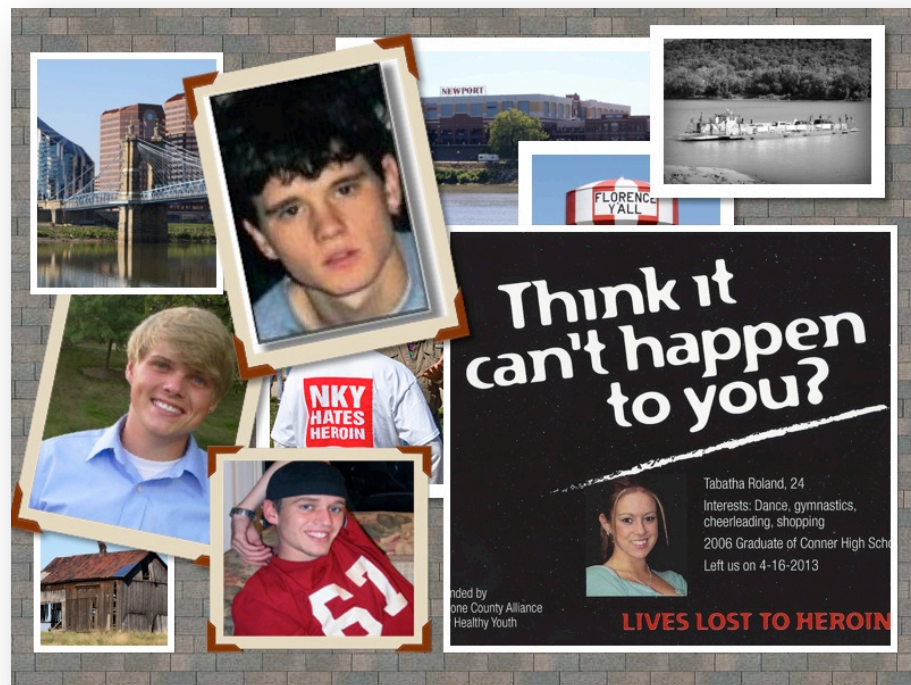


# Northern Kentucky's Collective Response To the Heroin Epidemic



## Our Plan for Recovery

Released November 14, 2013

**Northern Kentucky's Collective Response to the Heroin Epidemic:**

**Our Plan for Recovery**

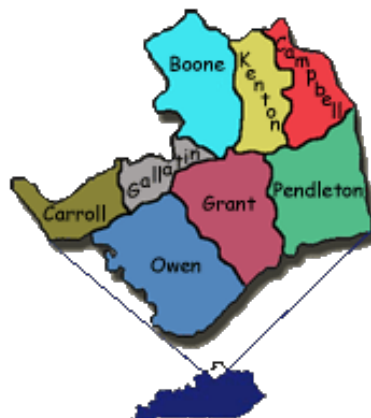
**Released by The Leadership Team of the Northern Kentucky Heroin Impact Response**

**November 14, 2013**

**Covington, Kentucky**

Advocates in Northern Kentucky, in conjunction with Dr. Jeremy Engel, convened a Call To Action on Heroin in September 2012. Subsequently, a core Leadership Team was established to identify strategies for stabilizing the epidemic across the eight counties in the NKY Area Development District. The Leadership Team is comprised of representatives from law enforcement, local governments, mental health and substance use treatment, health care, public health, advocacy groups, business, among others.

For more information, visit: [www.DrugFreeNKY.org](http://www.DrugFreeNKY.org)



## DEDICATION

### **Vision:**

Northern Kentuckians thrive, healthier and happier.

### **Mission:**

The people of Northern Kentucky will have access to life-saving and life-restoring resources for heroin addiction that will reduce its impact in our communities.

### **This Work is Dedicated to:**

The families and friends who have lost loved ones due to heroin;

Those who are travelling the long, hard road of addiction recovery;

Dr. Jeremy Engel for his unwavering passion and persistence toward a healthier Northern Kentucky;

Mac McArthur for his vision and longstanding commitment to removing the stigma of addiction and promoting the thrill of recovery;

Charlotte Wethington for her advocacy efforts for Casey's Law and for being one of the first voices for our vision and mission;

The members of PAR and other advocates who are making the problem public and shifting the culture from addiction to recovery;

The countless treatment, medical, and allied health professionals who provide life-restoring strategies;

The parents, grandparents, aunts, uncles, educators, librarians, prevention specialists, and youth group leaders—anyone—who positively impacts the development of youth;

The medical and emergency responders who provide life-saving services;

The concerned citizens, faith-based groups, businesses, and community coalitions for operationalizing the vision and mission in their neighborhoods and communities; and

The officers of the NKY Drug Strike Force, Local Law Enforcement, the judicial system, and local governments who work fearlessly and tirelessly to get heroin and other drugs off our streets.

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From the Perspective of the Chamber of Commerce

The heroin epidemic has shaken the Northern Kentucky region to the core. It has transcended beyond a personal or family issue to a challenge of regional significance. Everyday, we work to make Northern Kentucky the place of choice for businesses to locate and grow, and for families to live. To succeed, we need a healthy population and a reliable workforce—two things greatly affected by this epidemic. It is too costly to our citizens, businesses, economy, and region at large to do nothing. It is for these reasons that the Northern Kentucky Chamber of Commerce has taken a role in this fight. An issue this large requires regional collaboration to solve. By bringing diverse partners to the table, we have started the conversation and taken the first steps towards a solution. We are now reaching out to the entire community for assistance to ensure Northern Kentucky remains a place of choice. Join us.

Steve Stevens  
Adam Caswell  
Kevin Donnelly

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## PICTURED ON FRONT COVER

Tabitha Roland  
 Nicholas Specht  
 Taylor Walters  
 Casey Wethington

## FOREWORD

Combating substance abuse and the all-too-often deadly consequences of the disease of addiction is a worthy and noble cause. It is a cause that many will talk about but few will act upon. Most will say that the state needs to do something while others will feel that the city, county, or federal governments need to act. The reality is that with a problem so widespread and systemic, we all have to ask ourselves, "What can I do?"

That's what excites me about *Northern Kentucky's Collective Response to the Heroin Epidemic*. This response brings people from diverse backgrounds, training, and education together to use a multifaceted approach to a complex problem. Any effort that does not address all three of the core responses of treatment, enforcement, and prevention/education is doomed to fail. This plan addresses all three in a significant way.

Many times, grassroots efforts have been at the heart of great change in our nation. Drug problems in Northern Kentucky can't be solved in Washington, D.C. or Frankfort, Kentucky. Even though state and federal governments have a role to play, real change occurs when those closest to the problem take it upon themselves to seek out and implement strategies that address their individual community's specific needs.

The response documented in the following pages can serve as a blueprint for communities across the Commonwealth to develop their own response. I look forward to working with this team as they strive to make the Northern Kentucky region as safe and productive as it can be.

### **Van Ingram**

Executive Director  
Kentucky Office of Drug Control Policy  
125 Holmes Street  
Frankfort, KY 40601  
(502) 564-8291

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### From the Perspective of a Treatment Provider

Where did these *addicts* come from? The answer is simple: people with the disease of addiction come from us. They don't come from Mars. They come from our families, our homes, our neighborhoods. They come from our playgrounds, our schools, and our streets. They come from our businesses, our churches, and our institutions. They come from us.

Because of the stigma against addiction to alcohol, illegal drugs, or painkiller medication, we don't discuss our community's part in creating the problem. For example, it has been said, "Holding young people solely responsible for underage drinking is like holding fish responsible for dying in a polluted stream."

Through age 17, the youngsters who have problems with alcohol or other drugs are called unfortunate, disadvantaged youth. But on their 18<sup>th</sup> birthday young alcoholics and addicts become "hazardous waste." And, like other forms of hazardous waste, we want them out of our neighborhood and in someone else's community. Most of all we want to be sure that they are ***Not In My Back Yard***, even though my *back yard* may be, in fact, where they've come from.

Mac McArthur, Executive Director, Transitions, Inc.



## PREFACE

### Stigma - A Driving Force Behind the Epidemic by Charlotte Wethington

This plan is a call to action—action that can and will change the course of the lives of our families and communities. Joseph Califano, Jr., former Health and Human Services Secretary, summed up the work we need to do: “We need to END denial, STAMP out stigma, RETHINK our concept of crime and punishment, RESHAPE our medical system and COMMIT the energy and resources to confront this plague.” ([High Society, How Substance Abuse Ravages America and What to Do About It](#))

There is one simple action that we all can take that will allow this plan to move forward—**TALK about it**. If we communicate, we can diminish the shame, stigma and discrimination that surrounds the disease of addiction that often prevents individuals and families from seeking help. Talk about heroin addiction—a pressing public health issue—at every opportunity and make those opportunities often.

So, what is it that spurs people in general and parents in particular to take action? What causes us to be more vocal about restrictions on the food choices for school lunches than about the poison in our region that is threatening the lives of our loved ones with ruthlessness and regularity? Imagine if you can the response of our communities, if in fact, children were getting food poisoning at school. The outcry would be deafening, the response would be immediate and the health and safety of children would quickly be restored.

On the contrary, up until October 2012, it was the *silence* about heroin that was deafening. Why? Could the answer be stigma, the silent epidemic? Stigma that denies the existence of the problem, stigma that denies the truth and keeps families isolated, stigma that denies addiction its proper place as a chronic disease, stigma that denies the grieving of lives lost to the disease of addiction.

Shame, stigma, and discrimination paralyzes many with fear and without help or hope for recovery.

Stigma is an enormous obstacle to more effective treatment. Widespread perceptions that addiction strips individuals of basic human qualities lead to self-fulfilling predictions that those who are addicted cannot recover or ever play positive and productive social roles.

Nora Volkow, M.D., Director, National Institute on Drug Abuse

While some are working diligently to stamp them out, others still suffer in silence. Consider the words of Mary Ann Williamson as quoted by Nelson Mandela, “...We are all meant to shine, as children do....[That light] is not just in some of us; it's in everyone. And as we let our own light shine, we unconsciously give other people permission to do the same. As we are liberated from our own fear, our presence automatically liberates others.”

## ACKNOWLEDGEMENTS

Members of the Heroin Impact Response Leadership Team present this plan to inform and provide recommendations to the general public and our policy makers about the heroin epidemic in Northern Kentucky. This plan, based on research and best practices, reflects the collective knowledge and expertise of the following Leadership Team members along with countless others who have contributed along the way.

