fentanyl use, such as explaining the dangers of fentanyl, would likely be less effective as most people did not think they used fentanyl.

## **STEP 2. CAPACITY: BUILD RESOURCES AND READINESS TO ADDRESS PREVENTION PRIORITIES**

Based on the results of the needs assessment, the Coalition decided to prioritize the prevention of unintentional polysubstance use (methamphetamine and fentanyl) and related overdoses.

### **Building Internal Capacity**

Coalition members searched online for virtual trainings on unintentional polysubstance use to enhance their understanding of potential solutions. Through this search, they identified and attended multiple webinars offered by federally funded training centers. These webinars were presented by experts from across sectors, including education, public health, law enforcement, and harm reduction.

The webinars were rich in valuable content. Most helpful were two that focused on best practices for identifying methamphetamine-involved overdoses and on using fentanyl test strips to determine the presence of methamphetamine adulterants. Members also reviewed the resources identified by the webinar trainers, which included information on educating laypersons to identify the signs of a stimulant-involved overdose, fentanyl test strip purchasing, and current federal efforts to expand the use of fentanyl test strips.

### **Working with Community Organizations**

Coalition members discussed with their respective organizations the need to address polysubstance use and overdoses. While they agreed that the issue was important, none had the capacity to devote staff time or resources to the effort—beyond participating in the Coalition.

However, most were willing to provide whatever no-cost support might be helpful (e.g., displaying coalition-developed posters in their offices).

Disappointed, but not demoralized, coalition members regrouped to determine what they could accomplish, given their limited capacity. Rather than trying to address multiple needs, they decided to narrow their scope; focus on a single, key problem; and select an intervention that was as inexpensive as possible. This would also increase the likelihood that the intervention could be sustained, over time.

### **STEP 3. PLANNING: PRIORITIZE RISK AND PROTECTIVE FACTORS, SELECT INTERVENTION(S), AND DEVELOP A COMPREHENSIVE PLAN**

Based on the needs assessment findings and information collected during capacity building, the Coalition decided to focus its prevention efforts on a single goal: **Reduce the rate of fentanyl-involved overdoses among people using methamphetamine**. Members were conflicted about not improving laypersons' response to overdose, but eventually recognized that the Coalition did not have the capacity to address more than one goal at a time.

The Coalition identified one objective to help it meet its goal: **Expand access and use of fentanyl test strips among people using methamphetamine, ensuring that test strips were freely available at more than ten key locations throughout the town within four months.**

The Coalition's original needs assessment had confirmed the need to strengthen multiple factors that could protect against fentanyl use, including the need for increased awareness about the risk of fentanyl overdose, the importance of using methamphetamine in the company of others, knowledge about how to respond to a polysubstance overdose, and awareness of their own use of fentanyl.

The Coalition knew it lacked the resources to strengthen all of these protective factors. However, the chosen objective would help strengthen one important one: increasing people's awareness of their use of fentanyl. Thus, widespread distribution and use of test strips could help to reduce overdose risk even if the underlying issue of methamphetamine use continued to be a challenge for the community.

Before moving forward, the Coalition contacted the state health department to confirm the legality of purchasing and using fentanyl test strips. They also wanted to make sure that their program would not be duplicating any upcoming state efforts. The health department confirmed

that fentanyl test strips were recently legalized under state law, but that the state did not have any plans for expanding access. The Coalition also confirmed with the federal SPF-PFS project officer (with permission from the state) that they could use their SPF-PFS funding to purchase and distribute the test strips.

## Planning the Intervention

With these confirmations in place, the Coalition began planning its intervention. From their training, they knew their plan should focus on four areas: (1) purchasing the test strips, (2) distributing them, (3) educating people on how to use them, and (4) raising community awareness of the intervention.

- 1. Purchasing the test strips.** To identify a good vendor, the Coalition reached out to one of the harm reduction trainers featured on their webinars. The trainer shared contact information for the company with whom her organization worked, which sold test strips in bulk. After reviewing the estimated scope of polysubstance use in the community and seeking advice again from the trainer, the Coalition decided to purchase 5,000 test strips.
- 2. Distributing the test strips.** To inform their dissemination plan, coalition members began looking for public-facing organizations that would be willing to make the testing strips available. They started with their own organizations, and decided to be more, rather than less, inclusive (that is, not just limit their outreach to highly trafficked locations). Other than the criminal court, every Coalition organization agreed to make the test strips available. This included Springfield's three primary care practices, the town library, the Parks Department, the school district, and several local businesses. They also reached out to the community's religious leaders, who agreed to leave the test strips at their foodbank and near church entrances.

