

EXECUTIVE SUMMARY

Ohio Substance Abuse Monitoring Network

Targeted Response Initiative: Young Heroin Users and Treatment Experiences

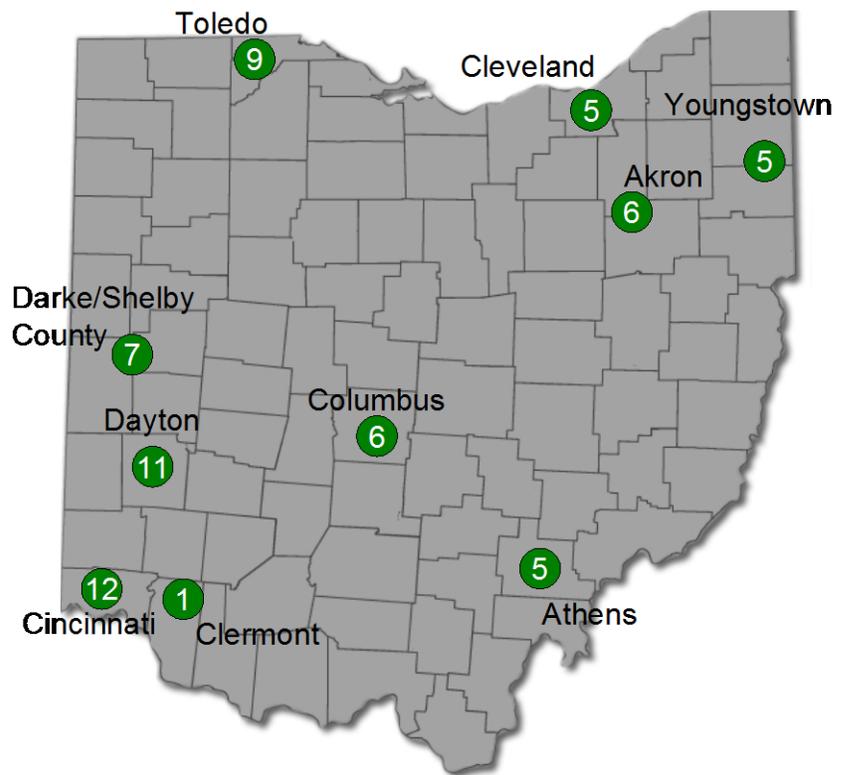
Introduction

Since 2000, the OSAM Network has consistently reported increases in heroin use among young whites (ages 18-25). In 2001, the OSAM Network conducted the first Targeted Response Initiative (TRI) on trends of heroin use in Ohio. In the spring of 2006, another OSAM Network TRI investigated this trend among young, new heroin users and their treatment needs. This TRI aimed to provide a preliminary epidemiological description of these young heroin users, including their characteristics, drug use patterns and treatment needs.

Methods

Between March and June 2006, regional epidemiologists conducted interviews with sixty-seven individuals from urban and rural areas across the state (Figure 1). To be eligible for the study, the participants had to report use of heroin in the previous 12 months, be between 18 and 30 years old, and report first heroin use within the previous 5 years. Providers from substance abuse agencies and correctional facilities were contacted to recruit recovering users. Active users were recruited by outreach workers or referred by other study participants.

Figure 1. Heroin Users Interviewed.



Main Findings

Participant Characteristics

Demographic characteristics are presented in Table 1. The majority of participants were white (about 90%), with an average age of 24. Forty-five percent of the participants were female. The majority had a high school education or GED. More than 70% were unemployed, and almost 90% were single. More than 55% were involved with the criminal justice system.

Of those who reported their family's socioeconomic status, about 71% reported growing up in middle class families. Lower-middle class and lower-class backgrounds were reported by about 12% and 17% of the participants, respectively. Participants self-defined their socioeconomic class.