### Leadership Team Members

Name	Organization
Bailey, David	St. Elizabeth Healthcare
Barnum, Ann	Interact for Health
Carl, Terry	Kenton County Jailer
Caswell, Adam	NKY Chamber of Commerce
Cloyd, Linny Capt.	City of Florence Police Department
Cook, Todd MD	St. Elizabeth Healthcare
Cooper, Lisa	Northern Kentucky ADD
Daly, Mike Chief	City of Ft. Thomas Police
Donnelly, Kevin	NKY Chamber of Commerce
Engel, Jeremy MD	St. Elizabeth's Physicians
Goddard, Chris	HealthPoint Family Care
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Howard, Adam	Boone County
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Sandfoss, Meghan	Northern Kentucky ADD
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Thoman, Shawnee	Kenton County Jail Nurse
Tu, Jamie	St. Elizabeth Healthcare
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White, Sarah	NorthKey Community Care
Whitford, Richard LT	City of Ft. Thomas
Winstanley, Erin PhD	University of Cincinnati

## With Special Thanks

- ❖ To the Northern Kentucky Chamber of Commerce for putting the heroin epidemic on their legislative agenda for 2013; to GERALYN ISLER from Business Benefits Insurance Solutions, Chair of the Chamber Health Committee for guiding the project through the process; and to Adam Caswell and Kevin Donnelly for input on the economic impact of heroin addiction in Northern Kentucky.
- ❖ To the R. C. Durr Foundation, Inc. for the funding to develop this plan.
- ❖ To Bill Scheyer, Vision 2015, for prompting the community to action; and to Ann Barnum, Interact For Health and Mac McArthur, Director, Transitions, Inc., for initiating the process.
- ❖ To Todd Cook, M.D., St. Elizabeth Healthcare; Jeremy Engel, M.D., St. Elizabeth Physicians; and Mina “Mike” Kalfas, M.D., Christ Hospital Physicians, for being physician leaders of a strategy to address this public health crisis.
- ❖ To the *Cincinnati Enquirer* Staff, in particular Terry DeMio and Carrie Cochran, and the network of community newspapers for capturing the essence of the problem and amplifying it through professional, compassionate, and honest journalism.
- ❖ To Steve Arlinghaus, Kenton County Judge Executive, Henry Bertram, Pendleton County Judge Executive, Gary Moore, Boone County Judge Executive, and the other county executives for supporting this effort and becoming a voice to move it forward.
- ❖ To Bill Mark, NKY Drug Strike Force, LT Rick Whitfield, Capt. Linny Cloyd, and other county law officers for collaborating with community partners to inform the public about the heroin epidemic.
- ❖ To those who brought the plan to completion:
  - David Bailey and Chuck Washburn, St. Elizabeth Healthcare, for data collection on economic impact, guidance on medically-assisted treatment, and regional coordination.
  - Lisa Cooper, Meghan Sandfoss, and Amy Martin, Northern Kentucky Area Development District for coordination and planning.
  - Bonnie Hedrick, Ph.D., NKY Agency for Substance Abuse Policy/Mental Health America of Northern Kentucky and Southwest Ohio; and Bruce Ripley, Development Director, Transitions, Inc., co-writers of the Plan with support from co-writers of the different recommendations:
    - Reducing the Supply: Bill Mark, NKY Drug Strike Force, LT Rick Whitfield, and other law officers.
    - Prevent: Sarah White, NorthKey Regional Prevention Center, and Jim Thaxton, Three Rivers District Health Department.
    - Protect: Lynne Saddler, M.D., MPH, Director, Northern Kentucky Health Department, and Jeremy Engel, M.D.
    - Treat: Gary Goetz, NorthKey; Mac McArthur, Director, Transitions Inc.; and Chuck Washburn, St. Elizabeth Healthcare.
    - Support: Jason Merrick, Northern Kentucky People Advocating Recovery
    - Advocacy: Jeremy Engel, MD and Charlotte Wethington, Casey’s Law and Recovery Advocate at Transitions, Inc.
    - Economic Impact: Adam Caswell, Chamber of Commerce, and David Bailey, St. Elizabeth Healthcare.
  - Process facilitator: Marta Brockmeyer, Ph.D.
  - Editor: Dorothy Miller, Ph.D.

## EXECUTIVE SUMMARY

Heroin is cheap, potent, and readily available. People who use heroin come from all walks of life, cutting across all socioeconomic boundaries.

According to the *Trust for America's Health report*<sup>1</sup> released in October, 2013, drug overdose deaths have quadrupled in Kentucky since 1999, higher than all states but West Virginia and New Mexico. That means Kentucky ranks 3<sup>rd</sup> in the Nation for drug overdose deaths.

Without question, evidence of a heroin epidemic in our state and particularly in Northern Kentucky is overwhelming. In Northern Kentucky, more babies are being treated for drug withdrawal, more persons are showing up in the emergency rooms with opioid overdose, and more people, particularly, younger people are dying from overdose. (See pages 14-15 for data specifics.)

The state's price tag for heroin, alcohol, and other drug abuse is estimated to be more than \$6 billion *annually*.<sup>2</sup> This estimate takes into consideration crime, medical care, workplace accidents, lost wages due to substance use, auto accidents, and more.

Combating the heroin epidemic (and addiction in general) requires more resources than are currently available in Northern Kentucky. Of the Commonwealth's 14 regions, Northern Kentucky receives the lowest per capita allocation of federal and state funds for treatment of substance abuse and mental health disorders.

The Leadership Team of the Northern Kentucky Heroin Impact Response has been formed to alter the trajectory of the heroin epidemic. To date, the Team has successfully influenced lawmakers to make Naloxone (a medication that can reverse heroin overdoses) more readily available, opened the first Protection Center for Naloxone distribution in Falmouth, and conducted twelve town hall meetings with our local partners.

In discussions since September 2012, the Leadership Team has identified key aspects of the epidemic that need to be addressed:

- The influx of heroin making its way from Mexico to Chicago, through Cincinnati, and into Northern Kentucky is fueling the heroin epidemic.
- People are dying before they can access treatment.
- Hepatitis C and other infectious diseases are on the rise because there are more injection drug users.
- Persons with the disease of addiction leave incarceration with no transition into treatment.
- Too many young adults experiment with alcohol and other drugs, including heroin. In fact, in 2011, according to the YRBS survey, KY ranked higher than any other state in adolescent heroin use and was almost double the U.S. rate (KY 5.2 versus U.S. 2.9). That rate is even higher for 12<sup>th</sup> graders (7.7%).

- There is limited treatment capacity for all categories of people, especially adolescents, pregnant women, and those who have co-occurring mental health and substance use disorders. The capacity at the only detoxification center in Northern Kentucky is 11 beds.
- Heroin addiction requires availability of specific methods of treatment, and few doctors are licensed to provide medication-assisted care.
- Individuals in recovery require more help in navigating toward health and financial independence.
- Addiction to heroin and other drugs places an extraordinary financial burden on families. For example, many grandparents are raising grandchildren due to their child's addiction to heroin and other drugs.
- Primary care physicians are not equipped to facilitate treatment of their patients with addiction.
- The progression through entry, treatment, and recovery services lacks monitoring and assistance for patients during transition periods.

Now, the Team is releasing our four-year plan to stabilize and reverse the epidemic. We will reduce the supply of heroin through partnerships with regional, state and local law enforcement; advocate for needed legislation that supports our mission; reduce the demand for heroin through prevention, treatment and recovery support; and we will protect those who use heroin (as well as the general public) from harm due to intravenous drug use. The strategies are presented graphically on page 24 and encompass the four demand reduction strategies: Prevent, Protect, Treat, Support.

Reversing this epidemic will require ongoing collaboration and sufficient funding to implement comprehensive, region-wide strategies. The projected cost for implementation of this plan's strategies is approximately \$4 million per year. However, an adequate investment in preventing, treating, reducing harm, and promoting recovery will produce considerable savings in areas such as healthcare, legal/justice, and business.

---

#### From the Perspective of a Judge Executive

In 2010, Kenton County built a new detention center with the capacity to hold approximately 610 inmates. Jailer Terry Carl estimates that 80% or more of Kenton County inmates are locked up for drug-related offenses. This percentage is also true for Campbell County, while Boone County estimates are a bit less. If drug abuse treatment is not received, inmates are eventually released without help for their addiction and often go right back into criminal activity, until they are caught and locked up again. This cycle is very costly since we house inmates at the Kenton County Detention Center at a cost of \$23,000 per person, per year. The detention center has become a revolving door for many of these folks, and we need to break that cycle."

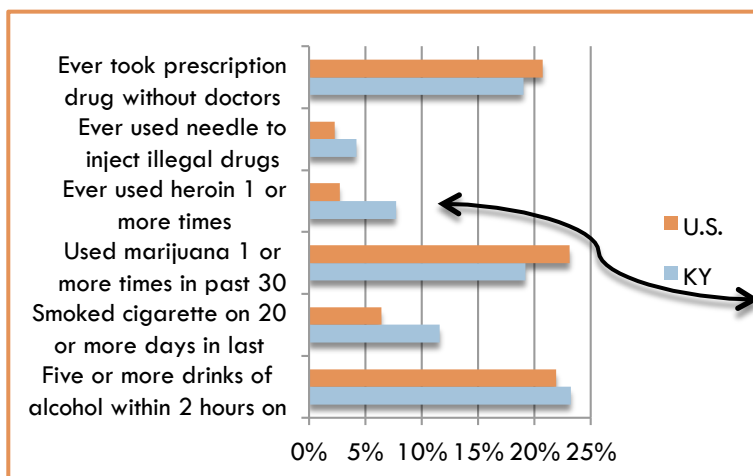
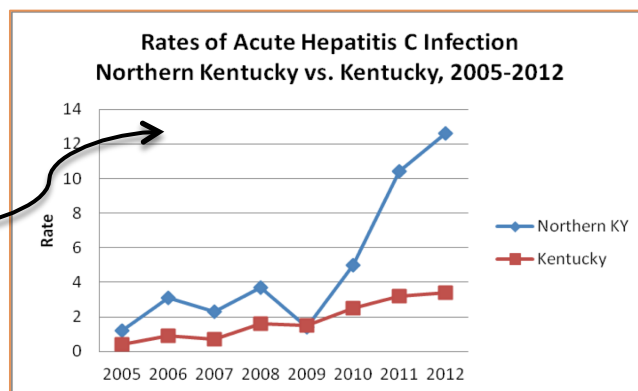
Steve Arlinghaus, Kenton County Judge Executive

## HEROIN'S TOLL ON NORTHERN KENTUCKY

According to the *Trust for America's Health* report<sup>3</sup> released in October, 2013, drug overdose deaths have quadrupled in Kentucky since 1999, higher than all states but West Virginia and New Mexico. That means Kentucky ranks 3<sup>rd</sup> in the Nation for drug overdose deaths. A recent newspaper article identified Northern Kentucky as “heroin ground zero,” describing our region as “...the state’s epicenter for heroin, straining legal and medical systems and bringing deadly consequences that are starting to spill out to the rest of the state.”<sup>4</sup>

The impact of the heroin epidemic on Northern Kentucky is unprecedented.

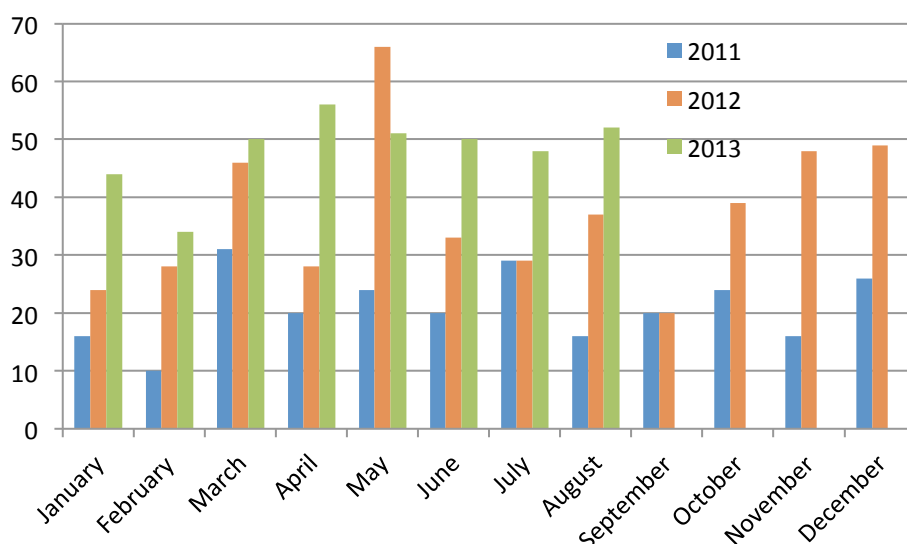
- Statewide, heroin overdose deaths *increased by 550%* between 2011 and 2012.<sup>5</sup> In 2012, heroin overdose cases accounted for almost 20% of all Kentucky Medical Examiner drug overdose cases, up from only 3.22% in 2011.<sup>6</sup>
- In Northern Kentucky the number of overdose deaths doubled between 2010 and 2012 from 31 to 61.
- In Northern Kentucky, the number of babies treated for drug withdrawal doubled between 2011 and 2012 (from 730 to over 1400).<sup>7</sup>
- Rates of acute infections of Hepatitis C in Northern Kentucky doubles the state rate and are 24 times the national rate. Public health officials attribute Northern Kentucky’s high infection rate to the region’s high levels of the intravenous (IV) use of heroin.<sup>8</sup>
- Admissions for heroin addiction increased from 64% in 2009 to 87% in 2012 at the region’s only non-medical detoxification unit.<sup>9</sup>
- According to the Northern Kentucky Drug Strike Force, the number of court cases for heroin possession and trafficking increased 500% from 2008 to 2012 in Boone, Kenton, and Campbell Counties (from 257 to 1,339), and is expected to double in 2013. Sixty percent (60%) of Kentucky’s heroin prosecutions in 2011 were in these three counties, even though the three counties have just 8.4% of the state’s population.<sup>10</sup>



• In 2011, nearly 8% of youth in 12<sup>th</sup> grade in Kentucky reported that they had used heroin 1 or more times—three times the U.S. rate. (CDC YRBS)<sup>11</sup>

- The number of overdose cases at Saint Elizabeth hospitals increased by 77.4% in 2012 and, as of August 2013, the number of heroin overdose cases almost doubled the 2012 rate (from 252 in 2011, to 447 in 2012, and through August 2013, the number was 385).<sup>12</sup>

Heroin Overdoses seen in the Emergency Department of St. Elizabeth Health care, 2011-2013.