All participating organizations were clear, however, that they lacked the capacity to track dissemination (e.g., how many each person took, how often) or answer questions about use. It would be up to the coalition members to keep supplies stocked and provide whatever educational materials were necessary.

- 3. Educating on use.** Understanding that they would have primary responsibility for education, the Coalition reached out to the public health department in a neighboring state that had developed a user-friendly brochure on test strip benefits and use. The Coalition requested permission to modify and use the brochure, which the department granted. They removed the non-English

translations (not needed given Springfield’s demographics) and changed the brochure’s colors so that it could be printed in black-and-white; this helped to reduce printing costs.

- 4. Raising community awareness.** After printing the brochures, the Coalition had little money left over to design or print any more general promotional materials—apart from a single sign for each distribution site. Fortunately, Springfield was a small town with few degrees of separation between residents. So, the Coalition planned a word-of-mouth marketing campaign. Each coalition member would be tasked with telling as many people as they could about the new test strip program, and to encourage everyone they told to also spread the word.

The coalition lacked the resources to develop a formal logic model. See Appendix B for an example of what one might have looked like, had they developed one.

## **STEP 4. IMPLEMENTATION: DEVELOP AND DELIVER STRATEGIES, ADAPTING THEM AS NECESSARY**

To guide the implementation of its intervention, the Coalition developed a preliminary action plan that included brief assignment descriptions, the staff responsible for each assignment, resources necessary for completing assignments, related milestones and timelines, and desired results. A few core coalition members volunteered to shoulder most of the implementation assignments since several others had limited availability—and all had spent considerable time in the planning process.

The action plan focused on four areas: obtaining/customizing the brochures, assembling the strip “packages” (the strips, brochures, signage), communicating with the dissemination sites, and developing talking points for the word-of-mouth campaign. Each area had its own set of action planning steps. For instance, obtaining/customizing the educational brochures involved modifying the existing brochure, copyediting the changes, determining how many to print, and arranging a printing run.

To ensure maximum visibility, the timeline dictated that all resources be assembled and ready before the start of the word-of-mouth campaign. Coalition members also coordinated with the participating organizations to identify one day when everyone would begin making the test strips available. This would help to attract notice and get community members to begin talking about the program organically. The Coalition suggested dates that were more than two weeks after all action plan timelines would be completed, to accommodate any potential delays. They also worked to accommodate any timing concerns that the organizations had.

Within three months of their initial needs assessment, fentanyl test strips and instructions were available, and the word-of-mouth campaign was underway.

## **STEP 5. EVALUATION: CONDUCT PROCESS AND OUTCOME EVALUATIONS, MAKE MID-COURSE CORRECTIONS (AS NEEDED), AND SHARE RESULTS**

The Coalition used set-aside grant funding to contract with an outside evaluator to assess the effectiveness of the fentanyl test strip distribution campaign and its impact on overdoses. Because funding was limited, the evaluator developed a simple, low-cost evaluation that focused on tracking easily quantifiable measures. There was no attempt to evaluate causal linkages, the effectiveness of the coalition’s planning process, or more qualitative concepts (e.g., “How well did coalition members share their talking points in conversation?”). Instead, the evaluator’s metrics included the following:

- Number of test strips distributed
- How quickly the test strips were distributed
- Number of brochures distributed
- Number of locations participating in the distribution effort
- Number of locations that dropped out over time
- Number of people directly contacted by coalition members in the word-of-mouth campaign
- Number of fentanyl-involved overdoses that occurred before and after the distribution effort began

To keep costs down, the evaluator relied on less precise but easier-to-track measures. For example, rather than keeping a daily (or even weekly) tally of how many test strips each location distributed, they tracked how often each site required refills and how many test strips were included in each refill. They also capitalized on one coalition member’s relationship with Springfield’s police chief to set up a system for getting a monthly report on known overdoses. This was an incomplete measure, since not all overdoses (especially non-fatal ones where 911 is never called) were reported to the police. However, it was the only option available.

The evaluation revealed that, in the first four months of distribution, refills for additional test strips were lower than expected. This was despite them being clearly marked as ‘free’ and being

paired with information on their importance. Yet during this same period, police reports of fentanyl-involved overdoses declined by more than 20%. Based on this information, the evaluator hypothesized that despite limited distribution overall, perhaps those community members at greatest risk of overdose were obtaining them.

In other findings, the evaluation tallied that Coalition members directly communicated with 207 residents through word-of-mouth and that approximately one brochure was distributed for every five test strips (which the evaluator posited was primarily the result of people taking multiple strips but only needed one brochure for them).

The evaluator proposed a more detailed evaluation (should additional funding become available) that would seek to assess attitudes and awareness of the test strips among both the general public and those using methamphetamine. They also suggested that the Coalition conduct a series of focus groups or listening sessions to learn more about any barriers to accessing the test strips (such as fear of stigma) and opportunities to expand awareness. Collectively, this evaluation would provide the Coalition with a deeper understanding of the risk and protective factors driving the unintentional overdoses and how effective the test strips could be at addressing them.

The Coalition discussed these findings internally and shared them with the participating organizations. Collectively, they agreed to make an immediate improvement whereby the test strips and brochures would be split into two supplies at each location—one remaining as publicly visible as possible and the other placed in a more discrete spot. That way, people nervous about being seen taking the strips could do so without notice. The Coalition also began discussing other opportunities to raise awareness of the importance and existence of the test strips, and recently contacted the state prevention office to discuss options for additional funding. A new federal grant opportunity will soon be accepting applications. They look forward to applying.

## METROPOLIS

### **About Metropolis:**

Metropolis is a large economically and ethnically diverse city in the northeast United States. It supports a wide range of businesses and industries, and several nationally recognized research institutions and other universities with extensive experience working with government agencies. The city offers residents a variety of public services, including health care services for low-income residents beyond what the state's Medicaid program covers. However, there is limited infrastructure for serving people who speak languages other than English, Spanish, Chinese,

Tagalog, or Arabic. There have also been repeated reports that services for people experiencing homelessness need improvement.

Historically, the city has faced significant substance misuse challenges, including waves of heroin use in the 1970s, high rates of cocaine use in the 1980s, and the ongoing opioid epidemic. In facing these challenges, city agencies have gained experience implementing effective behavioral health services—including services to prevent substance misuse.

When fentanyl misuse and overdose rates began spiking in 2014, the city government created a prevention task force (PTF) within the Mayor’s Office. It reflected the city’s “whole-of-government” response to any current and future major substance misuse issues. The PTF’s charter empowers it to use all the authorities of the Mayor’s Office to compel city agencies to action. Its current chairperson is a former member of Congress who represented part of the city for eight two-year terms.

Metropolis recently experienced several highly publicized cases of polysubstance use and overdose that involved a mix of opioids and xylazine, a tranquilizer approved for use with animals only. In humans, xylazine is known for causing severe skin wounds. It can cause overdoses on its own, as well as increase the risk of an opioid overdose by chemically interacting with consumed opioids to amplify and extend their sedative effects.

After engaging in a comprehensive planning process guided by the Strategic Prevention Framework, the PTF decided to implement a multi-faceted approach that included a community wide education and awareness campaign to increase knowledge about xylazine, accompanied by two more discrete interventions to educate health care providers and identify new evidence-based programs.

Let’s see how the PTF used the SPF to arrive at these decisions.

## **STEP 1. ASSESSMENT: IDENTIFY PREVENTION NEEDS AND READINESS TO ADDRESS THOSE NEEDS**

### **Learning About the Issue**

Soon after news headlines began covering the rise of xylazine-related wounds and overdoses, Metropolis’ mayor directed the PTF to focus its attention on xylazine. Knowing little about the drug or its consequences, they set to work to learn more.

- **First, they directed all relevant city agencies to share any existing data they had collected related to xylazine use.** These agencies included the Department of Health, Metropolitan Police Department, Department of Corrections, Office of Animal Welfare (due to xylazine’s use in veterinary medicine), Office of Homeless Services, City Housing Authority, Office of Child and Family Services, and Department of Education, among others. Most had little quantitative data to share. However, anecdotal data from the police department revealed numerous suspected incidents of xylazine use. This use appeared to be most common among people experiencing homelessness and people of Puerto Rican origin.
- **Second, they directed city agencies to include questions about xylazine use in their substance-related data collection instruments.** For example, the City Housing Authority began including xylazine in the form it used when people applied for affordable housing and the Department of Health began asking about xylazine in the screening tools it used at its free clinics. The PTF also encouraged agencies to provide appropriate translations of these instruments. However, this process of updating the instruments and collecting and analyzing the data took time, and results were not immediately available.
- **Finally, they conducted focus groups to find out what the public knew about xylazine.** Focus group participants included members of the broader public, individuals who were receiving medications for opioid use disorder through city treatment providers, and health care providers. Most of the health care providers had heard of xylazine but only a small number knew how to appropriately treat xylazine use or wounds. Outside of this group, most focus group members knew little about xylazine. Those who did (predominately White or Asian American) got their information from the recent media coverage. Some of the people in treatment had heard about xylazine from their peers.