The costs associated with opioid addiction can only be projected because addiction to drugs of any kind impacts so many social, legal, and health indicators. It is also difficult to single out the effects of heroin alone, as opposed to substance use in general. We do know that:

- It is estimated that local governments across the U.S. spend about 9% of their local budgets on issues related to substance use and the disease of addiction.<sup>13</sup> The estimated cost for Kentucky statewide related to substance use is \$6 billion annually.<sup>14</sup>
- Lifetime health care costs to treat infections, such as Hepatitis C, are estimated at \$64,490 per person. A 2013 article described Hepatitis C as “a public health and health care expense time bomb.”<sup>15</sup>
- The per-episode cost for treating endocarditis, an infection that can be related to intravenous drug use, is projected to exceed \$120,000.<sup>16</sup>
- The actual cost for treating babies born with drug withdrawal syndrome in Northern Kentucky is astounding. In 2012, the cost was \$898,219.85 for 63 infants equating to approximately \$14,257 per infant.<sup>17</sup>

## PROJECTED COSTS

<b>2014 Estimated Implementation Costs</b>
<b>Establish Governance and Accountability (Estimated Cost = \$115,000)</b>
Strategy 1: In collaboration with the Northern Kentucky Chamber of Commerce, conduct Economic Impact Study.
Strategy 2: In collaboration with the Northern Kentucky Area Development District, maintain the Heroin Impact Response Leadership Team to act as an Advisory Board to the regional heroin initiatives, allocate funding as available, deliver timely communication, and move the process through the four phases.
<b>Advocate (Estimated Cost = \$100,000)</b>
Strategy 1: Identify legislative needs and respond with advocacy efforts as feasible and appropriate for such things as increased support and payments from DCBS for grandparents raising their grandchildren.
Strategy 2: Create a public presence for the importance of prevention, treatment, recovery, and harm reduction through community education forums and events.
Strategy 3: Strengthen the advocacy efforts of local coalitions through education and technical support.
<b>Prevent (Estimated Cost = \$250,000)</b>
Strategy 1: Established county drug prevention alliances and coalitions to increase community awareness and action related to the heroin epidemic.
Strategy 2: Make current information and resources related to best practices available to assist community coalitions via regional trainings, websites, community forums, and media.
Strategy 3: Implement across the eight counties prescription take-back days and other environmental initiatives aimed at decreasing heroin and prescription drug use and preventing infectious disease.
<b>Treat (Estimated Cost = \$2,700,000)</b>
Strategy 1: Facilitate the licensure of 10 new doctors to provide treatment and expand outpatient clinics for medication-assisted treatment.
Strategy 2: Restore funding for residential treatment that has previously been decreased by the state mental health system over the past 4 years, in particular for women and their dependent children, especially pregnant women whose newborns are at risk for being born addicted.
Strategy 3: Expand outpatient services from two to five counties for adolescents suspended from school for violation of the substance use policy and begin expansion of treatment capacity for them.



Strategy 4: Increase funding to a break-even level for the existing Intensive Outpatient Program (IOP) and expansion for new referrals from the Affordable Care Act.
Strategy 5: Increase funding to a break-even level for the Non-Medical Detoxification Unit, which would save local hospitals over \$1 million a year from the indigent care fund.
Strategy 6: Allocate funds to the eight counties for additional residential treatment beds for offenders convicted for a drug-related charge to be used before, during, and after substance use treatment.
<b>Support (Estimated Cost = \$585,000)</b>
Strategy 1: Develop a system of case management for increasing the number of clients/families served with supportive services.
Strategy 2: Build the regional Recovery Ombudsman Program to improve recovery support in all areas including the rural counties.
Strategy 3: Provide match money and cut income loss for the supportive house program and group homes (74 beds), which will facilitate long-term recovery.
<b>Protect (Estimated Cost = \$250,000)</b>
Strategy 1: Develop and conduct mobile Naloxone harm reduction centers.
Strategy 2: Explore options with communities and policy makers to reduce the transmission of infectious diseases and remove used needles and syringes from the community, within the context of a comprehensive array of substance use prevention and treatment services.
Strategy 3: Expand Hepatitis C education for injection drug users.

---

### From the Perspective of a Primary Care Physician

At this point the impact of the heroin epidemic upon Northern Kentucky is devastating. I see individuals and families daily who are being impacted by the disease of heroin addiction.

Yet, I, like other primary care providers (pediatricians, family physicians, general internal medicine physicians, nurse practitioners, and physicians) have limited capacity to manage this very high-risk population of patients. Simply, we are not adequately trained. We lack the traditional referral base that is available to us for other chronic illnesses associated with high morbidity and mortality such as cancer, acute cardiovascular disease, and diabetes. In order to address this deficit we, the medical community, must invest in education, training, policy, protocol, and, above all, resources.

Additionally, individuals suffering from heroin addiction have characteristics that make it essentially impossible for a primary physician to care for without assistance. To provide quality care, we need a very well developed case management system in place to enable primary physicians to carry the right level of responsibility. Coupled with the disease management from the primary care physician, a case management system will ensure adequate care throughout the patient's potential disease stages. Together, we can set the standard and, in so doing, show the patient, family, and community that the medical team is able and willing not only to save lives, but restore health and well-being.

This disaster has challenged our community with the ultimate test. I believe we are up to the challenge. It is time to align the incentives, remove the barriers, and include the disease of addiction in the traditional medical model with the same resources and mission as all other health conditions.

Jeremy Engel, MD, St. Elizabeth Physicians

# Northern Kentucky's Collective Response To the Heroin Epidemic

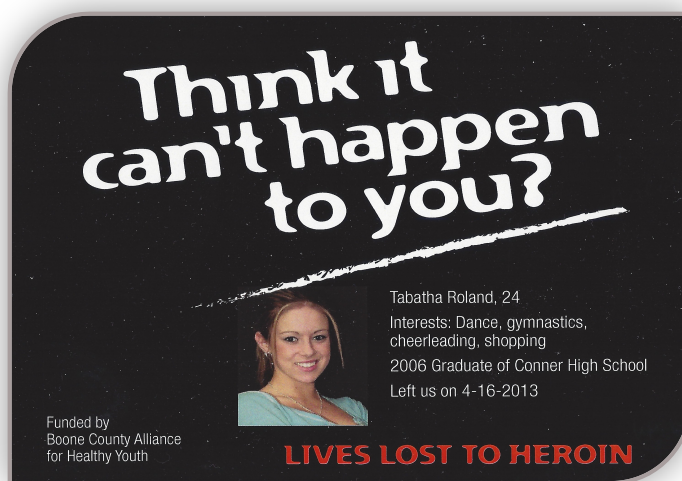
## OUR PLAN FOR RECOVERY

### PART I: BACKGROUND

The landscapes of Northern Kentucky are geographically diverse, paralleled by equally diverse cultures and norms. Despite the diversity, the people living near the hay fields and high-rise buildings share a commonality described on Kentucky's border signs as an "unbridled spirit." Like most Kentuckians, we are proud of our heritage, our hillsides, and our achievements. And now, from the river town of Warsaw to the riverfront businesses in Covington and Newport, heroin—described by some who are addicted as "the demon"—is making a path across our counties and is extinguishing the spirits of a new generation of Northern Kentuckians.

***Unified, we are determined to promote life-saving and life-restoring resources for heroin addiction that will reduce its impact on our communities.***

The families of Taylor Walters (20), Tawni Pina (21) and Tabitha Roland (24, pictured right) of Boone County can attest to the urgency of our mission. These young people represent the "new face of heroin" and are among the numerous Northern Kentucky residents of ***all ages*** who have died from heroin overdoses in recent years.<sup>18</sup> Their stories are not unlike others we have heard in community forums about heroin held across the eight counties in 2013. They are gut-wrenching stories that, without exception, dampen our Kentucky spirit. These stories frighten us, embarrass us, and bewilder us, because families also share how limited their intervention options were when they realized their child was addicted to heroin.



TABITHA ROLAND DIED IN APRIL, 2013

Because families are devastated following the death of their children, their grief often turns to advocacy. To honor their children, preserve their memory, and raise awareness about addiction and the importance of action, many families establish organizations, such as Foxfire Foundation (Chad Wagner), Tabitha's Fight (Tabitha Roland), and NKY Hates Heroin (Nicholas Specht). The families of these young people want others to know that their children/loved ones were more than their addiction. As the Specht family accounts, Nicholas died just days after he helped rebuild a church sanctuary. It was this kind of



NICHOLAS SPECHT DIED AUGUST, 2013

despair, determination, and advocacy that resulted in the enactment of Casey's Law—a quest started by his mother to help other families have more intervention options than she did.



These are only a few examples of the Kentucky lives lost to addiction. There are many more . . .

Indeed, heroin is affecting families in Northern Kentucky without regard for status, income, family composition, race, faith, or location. Heroin addiction has significant current and future economic liability in lost productivity, health care costs for acute and chronic infections, such as Hepatitis C, cirrhosis of the liver, and endocarditis. It also has significant implications for developing families by increasing the potential for domestic violence, child neglect and abuse, family disruption, and babies born addicted to heroin.

### Heroin—the Elusive “Demon”

Heroin—known by nicknames such as Big H, Dog, Black tar, Smac, Puppy Chow, and Horse—is a highly addictive drug derived from morphine, which is obtained from the opium poppy. Heroin can be injected, smoked in a water pipe, mixed in a marijuana joint or regular cigarette, inhaled as smoke through a straw (known as “chasing the dragon”), or snorted as powder through the nose.<sup>19</sup> It is classified as a Schedule 1 drug, which means it has no currently accepted medical use but has a high potential for abuse.<sup>20</sup>

Once heroin crosses the blood-brain barrier, it is converted to morphine and binds rapidly to opioid receptors, causing a “rush” that is affected by the amount taken and the rapidity with which it enters the brain and binds to receptors. Opioid receptors are located throughout the body. Receptors in the brain stem, when activated by heroin, can depress breathing and cause overdose. Activation in the limbic system, which controls emotion, produces intense feelings of pleasure, and can block pain messages transmitted through the spinal cord from the body.<sup>21</sup> In short, our bodies are very receptive to it, and that is why it is so highly addictive and dangerous.

Today's heroin comes in small, cheap packages—sometimes small balloons. It is often cut with other drugs as it changes hands from the Mexican and Columbian cartels to the dealer on the corner.<sup>22</sup> Buyers do not know exactly what they are getting, creating an even more life-threatening scenario. Yet, many people who use heroin talk about how they loved heroin instantly the first time they tried it. Many others will go on to describe how their addiction progressed rapidly after the first time.

Regular heroin use changes the functioning of the brain. One result is tolerance, in which more of the drug is needed to achieve the same intensity of effect. Another result is dependence, characterized by the need to continue use of the drug to avoid withdrawal symptoms.

### **The Epidemic: Data Tells the Story**

According to the Centers for Disease Control and Prevention, "epidemic refers to an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area."<sup>23</sup> Heroin use has been climbing over the last ten years, but became more evident in 2010. It has grown rapidly since then. The indicators on pages 14-15 illustrate the devastating blow to our children, our families, our communities.