## Assessing Prevalence

Using funds from its general budget, the PTF contracted with one of the city’s major research institutions to develop and implement a rapid testing protocol of substance samples. This was important for determining the true prevalence of xylazine in the community important since many people using xylazine were unaware that they were doing so, and so self-reports were unreliable. Under the protocol, all samples obtained by city agencies where xylazine’s presence was suspected were sent to a university laboratory for spectrometer analysis. This included samples of substances found at the site of fatal overdose events.

In just the first month of testing, the laboratory reported that xylazine was present in 15% of the samples found at the site of fatal overdoses, and in more than a third of the other samples sent for analysis. In more than 90% of the cases where xylazine was identified, fentanyl was also



present. In the remaining positive samples, xylazine was either present on its own or mixed with other substances—predominantly heroin or ecstasy.

## **Learning More**

The PTF also reached out to its contacts at the U.S Drug Enforcement Administration (DEA) to supplement the anecdotal information they'd gotten from the police department. DEA officials shared with them non-classified data on xylazine seizures in the greater Metropolis area, as well as across the state and neighboring states. These data showed a steady increase in xylazine seizures in Metropolis beginning in 2021 and revealed that the regional epicenter of xylazine seizures was actually a city around 150 miles southwest of Metropolis. Xylazine supplies seemed to be steadily increasing in waves originating from that city.

Given the urgency of the situation, the PTF chairperson decided to move forward with the planning process before receiving findings from the updated city agency data instruments. It would review these data once they became available and use them to guide future planning efforts.

## **STEP 2. CAPACITY: BUILD RESOURCES AND READINESS TO ADDRESS PREVENTION PRIORITIES**

Because of its position and authority within the city government, the PTF had extensive resources at its disposal to support substance misuse prevention in general. However, it faced two key challenges in addressing xylazine use: (1) limited information about the best ways to prevent and/or address xylazine use, and (2) limited resources to support their xylazine work specifically, as nearly all of what they had was already earmarked for other prevention priorities.

### **Identifying Potential Interventions**

To address the first challenge, the PTF looked to federal trainings on xylazine and recent academic journal articles. They were unable to find any confirmed best practices for preventing xylazine use or treating its consequences. However, they did learn about a growing number of anecdotal promising practices, particularly related to treating withdrawal symptoms and wound care.

To supplement their research, the PTF organized a series of listening sessions with consumer-facing health care and social service providers who were already serving people using xylazine. The listening sessions generated important tips for wound care (keep the wounds moist and always covered), preventing overdoses (administer naloxone because fentanyl is likely present,

but also engage in rescue breathing because naloxone does not reverse the effects of xylazine), and treating withdrawal (try replacement therapy providing clonidine or other similar drugs).

### **Obtaining Additional Funding**

To obtain the funding they needed to move their xylazine work forward, the PTF submitted a request for a supplemental budget proposal to go to the city council. The mayor approved the request and directed the budget office to include it as a line item in the upcoming budget. The following month, while debating the budget, the city council called the PTF chair to testify about the need for the funding. The chair shared the PTF's needs assessment findings and its planning goals [see Step 3, below], and explained why additional funding was necessary. The city council passed the budget with the requested funding included.

### **Preparing for Further Planning**

The PTF engaged in the following activities to raise awareness of its new initiative and invite participation in the planning process:

- It disseminated a 2-page, emergency alert bulletin, available in multiple languages, to all city agencies that provided or funded direct health care services, and to all private health care providers under contract with those agencies. The bulletin provided basic information about xylazine use, why it is a public health concern, and promising practices for treating xylazine withdrawal, wounds, and overdose.
- It disseminated a shorter (1-page) of the bulletin to all other city agencies. The shorter version focused on risks but excluded information related to treatment.
- It announced the formation of a citywide Xylazine Planning Committee and invited agencies to submit contact information for any staff, volunteers, experts, and community members who might want to participate.
- It encouraged agencies and providers to develop their own, specific plans for addressing xylazine use in the course of their other responsibilities.

## **STEP 3. PLANNING: PRIORITIZE RISK AND PROTECTIVE FACTORS, SELECT INTERVENTIONS, AND DEVELOP A COMPREHENSIVE PLAN**

Based on its exploration of the limited xylazine research and conversations, the PTF decided to focus its xylazine efforts on three core goals:

1. Raise public awareness of xylazine use and risks

2. Expand the use of promising practices for reducing xylazine-related consequences
3. Contribute to the research base surrounding xylazine misuse by identifying new evidence-based practices

These are described below.

### **Goal #1: Raise Public Awareness of Xylazine Use and Risks**

Drawing on its extensive experience implementing previous community awareness campaigns to address other substance misuse issues, the PTF understood that producing a single prevention message for the entire city was unlikely to be effective. Instead, it would need to create multiple messages tailored to the needs and norms of Metropolis' various populations.

To inform the development of these messages, the PTF convened a series of planning sessions with the Xylazine Planning Committee. Each series focused on a different population and sought to answer questions such as the following:

- What information about xylazine would the population most benefit from having?
- What communication methods would most likely reach this population?
- What types of messaging content would be most likely to resonate?
- In which languages should the messaging be delivered? Who might the PTF work with to adapt and translate non-English communication?
- What percentage of the population could the PTF realistically hope to reach with a message within the next eight months?
- Do planning participants have access to any additional data that could supplement the needs assessment findings?

Based on these discussions, the PTF identified this primary objective for the goal: **Within the next eight months, reach at least 60% of city residents overall and at least 45% of each focus population with a message about xylazine.**

To achieve this objective, the PTF began planning a citywide messaging campaign comprising multiple, population-tailored messages. The campaign would include posters, billboards, flyers, social media posts, and radio PSAs, and would be available in English, Spanish, Chinese, Tagalog, and Arabic (reflecting Metropolis' largest population groups), as well as Russian, French, and Korean (thanks to additional volunteer translation assistance from some of its planning partners).

The campaign would focus primarily on the risks posed by xylazine, with some additional content on those substances most likely to contain xylazine. It would also include contact information for local harm reduction providers. The PTF developed an overarching logic model for the campaign, as well as “sub” logic models for each of its tailored messaging efforts.

## **Goal #2: Expand the Use of Promising Practices for Reducing Xylazine-related Consequences**

To accomplish its second goal, the PTF reached out again to its consumer-facing health care and social service partners for help developing peer learning opportunities. They hoped that this peer learning approach would facilitate the exchange of information and promising practices among providers. The PTF set its primary objective for this goal as the following: **Ensure that at least 5% of the city’s consumer-facing health care and social service providers attend one in-person peer learning event about xylazine within the next eight months.**

The PTF worked with its provider partners to develop an outline for the learning events and identify peer trainers (whom they would pay for time and labor). The selected trainers were then charged with developing a training curriculum that focused primarily on wound care and overdose prevention. While curriculum development was underway, the PTF coordinated with harm reduction agencies throughout the city to identify staff who would benefit from the trainings. It also worked with the city health department to coordinate outreach to hospitals, emergency medical services, and other organizations where people using xylazine received services. The PTF developed a separate plan and logic model to guide the creation and delivery of these training events (see Appendix C).

## **Goal #3: Contribute to the Research Base Surrounding Xylazine Misuse by Identifying New Evidence-Based Practices**

To accomplish its third goal, the PTF consulted with a range of health care professionals and researchers to determine where new research might have the greatest impact within a relatively short time span. Collectively, they decided that the area of inquiry that best balanced “need” and “feasibility” was around managing xylazine withdrawal. Several organizations that provided detox services had shared that, because there was so little research in this area, they were essentially “throwing the kitchen sink” at cases where xylazine withdrawal was occurring. The PTF set the following objective for this goal: **Fund research on xylazine withdrawal management that results in at least one peer-reviewed article in the next 12 months.**

To achieve this objective, the PTF released to Metropolis’ major research institutions a request for information (RFI). The purpose of the RFI was to learn more about what a funded project

might reasonably accomplish in a year and the level of funding required. The PTF also contacted a major nonprofit foundation to gauge its interest in co-funding the grant. The foundation agreed to contribute \$250,000 for research funding. Meanwhile, the PTF reviewed the RFI results and determined that it would need to provide at least \$400,000 to fund a robust research study. The PTF chairperson approved allocating \$150,000 from the budget to accompany the foundation's contribution.

The PTF crafted a request for proposals (RFP) that encouraged grantees to focus on the effectiveness of the medication clonidine for managing xylazine withdrawal. The PTF has heard anecdotally that clonidine could be effective, but could find no hard data—including data on effective dosages, frequency of administration, or appropriate co-medications. The PTF developed a plan for issuing the RFP, reviewing proposals, awarding the grant, and providing grantee oversight (see Step 4, below).