These statistics are consistent with national trends related to heroin. In an August 2013 article in the *Wall Street Journal*, the Substance Abuse and Mental Health Services Administration reported the number of people who admitted to using heroin in the previous year jumped 53.5% to 620,000 between 2002 and 2011. The article also cited Drug Enforcement Administration statistics showing that heroin seizures at the Southwest border, from Texas to California, ballooned to 1,989 kilograms in fiscal 2012 from 487 kilograms in 2008.<sup>24</sup>

### **Factors Leading to the Epidemic**

The heroin epidemic is like a powerful storm, a confluence of factors colliding and creating an extraordinary force. There is no simple answer for turning it around. Converging factors that have contributed to the epidemic include: tamper-resistant formulations (an attempt by drug companies to deter abuse by creating obstacles to crushing or dissolving opioid tablets and capsules), state and federal efforts to reduce prescription drug abuse, and drug cartels recognizing the large demand for opioids in the United States and providing an inexpensive and available alternative.

Just as many factors have led to the epidemic, reversing it will require multiple community systems coming together to think outside the confines of their convention and comfort and creating strategies that are unique to the storm itself. Although seemingly a daunting task, the people of Northern Kentucky are resolved to take on the responsibility of finding and implementing the solutions that will save the lives and maximize the potential of our residents.

The large demand for opiates started with the widespread use of potent opioids to treat pain. In the mid-1990's, pharmaceutical companies and pain specialists launched a movement known as the "War on Pain" to change how doctors viewed the use of opioids to treat chronic pain.

Concurrently, OxyContin—an opium-based painkiller—was created and was more potent than its predecessor, Percocet. OxyContin's narcotic was packed in high doses in a time-released tablet, and it was “marketed [by Purdue Pharma] in a way unlike any narcotic painkiller before it.”<sup>25</sup>

OxyContin became a very popular choice for treating pain by physicians who were told that it had a low risk for addiction. Subsequently, patients became free of their pain when on the drug, and they looked for alternatives when they couldn't get it. Recognizing the need to monitor more closely how OxyContin was prescribed in Kentucky, House Bill 1 was passed in June 2012. Thirty-eight (38) of 75 pain clinics closed immediately after the passage of HB 1.

As a result, those addicted to OxyContin and other opiate pain medications quickly had to find another option to support their addiction. Heroin was close at hand and cheaper than prescribed medications. An 80 mg OxyContin tablet can cost \$60 to \$100 a pill. In contrast, heroin costs about \$45 to \$60 for a multiple-dose supply. The Northern Kentucky Drug Strike Force notes that the cheaper and more potent heroin is coming into Cincinnati/Northern Kentucky by Mexican and Columbian cartels, and that the influx occurred “coincidentally” about the same time prescription drugs became harder to get.

As early as 2005, many have heralded cries that heroin was on the rise, but they were ignored or dismissed, as is often the case during times of emergency alerts. Now, the storm is upon us, and we can ignore it no longer.

### Family Intervention

When heroin tightens its grip, the only hope is for some type of intervention by families or friends. When Casey Wethington was actively using heroin before his death in 2002, his family tried in

For Robin Knott, turning the doorknob of her bathroom and seeing her then 18-year-old daughter (Candice Williamson) with a needle was the end of suspicion that Williamson was addicted to heroin. It was the beginning of Knott's determination to fight for her daughter's life -- even if it might crush their relationship. Knott turned to a friend in her anguish, and he recommended she file a [Casey's Law](#) petition to get her daughter treatment.

May 28, 2013, T. DeMio, *The Cincinnati Enquirer*

vain to help him. They quickly learned that they had no legal way to intervene on his behalf because he was legally an adult. After his death, Charlotte Wethington's story resonated with state legislators and the Matthew Casey Wethington Act for Substance Abuse Intervention became law on April 9, 2004.

The Act allows parents, relatives, and/or friends to petition the court for treatment on behalf of the person with addiction.<sup>26</sup> While Casey's Law provides a means of intervention for families, the access to affordable treatment remains daunting for far too many.

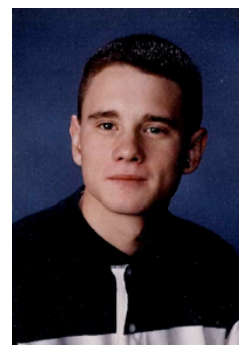
## **Treatment Works; Recovery is Possible!**

Treatment for addiction to heroin and other substances is medically effective as well as cost effective. In the 2013 KY Treatment Outcome Study Annual Outcomes Report,<sup>27</sup> KTOS clients experienced improvements after treatment in several key areas, including decreased substance use, improved economic status, and increased supports. Alcohol use significantly decreased by 26%, illegal drugs decreased by 50%, prescription opiates decreased by 56%, full-time employment increased by 67%, arrests were reduced by 48%, and incarceration decreased by 44%. The KTOS report also indicated that every dollar spent on publicly funded substance abuse treatment saved \$5.26 in costs to taxpayers associated with addiction.<sup>28</sup>

Treatment success brings about reductions not just in drug use, but also in criminal recidivism. In one example, a therapeutic community approach was tested in prison and continued during participants' transition back to the community. Among those who completed treatment and aftercare programs, 35% remained drug free, and 69% were not arrested within three years of release from incarceration. These reductions in turn yield significant cost savings and provide hope for families and communities devastated by addiction.<sup>29</sup>

## **The Time to Act is Now!**

Our plan of action will create new resources and financial support for addressing the heroin problem in Northern Kentucky. Incremental improvements in prevention, treatment, protection, and support will help more individuals and families and ease the financial burden on the local economy. Furthermore, a regional infrastructure for governance, accountability, implementation, and advocacy will be developed to move this plan forward.



CASEY WETHINGTON DIED IN 2002

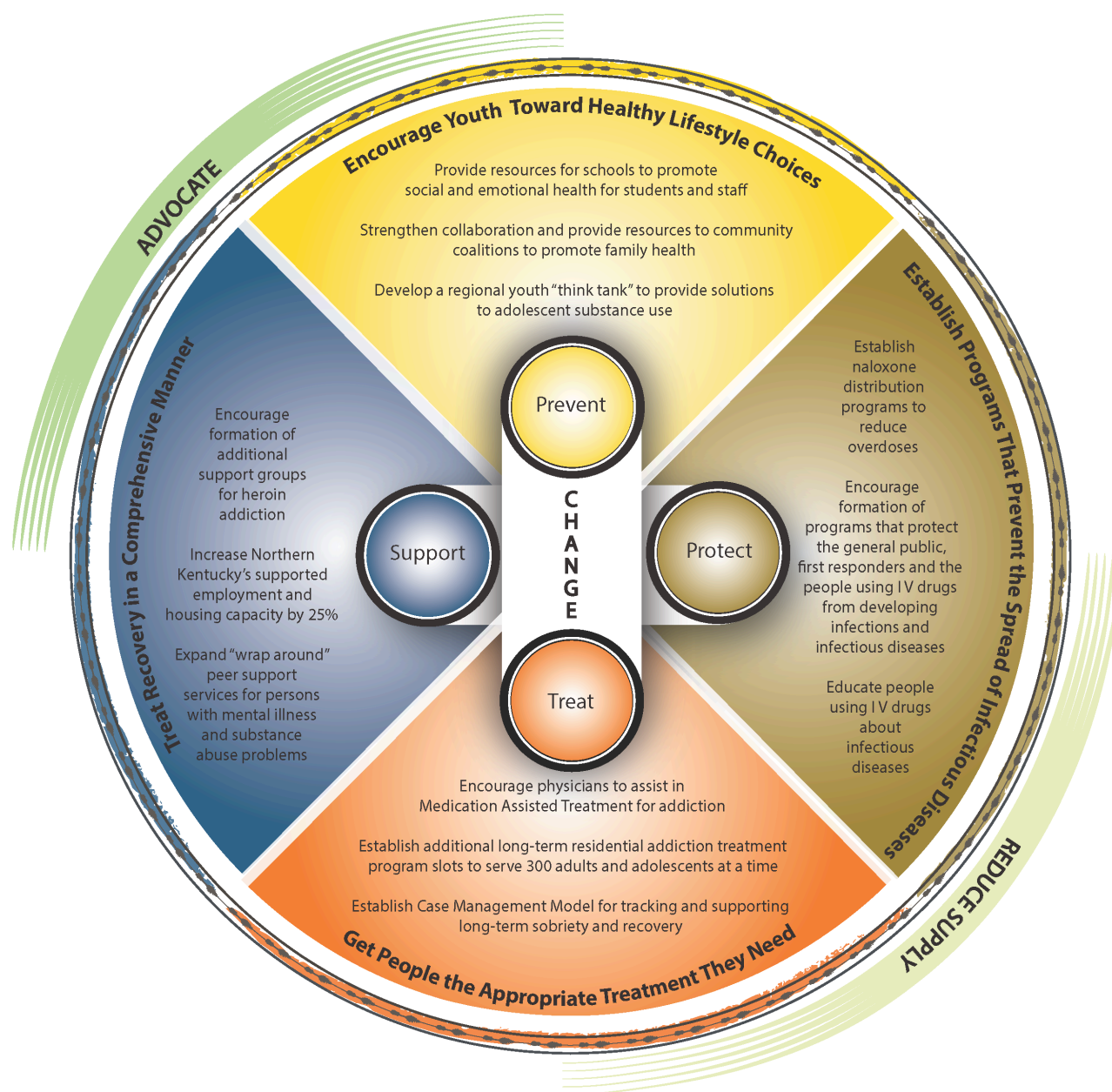
For those of us who have lost loved ones to addiction, often one of our greatest fears is that our loved ones will be forgotten. As Casey's mom, I never want anyone to forget that Casey was here and that he mattered. I count it a privilege to be the bearer of Casey's light, a light that will never go out. It is a light that shines through Casey's Law, a ray of hope that has and will continue to help light the way to recovery for other families.

Charlotte Wethington, Casey's Mom, and Advocate for Casey's Law and for Families Across Northern Kentucky



## MISSION STATEMENT

The people of Northern Kentucky will have access to life-saving and life-restoring resources for heroin addiction that will reduce its impact in our communities





## PART II: NORTHERN KENTUCKY RESPONDS WITH A UNIFIED MISSION

The time to implement known, evidence-based solutions is now. This plan represents a collective response to heroin by multiple agencies and entities that play a key role in health care, mental health, substance use prevention and treatment, public health, law enforcement, and the business community. It is how our region will collaborate to address a community health issue that impacts all of us.

Through this plan, we aim ***to promote life saving and life restoring strategies to address heroin addiction and its impact on our communities***. The Leadership Team has developed a five-step plan focused on curtailing the heroin epidemic in Northern Kentucky. The plan is data driven, community-owned, and targeted toward unbridling the spirits of Northern Kentuckians addicted to heroin. The strategies are based on the following assumptions:

- \* An abundant supply of cheap, accessible heroin contributes significantly to the epidemic.
- \* Coordinated, collaborative implementation is the cornerstone of reducing the supply of and demand for heroin.
- \* Reduction in the demand for heroin includes preventing new cases, treating existing cases, and promoting life-long recovery.
- \* Significant costs and human suffering result from infections associated with intravenous drug use.
- \* Advocacy moves the vision forward.

1. Reduce the Supply (Page 26)
2. Establish a Regional Infrastructure for Governance and Accountability (Page 27)
3. Advocate for Change (Page 28)
4. Reduce the Demand (Pages 29-41)
  - Prevent
  - Treat
  - Support
5. Protect (Pages 42-46)

Collaboration is essential for successful implementation of this plan. Therefore, to ***reduce the supply*** of heroin, the Heroin Impact Response Leadership Team will continue collaboration with the Northern Kentucky Drug Strike Force, local law enforcement, county prosecutors, and the justice system. To monitor the implementation of recommendations, the Team will continue working with the Area Development District and Chamber of Commerce to establish ***a system for regional governance and accountability***. With People Advocating for Recovery (PAR) and other advocacy partners, we will continue to review, propose, and ***advocate*** for new legislation that supports our mission.

***Demand reduction strategies*** will include: 1) preventing new cases of addiction; 2) expanding the availability of addiction treatment, including the availability of medication-assisted treatment; and 3) preventing relapse by improving recovery support over the long term. ***Protection strategies*** focus on preventing overdose death and reducing the threat posed by drug-related infectious diseases, such as Hepatitis C, Hepatitis B, and HIV.