## **STEP 4. IMPLEMENTATION: DEVELOP AND DELIVER STRATEGIES, ADAPTING THEM AS NECESSARY**

Guided by their planning efforts, the PTF developed action plans for moving ahead with its three primary objectives. Each action plan included clear assignment descriptions, staff responsible for each assignment, resources necessary for completing the assignments, milestones for measuring progress, associated timelines, and desired results.

### **Objective 1. Within the next eight months, reach at least 60% of city residents overall and at least 45% of each focus population with a message about xylazine.**

To achieve this objective, the PTF continued to work with the Xylazine Planning Committee to develop and test xylazine prevention messages. This process centered around a series of focus groups with participants from each of the focus populations. The PTF and its partners developed initial messages which they then tested with relevant focus group participants. Through this process, the PTF tested and refined messages for Whites, African Americans, Arab Americans, Filipino Americans, Chinese Americans and other Asian Americans, Hispanics/Latinos, and Native Americans. Within these groups, they tested for variations among youth, parents, people experiencing homelessness, people using or at high risk of using substances, and people with substance use disorders.

The groups varied in which messages they reported most effective, although a theme consistent across several groups (though not all!) was the value of messaging around the risks of xylazine-related wounds. The PTF used the information they collected to finalize the messages, which it then disseminated according to the city's usual best practices. The PTF also alerted the local

media to the messaging campaign and arranged for the PTF chairperson and other high-ranking city officials to complete interviews with media outlets about the campaign and its importance. The campaign was fully underway six months after the task force was directed to address xylazine.

**Objective 2. Ensure that at least 5% of consumer-facing health care and social service providers in the city attend an in-person peer learning event about xylazine within the next eight months.**

To meet its second objective, the PTF continued to collaborate with its team of peer trainers as they developed the training curriculum; providing resources and support, as needed. The PTF also connected the xylazine training team with other experienced trainers for technical assistance on training design (e.g., appropriate length of sessions, level of audience interactivity, frequency of breaks).

Meanwhile, the PTF worked with the city health department to coordinate and market the trainings. To encourage participation, they offered the training every other week at different city-operated health facilities and provided free lunch. They also coordinated with the Metropolis chapter of a national social worker association and the health department's training institute to accredit the training events as a continuing education credit opportunity for most attendees.

The first training event was delivered six months after the task force was directed to address xylazine. Live events were offered in English or Spanish, as those were the languages trainers spoke. However, subtitled recordings Tagalog, Chinese, and Arabic were created and posted online. These recordings were available for free but were not accredited for continuing education.

**Objective 3. Fund research on xylazine withdrawal management that results in at least one peer-reviewed article in the next 12 months.**

To achieve its third objective, the PTF issued an RFP through Metropolis' grants and contracts online portal. All of the city's major universities and other interested organizations were invited to submit a bid. The PTF received three bids that met its criteria for "minimally acceptable." A review team comprising select PTF staff members, staff from the partner funding foundation, and several of PTF's researcher partners reviewed the bids using a pre-developed scoring rubric. The PTF awarded the grant to one of the major research universities and issued the funding through the city's standardized payment system.

The PTF agreed to serve as lead oversight entity for the funded organization and provide monthly updates to its foundation partner. The PTF requested monthly status reports from the grantee, as well as bi-weekly calls with the grant’s principal investigator to discuss any challenges. Beyond that involvement, the PTF remained “hands off” to ensure that the study would be unbiased.

## **STEP 5. EVALUATION: CONDUCT PROCESS AND OUTCOME EVALUATIONS, MAKE MID-COURSE CORRECTIONS (AS NEEDED), AND SHARE RESULTS**

The PTF was subject to continual evaluation by the Metropolis Mayor’s Office of Evaluation. Through its regular, ongoing process assessment, the Office confirmed that the PTF had followed all required planning procedures, hitting metrics related to collaborative planning, process documentation, records retention, and use of strategic planning tools, among others.

However, because of its unfamiliarity with xylazine, the Office was unsure of how to conduct an appropriate outcome evaluation. To address this challenge, they contracted with a local university to support the development of an outcome evaluation.

### **Goal 1. Raise Public Awareness of Xylazine Use and Risks**

The evaluators engaged in two primary activities to assess the effectiveness of the communications campaign. First, they tracked media coverage of xylazine—specifically, data on viewership and listenership rates when campaign messages played on TV or radio, counting numbers of posters and flyers distributed, using social media APIs (i.e., tools used to analyze publicly available website and app data) to search for online mentions of xylazine. They also used search engine APIs to track how many people searched for information about xylazine.

They also collaborated with community partner organizations to conduct a new round of focus groups with community members to learn more about campaign visibility and effectiveness.

Here’s what they learned:

- From the media review, evaluators estimated that 30% of city residents had been exposed to campaign messaging at least once, with rates among the focus populations ranging from 5% to 35%.
- Focus group participants reported an increase in community awareness of xylazine in the first two months of campaign implementation. However, it was difficult to isolate the

effect of the campaign from the effects of expanded media coverage on xylazine, in general.

- In terms of overall outreach, the campaign made good progress and would likely hit accomplish most of its objective in a few more months. The evaluators suggested that the PTF's initial timeline was simply too aggressive.
- Outreach efforts were less successful among populations experiencing homelessness, as well as among some populations (e.g., Korean Americans) for whom English was not a primary language.

City agencies had long struggled to reach populations experiencing homeless and the PTF acknowledged that it had not done enough to address this issue. The PTF re-assembled the Xylazine Planning Committee to identify new opportunities to improve outreach. Meanwhile, the PTF identified and began working with members of the city's Korean population to improve the translation of campaign materials. They also scheduled a roundtable meeting to identify opportunities for improving campaign dissemination among this group of residents.

## **Goal 2. Expand the Use of Promising Practices for Reducing Xylazine-related Consequences**

The evaluation team developed a separate plan to evaluate the peer trainings. Their approach consisted of (1) counting attendance records at events, and (2) counting the number of unique visitors to the online recordings of the trainings. The evaluators compared these data to city records on the total number of consumer-facing health care and social service workers in the city to determine whether the 5% objective was achieved.

The evaluators also decided to expand the evaluation to begin assessing the impact of event attendance. They developed and administered pre- and post-training knowledge tests for attendees, along with a 30-day follow-up survey. This would allow them to measure changes in participant knowledge about xylazine harm reduction, as well as how and to what extent they applied the knowledge to their everyday practice.

Findings from the evaluation revealed that the training led to increases in knowledge, that participants were very satisfied with the training, and that participants who encountered people using xylazine were applying lessons learned.

It also revealed that only 0.5% (~750 out of 150,000) of the combined health care provider and social service workforce attended a training or accessed a recording within the first two months that the recordings became available.



As with the awareness campaign, the evaluators posited that the PTF may have simply picked too aggressive an initial timeline to achieve its objective. The evaluators also noted that information about xylazine would likely not be a relevant topic for every consumer-facing health care provider or social service provider, which may have reduced interest in attending the events. Moving forward, the PTF will begin working with the health department and its other partners to develop new outreach strategies for the training. It will also coordinate with the trainers to update the trainings as new information becomes available.

### **Goal 3. Contribute to the Research Base Surrounding Xylazine Misuse by Identifying New Evidence-Based Practices**

The evaluation team was not asked to evaluate the funded research study since the regular academic peer-review process would determine whether the research design and methods were appropriate and the findings relevant and accurate. Instead, the evaluators developed an evaluation plan to assess the impact of the article that the grantee was expected to publish. The plan was designed to track the PTF's dissemination of findings and the degree to which the findings were incorporated into the next round of PTF xylazine planning. The evaluators also developed a survey for health care providers to assess changes in provider knowledge and/or behavior related to withdrawal care. The evaluators are awaiting publication of the article to begin this evaluation.

Across all three goals, the evaluators identified that the PTF may have developed overly aggressive timelines. They have recommended that the PTF examine its planning processes to determine why this occurred and whether any process improvements could be implemented.

## APPENDIX A: SANTA ALTO LOGIC MODEL

| Inputs   | Activities  | Outputs  | Short-Term Outcomes                         | Medium-Term Outcomes   | Long-Term Outcomes                         |
|--|---|--|---|--|--|
| <i>What We Invest</i>                            | <i>What We Do</i>   | <i>What Occurred</i>                                       | <i>Changes in Learning</i>                  | <i>Changes in Action</i>   | <i>Changes in Conditions</i>               |
| Vigor Health and County Health Department staff  | Review research to identify evidence-based programs and practices | 750 participants in OEND programs                          | Increase awareness of fentanyl in community | Slow the rate of fentanyl-related overdoses                        | Decrease the number of opioid overdoses    |
| Funding (federal grant, state prevention office) | Conduct surveys and focus groups                                  | 215 survey respondents, 8 focus groups                     | Change opinions on harm reduction           | Build and sustain community partnerships                           | Mainstream acceptance of harm reduction    |
| Community partners                               | Community-wide fentanyl awareness campaign                        | High visibility of campaign billboards and other materials | Community members can identify an overdose  | Increase funding for county health department's prevention efforts | Improved public health outcomes            |
| Naloxone take-home kits                          | Naloxone administration trainings                                 | Delivered naloxone take-home kits                          | Community members equipped with naloxone    | Increase the size of the prevention workforce                      | Build safer and more equitable communities |
| Materials from National Fentanyl Awareness Day   | Community education events  | 3 community events reaching 1,280 people                   | Raise awareness of prevention efforts       |  |  |
| Technical assistance (state prevention office)   | Develop action plans  | Hispanic cultural adaptations of materials                 |   |  |  |