## Reduce The Supply

### 2017 Targets and Strategies

- \* Methods of cross-county collaboration among local law enforcement and regional drug enforcement agencies are strengthened.
- \* Strategies are developed and implemented to reduce the supply of heroin and other drugs.

Goal: To decrease the availability of heroin and other drugs on Northern Kentucky streets.

#### Strategies:

- Collaborate with the Northern Kentucky Drug Strike Force, in concert with local law enforcement, to facilitate strategies related to reducing the supply.
- Encourage community residents to watch out for each other, their property, and any suspicious activity. Encourage local law enforcement to inform the public about ways to communicate tips about suspicious activity within their communities.

#### Supporting Documentation:

Heroin now is the drug of choice in Northern Kentucky, replacing Oxycodone as the dominant drug of abuse in this area. Because heroin trafficking has become so widespread, the majority of investigations done by the Northern Kentucky Drug Strike Force over the last year centered on heroin. A few years ago heroin users primarily purchased from dealers in Cincinnati, but now heroin trafficking is much more prevalent in Northern Kentucky. Heroin also is available in greater quantities, and at a lower price per gram, than it was two or three years ago. Moreover, there are established drug trafficking organizations that have networks in place, capable of distributing large quantities of heroin throughout the Northern Kentucky and Greater Cincinnati region. Heroin traffickers on the street in Northern Kentucky may have suppliers in Cincinnati or Lexington, and that's why it is so vital for law enforcement to work cooperatively across county lines.

Since buying drugs is costly, burglary and theft is a by-product of opioid addiction. Campbell Commonwealth's Attorney Michelle Snodgrass estimates that 85 percent of that county's crime has its origins with heroin.<sup>30</sup> That figure is consistent with findings from other counties in the region. We will facilitate community partnerships among businesses, law enforcement, and all sectors of the community to prevent crime and to deter the re-sale of stolen property.

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From the Perspective of the Northern Kentucky Drug Strike Force

The number of court cases for trafficking and possession jumped from 257 in 2008 to 1,339 in 2012 for Boone, Kenton, and Campbell Counties. We are expecting cases to more than double in 2013. We pledge to continue working with regional, state, and federal agencies to implement the best strategies known for getting these drugs off our streets.

--Bill Mark, Northern Kentucky Drug Strike Force

## Establish Regional Infrastructure

### 2017 Targets and Strategies

- \* Progress reports are completed and reported to regional stakeholders and to the public.
- \* Sociological, medical, and economic impact analysis is completed and reported to drive the continuous improvement of strategies in this plan.
- \* New partnerships are identified and engaged.

Goal: To establish a regional mechanism to address the supply and demand issues of heroin and other drug use in the NKY Area Development District.

#### Strategies:

- Establish mechanism for regional implementation and accountability.
- Conduct sociological, medical, and economic impact analysis of the heroin epidemic.
- Continue the Heroin Impact Response Leadership Team.
- Develop mechanisms for educating professionals, advocates, and the public around this effort.

### Organizational Direction

The Leadership Team members (listed on page 10) will continue to meet as a regional coalition to identify needs, develop strategies, and engage partnerships to implement heroin and other drug prevention, treatment, recovery, and harm reduction. Officers of the team will be named to act as an Executive Committee to facilitate monthly meetings, execute fiscal tasks, and monitor the outcomes. To achieve the target outcomes identified in the strategic plan, the following **WORK GROUPS** are established:

**--Advocate.** Northern Kentucky People Advocating for Recovery (PAR), the Chamber of Commerce, and other local advocate groups will work in concert to identify the issues where advocacy is needed for improvements to legislation, policies, and practices.

**--Prevent.** Agencies and county coalitions involved in the KY ASAP-Northern Kentucky Prevention Alliance will work with the Leadership Team in implementing the recommendations on prevention.

**--Treat.** The Regional Planning Council will work with the Leadership Team in finding ways to increase treatment capacity.

**--Support.** The NKY People Advocating Recovery, Transitions, Inc., Mental Health America of NKY, and SWOH will work within the Leadership Team structure to strengthen peer support services and case management, as well as to develop the Recovery Ombudsman Program.

**--Protect.** The NKY People Advocating Recovery will work within the Leadership Team in developing regional Naloxone distribution. The NKY Independent Health Department and the Three Rivers District Health Departments will work within the Leadership Team to spearhead harm reduction strategies.

## Advocate for Change

### 2017 Targets and Strategies

- \* A mechanism is in place that allows the consumer voice to be heard.

Goal: To activate the necessary educational, legislative, and participatory platforms that will deliver life-saving and life-restoring structures to individuals, coalitions, and communities in the Northern Kentucky region.

The priorities around which we will identify legislative needs and respond with advocacy efforts as feasible and appropriate are:

- Addiction medicine should be included in the traditional medical model with equal resources and commitment.
- A mechanism to measure outcomes such as death, overdose, incarceration, relapse, etc. is needed to ensure that appropriate quality measures are enacted. In this mechanism, citizens need a way to have meaningful input into the process that allows an appropriate feedback loop.
- Resources, including personnel, in particular physician providers, must be developed on an urgent and sustainable basis.
- Insurance, private and public, must cover treatment for an extended period. The cost to the consumer must be minimized. There should be funding to cover any gap because failure to treat will lead to relapse.
- Effective, long-term recovery is more likely when a case management system is in place to support individuals through all phases of treatment and recovery.
- The families impacted must be assisted. Multiple generations are put at risk. For example, grandparents raising their grandchildren need increased support and payments from DCBS for the care of the children.
- A centralized oversight group with an appointed director to oversee the regional response to addiction would strengthen supply and demand reduction strategies. This entity would help with implementing the continued response plan.
- A different culture, one of resiliency and continued shared recovery, is needed to facilitate life-restoration and maximization of potential.
- Our economy and community must work to include vulnerable individuals in the workforce and we must always strive to grow the potential of our greatest asset, human capital.
- Naloxone saves lives. The region needs a well-structured and funded opioid overdose prevention system.
- We must start integrating the traditional medical system with the prevention and safety net systems. This will require increase physician/nursing leadership development and involvement.
- Identify problems, find solutions, develop consensus and fix the problems.

## Reduce the Demand: Prevent

### 2017 Targets and Strategies

- \* Communities show a decrease in the use of heroin, prescription drugs, alcohol, tobacco, and other drugs.
- \* Community action groups on heroin operate within each county
- \* Resources are available to community action groups.

Goal: To build the capacity of each community in the Northern Kentucky Area Development District to identify, develop, and implement strategies that promote healthy behaviors.

#### Strategies:

- Inform the public about heroin issues through social media, public service announcements, community forums, website, and printed materials in public places.
- Strengthen collaboration among multiple entities within each county to facilitate a community-specific and community-driven response to the heroin epidemic.
- Promote prescription take-back boxes at designated locations within each county.
- Provide educational materials describing prescription drug use as one precursor to heroin addiction.
- Provide training and resources for schools related to promoting social and emotional health for students and staff, including the identification and referral of students in chronic distress.
- Provide evidence-based resources for community coalitions related to promoting family health.

#### Supporting Documentation and Direction

Alarming data from the Centers for Disease Control and Prevention Youth Risk Behavior Survey in 2011 revealed that 7.7% of 12<sup>th</sup> graders in Kentucky reported using heroin one or more times. In contrast, the percentage of 12<sup>th</sup> graders in the U.S. was 2.7%.

To decrease the incidence of heroin use as well as other drugs, the Northern Kentucky Prevention Alliance, formed by the KY ASAP Board in 2013, will work collaboratively to implement the recommended strategies. The Alliance philosophy is based on the evidence that the most comprehensive, effective approach to reducing alcohol, tobacco, and other drugs is a blended approach that addresses both individual and environmental influences in a comprehensive way. Implementing a blended approach requires multidisciplinary teamwork or multiple sectors of the community working together; community assessment of the community-specific risk factors to know where to target resources; planning, capacity building, and

Prevention is the practice of promoting a lifestyle that encourages people to live their “best life”—a life that is physically, mentally, and spiritually healthy. For a relatively small cost, prevention services can provide substantial benefits for the dollars invested. **For every dollar spent on school-based prevention, \$18 dollars is saved in shoveling up the wreckage of substance use.**

Allison Butler and Sarah White – NorthKey Regional Prevention Center

partnerships; and monitoring the problem and the implementing the strategies. **Note: Most schools in Northern Kentucky use the Kentucky Incentives for Prevention (KIP) survey, which, to date, has not measured heroin use as well as some other drugs.**

Since prescription drug use is often the precursor to heroin use,<sup>31</sup> it is important to continue ways to curtail availability of these substances in homes and communities. According to the most recent KIP survey, prescription drug use among 12<sup>th</sup> graders in Northern Kentucky has been steadily decreasing since 2004—from 10.9% to 4.8% or about one out of every class of 20 youth. The decline is largely due to focused prevention strategies across the state and, in particular, Northern Kentucky. But a 4.8% rate is still too high.

The NKY Agency for Substance Abuse Policy Board will continue to award mini-grants to community movements in each of the counties.

Over the past 5 years, a significant portion of these county funds has targeted prescription drug abuse. Prevention efforts over the next year in the Prevention Alliance's work will focused on social and emotional development of children.

#### KY ASAP Prevention Alliance Partners

NorthKey Regional Prevention Center  
Three Rivers District Health Department  
Northern Kentucky Health Department  
Owen County Community Health Collaborative  
Boone County Alliance for Healthy Youth  
Pendleton County Champions  
Champions for a Drug-Free Grant County  
Campbell County Drug-Free Alliance  
Kenton County Alliance  
Champions for a Drug-Free Gallatin County  
Carroll County Champions  
Covington Partners

### **Promoting Mental, Social, and Emotional Health**

The etiology of mental illness is complex and can develop as a result of genetic predisposition, congenital anomalies, and/or adverse childhood conditions or events that are chronic or severe. Conditions, such as anxiety disorders, attention deficit hyperactivity disorder (ADHD), autism spectrum disorders, bipolar disorder, depression, eating disorders, and schizophrenia,<sup>32</sup> are among the spectrum of mental health disorders.

Recent research tells us that childhood anxiety and depression, as well as other forms of mental illness, can stem from multiple, acute or chronic adverse childhood experiences (ACE), such as the death of a close family member; illness of a parent; family financial problems; divorce; intentional physical, sexual, or emotional abuse; domestic violence; and ongoing social exclusion/bullying. These conditions or events, especially when chronic or severe, have an impact on the developing brain that often becomes evident in disruptive, defiant, often deviant behavior, and, later in life, as serious mental health disorders.

The number of children in America affected by ACEs is unclear. What is known is that, among 17,000 ACE Study participants,<sup>33</sup> almost two-thirds reported having had at least one adverse childhood event (ACE) and almost 20% reported experiencing at least five or more. The severity of the mental illness correlates with the multiplicity, duration, and severity of adversity. ACEs seem

*to account for one-half to two-thirds of the serious problems with drug use. ACEs increase the likelihood of experimentation of alcohol and other drugs, suicidal ideation, and other risky behaviors.*

In 2014, members of the KY ASAP Prevention Alliance will focus their school-based services on addressing children living in chronic stress, as well as providing training and technical assistance to schools on building supportive programs that contribute to the social and emotional well-being of students.

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From the Perspective of the School Superintendent

It is critical that schools address every barrier to learning that students encounter. If it is in the way, it must be removed! The research supports incorporating the social and emotional components of learning with the academic component. They can't operate apart. A strong partnership between parents and community that aligns with the school to address these barriers to learning must exist. No one can do it alone.

Jay Brewer, Superintendent, Dayton Independent School District

Health Educators are expected to be creative. This summer I found a new way to raise awareness that the disease of addiction can be managed and to send a message of hope and optimism to those in recovery. Persons in treatment and recovery are encouraged to exercise to promote a neural response that improves cognitive functioning, elevates mood, and causes positive stimulation in the reward centers in the brain. At the 2013 "Paddling for the Pink Kentucky Dragon Boat Festival" on A.J. Jolly Lake in Southern Campbell County, Kentucky, I saw that dragon boat racing could have significant benefits for persons in treatment and recovery. A team of paddlers from Brighton Center, a recovery center for women, participated in the paddling event and their response was overwhelmingly positive. Dragon boat racing is a team sport where paddlers must work in unison to achieve maximum speed. We have found that with breast cancer survivors, it is an approach not only for promoting wellness and healing, but also for raising awareness about breast cancer. Based on our first experience with paddling for women in recovery, the process of practicing for and participating in a team-oriented paddling activity has great potential for the inclusion into the process of treatment and recovery.

Jim Thaxton, Health Educator III, Three Rivers District Health Department and owner Thaxton Canoe Trails

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## What is addiction?

Before a disorder can be classified as a disease, it must meet three criteria. The first is that it impairs the normal functioning of the afflicted individual. The list of medical consequences of addiction is exhaustive and certainly sufficient to fulfill the first criteria. The second criterion for a disease is that it must have a consistent set of signs and symptoms. The signs and symptoms of addiction have been well documented for decades, and anyone familiar with this disease can probably name quite a few! The third and final criteria, is that physiological abnormality be detectable by medical tests. Advanced imaging techniques called functional brain scans, such as SPECT (single photon emission tomography), PET (photon emission tomography), and fMRI (functional magnetic resonance imaging) use sophisticated methods of measuring brain cell activity and allow researchers to map out the normal patterns and pathways of the human brain. The brain scans of individuals afflicted by addiction show *reproducible and consistent abnormalities* when compared to the normal. Addiction meets all the criteria of a disease, just like diabetes and hypertension. Hopefully, with time and education, this knowledge will help lessen the stigma suffered by those who have the disease of addiction.

Todd Carren, MD, Transitions Medical Director

***Hear me Lord, for I am lost  
I've paid the price, but at a great cost  
There's a stranger in the mirror  
This can't be me  
Save me!  
Please help me be free!  
Show me your way  
Help me to live  
Teach me to love  
Teach me to forgive.***

***---a poem on the anguish of addiction by Lauren Frederick,  
who died of overdose in 2011.***



## Reduce the Demand: Treat

### 2017 Targets and Strategies

- Statistics will show a 50% increase in overall treatment capacity.
- Treatment capacity will increase by 200 new residential treatment beds for adults.
- Adolescent (age 12-17) treatment capacity will increase by 16 new beds for long-term residential treatment.
- Counties referring adolescents suspended for school policy violations for substance use will expand from 2 to 5.
- The number of physicians trained to practice medication-assisted treatment will increase from 9 to 40.
- Using a case management model, recidivism and relapse are decreased.
- Strengthen relationships with the criminal justice system to advance treatment for persons who are incarcerated.
- Collaborate with key stakeholders toward the integration of addiction into the traditional medical model.

Goal: To expand and improve health care and treatment for persons who are addicted.

#### Strategies:

- Establish additional long-term residential addiction treatment programs for adults ages 18 and older in the eight-county Northern Kentucky region.
- Establish Northern Kentucky's first long-term residential addiction treatment programs for adolescents age 12-17 within the eight-county region.
- Establish additional intensive outpatient addiction treatment programs in the 8-county region.
- Develop a plan to increase the availability of other forms of addiction treatment (traditional outpatient, short-term residential) within the eight-county region.
- Develop a plan to increase availability of medication-assisted treatment in the region, including recruiting more physicians who will obtain licensure to prescribe necessary medications.
- Create collaborative wraparound services available throughout the region.
- Collaborate with local universities' nursing schools to increase the number of nurse practitioners with advanced training who will practice in mental health and/or substance abuse treatment settings in Northern Kentucky.
- Create training programs for physicians, nurses, mental health professionals, and substance abuse treatment professionals to increase their understanding of addiction, medication-assisted treatment, Naloxone, and long-term support for recovering individuals and family members.
- Strengthen relationships with key stakeholders toward the integration of addiction into the traditional medical model.

- Collaborate with key stakeholders toward the integration of addiction into the traditional medical model.

### **Supporting Documentation and Direction**

“Scientific research has established that medication-assisted treatment of opioid addiction increases patient retention and decreases drug use, infectious disease transmission, and criminal activity. Investment in medication-assisted treatment of opioid addiction also makes good economic sense. For methadone, every dollar invested in treatment generates an estimated \$4–5 return.”<sup>34</sup> In fact, in Kentucky in 2012, every \$1 spent on any type of publicly funded substance use treatment saved taxpayers \$5.26 in the cost factors studied.

However, given the highly addictive nature of opioids, if there are not adequate treatment resources at all levels of care (but especially at the high intensity (frequent contact) and medically-assisted treatment levels), there is a high likelihood of an individual recycling through a pattern of abuse, brief detox/non-use, and then continued use until there is serious involvement with law enforcement/justice system and/or a serious health risk requiring longer treatment contact.

Regarding treatment in the eight-county Northern Kentucky region, we are under resourced. Of the Commonwealth's 14 regions, Northern Kentucky receives the lowest per capita allocation of federal and state funds for substance abuse and mental health treatment. Our region has 10.16% of Kentucky's population but receives only 8.16% of State General Fund dollars for mental health treatment, addiction treatment, and community care support. Therefore, enhancing our capacity must be part of the long-term plan.

Service for individuals with substance use problems in Northern Kentucky is offered by a blend of service providers. This blend consists of non-profit agencies, healthcare providers, and independently licensed clinicians in private practice. Most of the region's substance use treatment resources reside within the organizations of Transitions, NorthKey Community Care, St. Elizabeth Healthcare, and Brighton Recovery Center (for residential recovery services for women). Recently (July 2013), NKY Med Clinic, LLC opened in Covington adding capacity for medically-assisted detox and treatment. The organization with the broadest continuum of care options is Transitions, Inc.

The list below indicates the estimated service resources by category available in the region. This data was obtained by surveying individuals and agencies that are identified by the state as providers of substance abuse services. The capacity indicates the number of individuals that can be served over a 12-month period.

Treatment Availability				
All 8 Counties (Estimated Population of 442,000) Type of Service	Daily Capacity	Adult Age - Regional Capacity (Number Served Annually)	Daily Capacity	Adolescent Age - Regional Capacity (Number Served Annually)
Inpatient Detox	26	1456	0	0
Residential Detox	11	572	0	0
Medication-assisted Detox	3	70	NA	NA
Short Term Residential	0	0	0	0
Long Term Residential	87	460	0	0
Hospital-based Residential	0	0	0	0
Intensive Outpatient Program	191	432	20	30
Traditional Outpatient Services	366	2384	Unknown	1015
Medication-assisted Outpatient	450*	670	0	0
<b>Total Capacity</b>	<b>1134</b>	<b>6,044</b>	<b>20</b>	<b>1045</b>

\*NKY Med Clinic, LLC. Opened in July 2013; they have no data for 2012.

In addition to traditional residential programs, Northern Kentucky also has two programs that use the therapeutic community (TC) model. In the Commonwealth, the version used is called the Recovery Kentucky movement. A therapeutic community (TC) is a long-term residential program where clients recovering from substance use disorders are responsible for helping each other recover, while staff might have more of a supporting role in this regard. A major role of professional staff is to support clients' efforts to help one another. Although many clients benefit from traditional residential addiction centers where professional staff have the primary role in helping people recover, TCs provide a structured way for clients to also benefit from their peers' experience of working their way into recovery.

Treatment Availability in Northern Kentucky Recovery Centers		
Type of Service Recovery Center Beds Therapeutic Community Model	Daily Capacity	Adult Age – Regional Capacity (Number Served Annually)
Grateful Life Center	110 adult males	215
Brighton Center for Women	100 adult females	180
<b>Total Capacity</b>	<b>220</b>	<b>395</b>

## The Need in Northern Kentucky

Data supplied by the University of Kentucky Center for Drug and Alcohol Research (CDAR) indicates that approximately 26,556 adults and 2,426 adolescents annually have significant substance abuse problems that require treatment. Using this data, the region has resources to provide some type (not necessarily the most beneficial/effective type) of substance use treatment service to approximately 23.9% of the regional demand. That means that only one-fourth of patients needing treatment can get them at any given time and does not take into account the many new and repeat patients every year.

***This means that too many Northern Kentucky residents cannot access the treatment they need.*** In particular, even at the undesirable level of meeting 24% of the regional need, there are important gaps in service capacity for adolescents and adults. Northern Kentucky has no residential treatment facilities for adolescents; and there are also gaps for detoxification, short-term residential treatment, long-term residential treatment, and intensive outpatient treatment for adolescents. For adults, there are gaps for detoxification, residential, short-term residential, intensive outpatient, and outpatient services. Even with a modest goal of meeting 50% of the existing need in the region, all levels of care (except for outpatient adolescent services) will still require further increases in capacity to reach this level.

## Northern Kentucky Wait Lists

Appointment waiting list information confirms the extent of the gaps. We are defining any appointment wait of over 48 hours (at any level of care) as an obstacle to receiving needed care. Currently, the following waiting times exist within the region:

Waiting List		
Service Type	Length of Wait	# Months with Wait List
Detox - Residential	1 week (men) 5 weeks (women)	Every month
Outpatient Therapy - Adults	3 weeks	Approx. 5 months per year
Outpatient Therapy - Adolescents	2 weeks	Approx. 5 months per year
IOP - Adults	1 week to 3 months	Approx. 5 months per year
IOP - Adolescents	1 week to 3 months	Approx. 5 months per year
Residential - Men	6 to 9 months	Every month
Residential - Women	6 months	Every month

These disparities are expensive for taxpayers. These consequences are primarily in the form of additional healthcare, law enforcement, and justice system costs. In 2005, for every \$100 spent because of substance abuse, Kentucky spent \$7.32 for prevention, treatment, and research and an additional \$92.01 on public programs to deal with damage created by substance abuse.<sup>35</sup> ***Yet, the National Institute on Drug Abuse (NIDA) estimates a \$12 return on investment for every \$1 spent on treatment, depending on the number of factors tracked and studied. So which is the better investment, losing 92% of every dollar or saving 1200% for every dollar?***

Dollar comparisons like these ignore the biggest cost of all: the pain, grief and suffering experienced by the substance user, their friends and family—pain which often lasts for many years.

### **Funding Requirements to Reach Target of 50% Penetration**

To achieve the modest goal of meeting half of Northern Kentucky's need, there are two important considerations. First, establishing residential treatment programs for adolescents and adults requires a large initial amount of capital funding to build facilities. Second, third party reimbursement for substance use treatment is currently in flux.

With the advent of the Affordable Care Act, the expectation is that more individuals will have coverage for at least some of the cost of substance use treatment services. This is due to the expected coverage of substance use treatment by Medicaid and the requirement for parity with general health coverage for mental health and substance abuse treatment across all insurance. However, this has not yet occurred, and Medicaid in Kentucky has not historically offered robust benefits. For some people, much of the cost will be out of pocket. Due to the contentious nature of Affordable Care Act discussions, there are concerns about implementation delays and uncovered services, so the issue of broader treatment access has an uncertain time frame.

There will be many people who do not gain sufficient behavioral health benefits from the Affordable Care Act. Some examples are 1) those who are addicted and spend all of their time, money, and energy finding their next fix; 2) the young and confident adults who think they will not get sick, so they do not buy insurance; 3) apathetic citizens who do not worry about health insurance until they get sick; or 4) those who are in the "gap" – they make too much money to qualify for Medicaid, but not enough to afford a health insurance policy. Public funding will need to be continued in order to support those people who fall into the gaps, or for those who need more services than Medicaid managed care offers.

Regardless, the development of additional regional services requires some start-up financial support, as outlined below. This support is necessary to allow for the implementation of health care coverage parity as envisioned within the Affordable Care Act, although the time frame for that is extremely uncertain. Many of the annual support figures for this chart could be reduced and possibly eliminated with the advent of parity and the coverage for treatment services by third-party payers projected by the Affordable Care Act.