## APPENDIX B: SPRINGFIELD LOGIC MODEL

| Inputs   | Activities   | Outputs  | Short-Term Outcomes   | Medium-Term Outcomes   | Long-Term Outcomes                                       |
|--|--|--|---|--|--|
| <i>What We Invest</i>  | <i>What We Do</i>  | <i>What Occurred</i>   | <i>Changes in Learning</i>                                  | <i>Changes in Action</i>   | <i>Changes in Conditions</i>                             |
| Community partners (e.g., churches, law enforcement)                   | Community surveys, interviews with law enforcement                                       | 285 surveys completed, 8 semi-structured interviews                    | Expanded community awareness of fentanyl-involved overdoses | Changes in law enforcement response to overdoses                         | Greater community acceptance of harm reduction practices |
| Coalition members and their respective workplaces' staff               | Determine test strip locations (e.g., food bank, library, primary care provider offices) | Set up test strip boxes at 12 different locations across the community | Better understanding of hot spots to place free test strips | Acquire dedicated government funding for additional fentanyl test strips | Decline in fentanyl-involved overdoses                   |
| 500 educational brochures from a major city's public health department | Modify brochures to be relevant to community   | Distributed 430 educational brochures                                  | Community members learn how to access and use test strips   | Coalition better connected with prevention/harm reduction workers        | Greater community cohesion                               |
| Funding from SPF-PFS program   | Purchase 5,000 test strips   | Distributed 2,100 test strips  | Greater availability of free fentanyl test strips           |  |  |
| Talking points for word-of-mouth campaign                              | Organize a formal distribution day   | Engaged in conversations with 152 community members                    |   |  |  |

## APPENDIX C: METROPOLIS LOGIC MODEL

| Inputs  | Activities  | Outputs  | Short-Term Outcomes  | Medium-Term Outcomes  | Long-Term Outcomes   |
|---|---|--|--|---|--|
| <i>What We Invest</i>   | <i>What We Do</i>   | <i>What Occurred</i>   | <i>Changes in Learning</i>   | <i>Changes in Action</i>  | <i>Changes in Conditions</i>                                 |
| Funding from Mayor's Office   | Conduct listening sessions with health care and social service workers      | Conducted 9 live trainings over 2 months                                 | Greater awareness of xylazine among health care/social service workers | Application of information learned in everyday practice                         | Funding for xylazine harm reduction in the city's budget     |
| Data from multiple city agencies related to xylazine use            | Research evidence-based strategies related to xylazine in academic journals | PTF learned about promising practices for xylazine harm reduction        | Increased knowledge about xylazine harm reduction efforts              | Updating trainings with new, evidence-based information as it becomes available | Incorporate trainings into onboarding for all city employees |
| Partnerships with city health dept and harm reduction organizations | Outreach to hospitals, emergency services, etc.                             | Collaboration with hospital systems and the city's public housing agency | Understanding how to care for xylazine wounds appropriately            | Developing new outreach strategies for future trainings                         | Fewer xylazine-related overdoses                             |
| Trainers (health care and social service workers)                   | Develop an outline for training curriculum                                  | 750 health care and social service workers attended or viewed trainings  |  |   |  |

| Inputs  | Activities                             | Outputs  | Short-Term Outcomes        | Medium-Term Outcomes     | Long-Term Outcomes           |
|---|--|--|----------------------------|--------------------------|------------------------------|
| <i>What We Invest</i>                                       | <i>What We Do</i>                      | <i>What Occurred</i>   | <i>Changes in Learning</i> | <i>Changes in Action</i> | <i>Changes in Conditions</i> |
| Evaluators from the Mayor's Office and the local university | Conduct pre- and post-training surveys | 87% of attendees were "satisfied" or "very satisfied" with the trainings |                            |                          |                              |