Expansion of Treatment Services		
Service Expansion	Details/Costs	Total Funding Need
Medically-assisted detox	Partial support for start-up expansion of 1 prescriber	\$65,000 annually *
Short-term residential (men & women)	40 beds for women	\$1,250,000 capital, \$450,000 annually **
	60 beds for males	\$2,000,000 capital, \$650,000 annually **
Intensive Outpatient Services	Increase group number by 34 (men, women and adolescent) with partial support of each clinician expense	\$2,040,000 annually *
Outpatient Services	Add approximately 19 licensed clinicians to provide services all age groups, but, primarily adults.	\$570,000 annually *
<p>*The need for the annual amount can be decreased as anticipated portions of Affordable Care Act become implemented, and this service receives parity coverage through a health plan. This modeling estimate assumes \$30,000 per licensed outpatient clinician (about 40% to 50% of cost).</p> <p>**The need for annual support for residential services is dependent upon the implementation of the Affordable Care Act and the types of residential coverage required under this legislation. The amounts assume the service will be a covered service and have a reasonable rate of pay.</p>		

As pointed out below, some people require longer-term residential services to establish a successful recovery-oriented life. Since it is unlikely that the Affordable Care Act will cover these services, the region needs support for these services at the following levels:

Long-Term Residential Treatment Expansion		
Service Expansion	Details/Costs	Total Funding Need
Long-term residential service slots for men, women and adolescents	100 beds for women	\$2,500,000 capital, \$2,000,000 annually
		\$5,000,000 capital, \$3,500,000 annually
	200 beds for men	\$2,750,000 capital \$1,000,000 annually
	16 beds for adolescents	

## General Rules of Thumb

With addiction services, there are additional factors to consider:

- Our plans for service expansion must be systematic, long-term, and sustainable.
- Treatment helps clients to heal, but treatment and healing are two different things. Treatment comes from outside the person, whereas healing comes from the inside.
- There is a profound difference between abstinence and recovery. Abstinence means not indulging in an activity or not using a substance. Recovery is a whole person change in thinking, believing, feeling, and behaving. Long-term recovery is the goal.
- Study after study has shown that the longer people are in treatment, and the longer they are in aftercare/continuing care, the better their chances are for long-term recovery.
- As is the case with chronic diseases such as diabetes or hypertension, relapse is often a part of the process of recovery from the disease of addiction. Services must be structured accordingly.
- Different clients and different drugs of addiction often need different approaches. No one modality works for all clients and for all addictions.
- Medication-assisted treatment is most effective when delivered in conjunction with counseling, recovery supports, and other services. In any case, when it comes to recovery from any kind of addiction, there are no magic bullets.

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### From the Perspective of a Physician Treating Opioid Addiction

As someone who has been treating opioid dependence for seventeen years, I realized early in the game that counseling and traditional treatment alone was woefully inadequate in this disorder. The degree of chemical imbalance in the brain of a person with the opiate addiction is too strong to just simply correct itself with abstinence. To really help these people, we need to stabilize their brain chemistry first. Medication-assisted therapy is the key to unlocking recovery for a large number of individuals. With their brain stabilized, they are able to begin working on the plethora of issues needed to fix a broken life. Without the medication, it is a much more daunting, if not impossible, task.

Mina ("Mike") Kalfas MD FAAFP  
Physician, The Christ Hospital Medical Associates  
Family Medicine, Addiction Medicine  
Former Medical Director St. Elizabeth Drug and Alcohol Treatment  
Center, Falmouth KY

## Reduce the Demand: Support

### 2017 Targets and Strategies

- \* Fewer persons leaving rehabilitation services will relapse and overdose.
- \* More persons will achieve long-term recovery as evidenced by 3 years of sobriety.
- \* A plan for facilitated transition from incarceration into treatment will be in place.

Goal: To develop and implement wraparound services and programs to promote successful long-term recovery.

#### Strategies:

- Collaborate with faith-based organizations, social services, and others interested in starting a 12-step support group related to heroin addiction.
- Foster coordination between peer-run support services, educational efforts, and treatment providers. This collaborative relationship will allow peer support services to complement effectively therapeutic interventions and services. This entails recruiting and training peer specialists.
- Enrich and expand the supported employment services available in the region. Increase the supported employment capacity by 25%.
- Enrich and expand the supported housing resources in the region. Increase and expand the supported housing service capacity by 25%.
- Establish an ongoing awareness and education group in each Northern Kentucky county. These groups will empower family members to better understand all aspects of the disease of addiction, and heroin, in particular.
- Expand wraparound services for persons with mental illness and substance use challenges.
- Establish a Northern Kentucky Recovery Ombudsman Program to help families navigate the services and supports needed to address addiction.

### Supporting Documentation and Direction

In the United States, most of the public resources to help persons with addiction are directed toward the initial interventions and the very early stages of recovery. However, professional healthcare and treatment services are more effective when long-term, ongoing professional and peer support is readily available to people as they recover from heroin addiction.

#### Wraparound Services

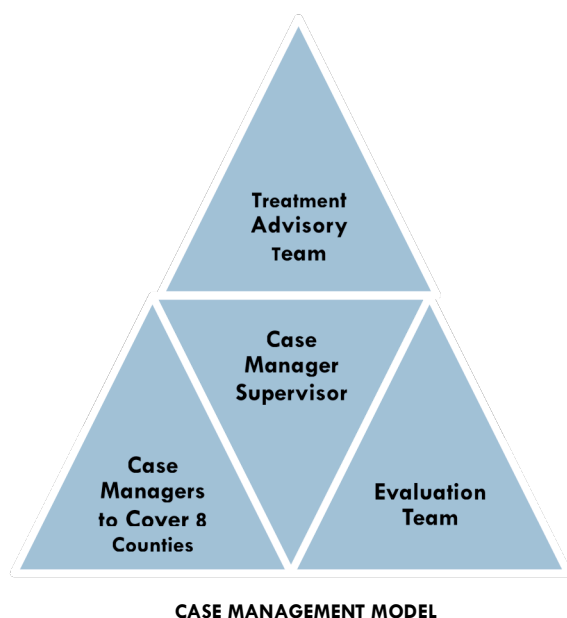
“Wraparound” refers to a comprehensive, holistic method of providing social services, other professional services, and peer support so that people can improve their lives and eventually remain self-sufficient in the community. For example, the Substance Abuse Wraparound Model implemented by Mental Health America of Northern Kentucky and Southwest Ohio greatly improves the client’s successful completion of treatment programs and reduces relapses. This program uses Certified Peer Support Specialists to build a positive relationship with the client as soon as they enter treatment and assists them throughout treatment for at least 9 months after



graduation from treatment. Peer specialists offer persons in recovery understanding; education about their illness; shared recovery experiences; and inspiration, hope, and help to build the community supports necessary to live healthy, free from the entanglement of substance use. Currently, Mental Health America of NKY and SW Ohio only has enough funding to provide wraparound services to 25 clients, significantly less than the number of clients that need to be served.

In addition to mutual help groups, such as Alcoholic Anonymous, Al-Anon, Narcotics Anonymous, and Nar-Anon that are beneficial, other groups have formed in recent years to offer varied forms of support outside the scope of 12-Step groups. One example of such a group in Northern Kentucky is Personal Involvement Empowering Recovery (PIER). PIER is a peer-led group based in Newport that offers classes on a variety of practical topics commonly needed by people in recovery. Topics primarily address relationship and job seeking skills. PIER also offers recreational options, mentoring, and various support groups, including a group for people in recovery who are also living with a mental illness.

In addition, a case management of persons in treatment and recovery is proposed. The



collaborative wraparound services provided through the case management system will provide services to 50-100 clients and include a process for providing feedback on documented outcomes to the Leadership Team. The model presented at the left reflects a case manager supervisor who will work with the medical team to facilitate the delivery of medication-assisted treatment coupled with support for navigating from active addiction into treatment and long-term recovery.

The supervisor will have a team of 5-8 case managers who will facilitate clients into treatment, track and provide wraparound services to clients in residential and out-patient treatment facilities, connect clients to recovery support services, and document outcomes for each client. Case

managers will be trained and closely supervised to maximize positive outcomes for clients. Client records will remain confidential and follow current patient confidentiality requirements.

The case manager will have access to a volunteer multidisciplinary Treatment Advisory Team for assistance on unique or difficult situations. Working with the KY Legislative Research Committee (or other analysts identified), the Evaluation Team will conduct a cost analysis weighing the costs of reducing mortality and morbidity associated with heroin's degradation of the community, as well as the overall cost and burden on the medical system.

## Recovery Ombudsman Program

Although lawmakers and the general public know more about addiction now than in years past, much more needs to be done in this regard. A Kentucky-based, grassroots group called People Advocating Recovery (PAR) collaborates with lawmakers, media outlets, and people affected by substance abuse to eliminate legal barriers to recovery and the shame, stigma, and discrimination that surrounds the disease of addiction. For the recommendations in this plan to succeed, we need advocacy groups like PAR who can focus on the larger issues related to addiction and reach out to a variety of sectors (i.e., lawmakers, treatment professionals, the general public, etc.) for the greater good.

Several states have adopted Recovery Ombudsman Programs to assist service recipients, families, and friends with their concerns about substance use and mental health treatment and recovery for a loved one. An Ombudsman would help clarify regulations that apply to specific situations, provide information regarding alternatives, provide information regarding access to services and supports, and suggest referrals to other agencies. The Ombudsman mediates the concerns of each person involved in a specific situation and may serve as an advocate for service recipients.

Since our service region spans eight counties, an Ombudsman Program in Northern Kentucky will entail a coordinator, trainer, and county-specific advocates creating a regional network for support.

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From the Perspective of a Mental Health Provider

Clearly the issues of substance use disorders and mental health are intertwined as almost to be one problem. Both parts must be addressed to achieve maximum success. We know what the best practices are to achieve the best outcomes in recovery. For heroin addiction/mental illness, this includes medication-assisted treatment in combination with behavioral therapy, case management, and peer support.

David Olds, Executive Director, Mental Health America of Northern Kentucky and Southwest Ohio

## Protect

### 2017 Targets and Strategies

- \* Overdose fatalities are decreased.
- \* The number of new cases of Hepatitis C and other infections caused by intravenous drug use are decreased.

Goals: To reduce opiate deaths and the number of new cases of infectious diseases associated with intravenous drug use, such as Hepatitis C.

#### Strategies:

- Develop and implement a plan to initiate the prescription, distribution, and administration of Naloxone throughout Northern Kentucky.
- Provide education for injection drug users (IDUs) about the risk of endocarditis, Hepatitis C, and other bloodborne infections, as well as the benefits of prevention and care.
- Provide testing with referral to care and treatment through targeted outreach.
- Explore options with communities and policy makers to reduce the transmission of infectious diseases and remove used needles and syringes from the community.
- Increase the number of IDUs accessing timely health care for treatment of infections (e.g. endocarditis, Hepatitis C, HIV) to reduce premature death and the transmission of disease.

### Supporting Documentation and Direction

#### Overdose from Opioids:

Opioids, like heroin, act on the parts of the brain that control emotions, producing intense feelings of pleasure and blocking pain messages from the body to the brain.<sup>36</sup> Opioids also act on other parts of the brain stem to depress breathing. Too high a dose of an opioid can stop breathing altogether, resulting in death.

St. Elizabeth Healthcare has recorded an increase in heroin overdoses in its Emergency Rooms over the last few years. The chart presented on page 15 depicts the dramatic rise in the number of heroin overdoses treated in the emergency departments of Covington, Ft. Thomas, Edgewood, Florence, and Grant County. In addition, a number of NKY residents are treated at the University of Cincinnati Medical Center (UCMC). In 2011, for example, UCMC treated an additional 47 patients.

If administered timely, the prescription drug Naloxone can reverse overdose deaths if administered in a timely fashion by temporarily blocking opioids from acting on the brain. Naloxone costs about \$50 and can revive a person long enough to be transported to an emergency room. Used since the 1970s by emergency room personnel and paramedics, Naloxone has not been widely available to emergency response professionals or families and

friends who may find a loved one who has overdosed from heroin. Fortunately, the drug is safe enough to be administered by non-professionals and is inexpensive in relation to the loss of a life.

According to a survey conducted in 2010 by the Harm Reduction Coalition of known Naloxone distribution programs in the U.S., between 1996 and June 2010, a total of 53,032 individuals have been trained and given Naloxone. These 48 “take-home” Naloxone programs, spread over 188 sites in 15 states and Washington, D.C., have received reports of 10,071 overdose reversals using Naloxone.

A law passed in the 2013 General Assembly allows Naloxone to be more widely prescribed and used in emergency situations. Therefore, this plan includes strategies to increase the distribution of Naloxone to heroin users, since this medication can keep a person alive another day to get into treatment. Additional strategies to make Naloxone more available are working with first responders, such as law enforcement (who are often first on the scene of overdoses) and health care providers to prescribe and make the drug available for administration, and developing a mobile Naloxone clinic. A mobile clinic would make Naloxone prescriptions more available in each county in the region. At each clinic site, a team of professionals will provide prescriptions (and/or Naloxone kits) and brief behavioral and educational interventions to initiate movement toward treatment and recovery.

Public awareness regarding the importance of calling for emergency help is also essential. Often, people in the presence of an overdose victim are afraid to call for help due to their fear of prosecution. Even if help arrives, it is sometimes too late by the time a paramedic arrives or the person gets to the emergency room. Having a kit available at the time of overdose is the most effective way to ensure timely reversal of the opioid effects in the brain.

Emergency response can take more time in rural areas. To save lives, we have often transported persons who have overdosed in our cruisers in order to get them to the emergency department in time to reverse the effects of the opioid.

Sheriff Chuck Dills, Grant County

## **Infections, Infectious Diseases, and Injection Drug Use**

### **Infective Endocarditis**

Injection drug use is a significant risk factor for developing a condition called infective endocarditis (or endocarditis). Infective endocarditis is an infection (usually from bacteria) of the inner lining of the heart chambers and heart valves. It is a serious and deadly disease, requiring weeks of treatment with high dose intravenous antibiotics. Even with treatment, infective endocarditis has an 18% in-hospital mortality, mostly due to congestive heart failure.<sup>37</sup>

Furthermore, the infection tends to damage the heart valves, requiring valve replacements. IDUs develop endocarditis because they often use needles to inject drugs that are contaminated with the bacteria that can cause endocarditis. When the contaminated needle is put into a vein, the bacteria travel through the blood to the heart, settling on the valves and causing an infection that is difficult to treat. The incidence of infective endocarditis among IDUs in the United States ranges between 1–5% every year. In IDUs, infective endocarditis accounts for 5–20% of hospitalizations and 5–10% of total deaths.<sup>38</sup> It has been estimated that treatment of endocarditis costs over \$120,000 per episode.<sup>39</sup>

### **Infectious Diseases**

Injection drug users in the eight-county region are at increased risk for acquiring and transmitting infectious diseases, such as HIV (human immunodeficiency virus) and viral hepatitis, e.g. Hepatitis B (HBV) and Hepatitis C (HCV). These infections are transmitted through contact with blood from infected people when needles and syringes are shared and less commonly through sexual contact with an infected partner.<sup>40</sup> Hepatitis C virus infection is the most common blood borne infection in the United States; approximately 3.2 million persons are chronically infected.<sup>41</sup>

### **Human Immunodeficiency Virus (HIV)**

Through June 30, 2012, there have been 700 people cumulatively diagnosed with HIV infections in the eight county region of Northern Kentucky. Northern Kentucky has the 3<sup>rd</sup> highest percentage of cumulative infections diagnosed in the Commonwealth and the 3<sup>rd</sup> largest number of persons living with HIV in the Commonwealth. Of the 700 cases in Northern Kentucky, 11% (80) reported IDU as a risk factor. From 2008 - 2012, 6 of 143 cases of HIV in NKY (8 counties) reported IVDU or MSM/IVDU as a risk factor. This equals 4.2% of cases of HIV indicating that they had a risk factor of IVDU. For comparison, 47.6% had MSM (Men who have sex with men) as a risk factor, 29.4% reported no risk factor, 11.1% reported heterosexual contact as a risk factor, and 7.7% reported other (female, presumed hetero or perinatal HIV transmission).<sup>42</sup>

### **Viral Hepatitis**

Acute Hepatitis C (HCV): Acute Hepatitis C is an illness caused by a viral infection. The incidence of acute Hepatitis C in Northern Kentucky has increased since 2009 and significantly exceeds the statewide rates. In 2012, there were 56 cases of acute Hepatitis C reported in the eight county

region of Northern Kentucky, representing a case rate of 12.6 cases per 100,000 population. This case rate is significantly higher than the national case rate of 0.48 cases per 100,000 population and the Kentucky case rate of 3.4 cases per 100,000 population. This also is an increase from 2011 when there were 42 cases, a case rate of 10.6 cases per 100,000 population.

Non-acute Hepatitis C: Many people with non-acute Hepatitis C infections have chronic liver disease, which can range from mild to severe, including cirrhosis and cancer. Non-acute cases are not required to be reported to health departments in Kentucky, so the numbers reported may underestimate the actual number of cases in Northern Kentucky. In 2012, there were 980 cases of non-acute Hepatitis C reported to the health department in the eight county region of Northern Kentucky, representing a case rate of 220 cases per 100,000 population.

The Northern Kentucky Independent District Health Department has tested residents in Boone, Campbell, Grant, and Kenton counties for Hepatitis C since May 2012 as part of a pilot project with the Kentucky Department for Public Health and the Centers for Disease Control and Prevention. Since that time, there have been 1,274 tests performed, with 173 (13.5%) tests confirmed as positive. Of those testing positive, almost 84% reported injection drug use, 83% reported multiple sex partners, and 74% reported a history of tattoos.

HCV is present in high quantities in the blood of infected persons and is, therefore, readily transmitted after exposure to blood-contaminated needles, syringes, and drug preparation equipment. Of new cases of HCV reported to the Centers for Disease Control (CDC), injection drug use is the most common risk factor.<sup>43</sup> Hepatitis A (HAV) also occurs in this population due to poor hygiene during drug-sharing practices and activities that involve personal contact. Injection drug users (IDUs) are also more likely to have adverse hepatitis-related health outcomes. Most people infected with the hepatitis virus do not know that they are infected and, therefore, are not receiving treatment. They are at greater risk for severe and even fatal complications from the disease, increasing the likelihood that they will spread the virus.

Viral hepatitis is a leading infectious cause of death due to liver cirrhosis and liver cancer. More than 75% of HCV infections become chronic, often leading to serious, progressive, and fatal liver disease. Without treatment, 15-40% of people living with viral hepatitis will develop liver cirrhosis or liver cancer.

Hepatitis B (HBV): In 2012, there were 26 cases of acute Hepatitis B reported in the eight county region of Northern Kentucky, representing a case rate of 5.8 cases per 100,000 population. This is significantly higher than the national case rate of 0.9 cases per 100,000 population, based on preliminary data. It is also higher than the Kentucky case rate of 3.5 cases per 100,000 population. There was not a significant change in the number of cases reported in Northern Kentucky for 2012 compared to 2011.<sup>44</sup>

Non-acute Hepatitis B is not a mandatory reportable disease so the number provided here may not represent the actual number of cases in the region. In 2012, there were 51 cases of non-

acute Hepatitis B reported in the eight counties of Northern Kentucky, representing a case rate of 11.5 cases per 100,000 population. These numbers have not previously been captured so a comparison of years is not possible.<sup>45</sup> [See chart on page 14 for more information.]

### **Economic Impact of Viral Hepatitis**

A 2013 article described Hepatitis C as “a public health and health care expense time bomb.”<sup>46</sup>

For example:

- Lifetime healthcare costs for one person can easily total hundreds of thousands of dollars due to end-stage treatments for viral hepatitis (e.g. liver transplants). Lifetime health care costs to treat infections, such as Hepatitis C, are estimated at \$64,490 per person.<sup>47</sup>
- Compared with patients of the same age and sex, managed care enrollees with HCV are hospitalized more than 3 times as often as uninfected enrollees. Cost for an HCV-infected enrollee is \$21,000 (4 times more than an uninfected enrollee and twice the cost of an enrollee with diabetes).<sup>48</sup>
- A study of almost 340,000 workers found that employees with HCV had significantly more work days lost than other employees, resulting in lost productivity.<sup>49</sup>

Although diseases and overdose deaths can be addressed by the strategies throughout this plan, this section of the plan specifically recommends strategies that can improve health outcomes of intravenous drug users through secondary prevention (harm reduction).

## SUMMARY

A committed Leadership Team has worked since October 2012 developing this plan. During that time, we have spent hours talking one-on-one with diverse sectors of the community—with policy makers, businesses, patients, doctors, and law enforcement. In twelve town meetings held in Owen, Grant, Boone, Pendleton, Kenton, Carroll, and Campbell Counties, we have provided information and listened to community folks share their stories and their concerns. We have responded to their questions and tried to harness their fear. We have heard the stories of grief from parents who have lost children, and we have also heard the stories of victory from those who have regained their independence from addiction. All of these conversations have helped shape the strategies identified in this plan.

Now we feel prepared to facilitate the implementation of this plan. Together we have gathered enough expertise to initiate, guide, and assist the major stakeholders to maximize the collective efforts required to address the task at hand—a task focused on empowering a culture of recovery. We have a great purpose. We will find the best solutions to address the impact of heroin on our citizens and community of Northern Kentucky. Our losses will temper our resolve and hasten our action. Please join us.

The cultural environment shaping people's stories can be influenced using all the tools of modern life. We can create a culture of sobriety and safety, built from positive stories of resilience and transformation. We can make it easier to build relationships with people who have overcome challenges, and are themselves transformed. This paves the way for the meaningful talk, person to person. Anonymity is proper for individual work or intensive work – but the larger world needs characters and a story line, a movie to walk into and live out.

We will build a cultural narrative of safety and sobriety using the same techniques that consumer products firms use to influence customer behavior. We will make it understood, easy to do, desirable, rewarding, and a habit. People will see the proof and payoff.

Paul Komarek, author and consultant, on creating a culture of sobriety and safety

.....Paul Komarek is an author and consultant with a comeback story. After bipolar disorder wiped out his legal career, Paul rebuilt his life around his strengths as a writer, teacher, and policy expert. He works on tough social issues, including criminal justice reform, education of children with disabilities, violence prevention, addiction treatment, and health care for the poor. Paul's book *Defying Mental Illness, Finding Recovery with Community Resources and Family Support* (ISBN 978-1479369461) is for general audiences to focus on mental health recovery.



## ENDNOTES

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- <sup>2</sup> Walker, Robert. (n.d.). Cost estimates of drug and alcohol abuse to Kentucky. University of Kentucky, Center on Drug and Alcohol Research, Lexington, KY. An ad hoc report provided to the Kentucky Office of Drug Control Policy.
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- <sup>4</sup> DeMio T. (2013, March 25). "SPECIAL REPORT: Northern Kentucky is heroin ground zero." In *Cincinnati Enquirer*. Retrieved from [www.cincinnati.com](http://www.cincinnati.com).
- <sup>5</sup> Kentucky Office of Drug Control Policy. (2012). Overdose Fatality Report.
- <sup>6</sup> Kentucky Office of Drug Control Policy. (2012). Overdose Fatality Report.
- <sup>7</sup> St. Elizabeth Healthcare and Cincinnati Children's Hospital Perinatal Institute. (2012). Database.
- <sup>8</sup> DeMio T. (2013, January 25). "Hepatitis C cases climbing in NKY." In *Cincinnati Enquirer*. Retrieved from [www.cincinnati.com](http://www.cincinnati.com).
- <sup>9</sup> Transitions, Inc. (n.d.). Database.
- <sup>10</sup> DeMio T. (2013, March 25). "SPECIAL REPORT: Northern Kentucky is heroin ground zero." In *Cincinnati Enquirer*. Retrieved from [www.cincinnati.com](http://www.cincinnati.com). Boone, Kenton, and Campbell counties together accounted for nearly 60% of Kentucky's heroin prosecutions in 2011, even though the three counties have just 8.4 percent of the state's population.
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