Participants reported using heroin for the first time about 3.4 years ago (Table 2). Almost 60% were in treatment or recovery. About 24% reported last heroin use on the same day or one day prior to being interviewed. More than half were involved with the criminal justice system. Seventy-six percent injected drugs (Table 6).

Table 1. Demographic characteristics	No. (%)
Age	
Range	18 - 31
Mean (SD)	24.2 (3.4)
Gender	
Male	37 (55.2%)
Female	30 (44.8%)
Ethnicity	
White	59 (89.4%)
African American	4 (6.1%)
Other	3 (4.5%)
Education	
Less than high school	19 (28.4%)
High school or GED	27 (40.3%)
Some college	21 (31.4%)
Employed	
Yes	19 (28.4%)
No	48 (71.6%)
Marital status	
Single	59 (88.1%)
Married	3 (4.5%)
Separated	5 (7.5%)
Residence	
City	41 (61.2%)
Suburb	14 (20.9%)
Town	7 (10.4%)
Rural	4 (6.0%)
Criminal justice system	
No	29 (43.3%)
Yes, probation or parole	23 (34.3%)
Yes, case pending	12 (17.9%)
Yes, incarcerated	3 (4.5%)

Drug Use Histories and Pathways to Heroin Abuse

Most participants had extensive drug use histories (Table 3). Almost all reported a history of alcohol, marijuana and powdered cocaine use. More than 80% reported a lifetime history of OxyContin® and other pharmaceutical opioid misuse. A majority reported a history of benzodiazepine, MDMA, LSD, and crack-cocaine use.

Tobacco, alcohol, and marijuana were typically the first substances abused, occurring, on average, between the ages of 12 and 13.

Initiation to most other drugs of abuse occurred between 16 and 19 years of age. The last drug that most individuals began using was heroin. Mean age at first heroin use was 20.7 years (Table 4).

About 60% of the participants believed they were addicted to pharmaceutical opioids before trying heroin for the first time. About 70% of these participants reported that OxyContin® was the pharmaceutical drug they

most commonly abused before transitioning to heroin. Four interrelated factors contributed to participants' transition to heroin: 1) rapidly increasing tolerance to pharmaceutical opioids; 2) decreasing availability and high street prices of OxyContin®; 3) high availability and comparatively low prices of heroin; and 4) a commonly shared belief that heroin is the "same thing as OxyContin®," which diminished stigma and initial fears associated with heroin use.

Participants typically first used heroin in the context of close and trusting social relationships. About 70% reported their first use with a boyfriend/girlfriend, a relative, or a close friend. Over 70% snorted heroin initially. More than 80% reported using heroin again within a week.

Patterns of Heroin Use

Over 90% believed they became addicted to heroin (Table 5), and users generally reported rapid escalation of their heroin use from about one bag a day (\$20) to several bags or a gram per day (up to \$200 or more). Although almost 80% began using heroin intranasally, the majority (76%) eventually switched to injection (Table 4). Heroin was the most common drug initially

	No
Years since first heroin use, mean (SD)	3.4 (1.7)
Last heroin use (days ago)	
Same day or 1 day ago	16 (23.9%)
2 to 7 days ago	17 (25.4%)
1 to 4 weeks ago	5 (7.5%)
More than 4 weeks ago	29 (43.3%)
In treatment or recovery?	
Yes	38 (57.6%)
No	28 (42.4%)

Substance	Percentage Reporting Lifetime Use	Mean Age at First Use (SD)
Alcohol	98.4%	12.5 (1.8)
Marijuana	98.4%	13.2 (3.4)
Powdered Cocaine	93.7%	16.9 (2.7)
Other Rx Opioids	84.6%	17.4 (3.5)
Tobacco	82.0%	12.3 (3.4)
OxyContin®	78.5%	19.9 (3.5)
Benzodiazepines	65.1%	17.4 (4.2)
LSD	63.5%	16.3 (2.7)
MDMA	61.9%	18.6 (3.2)
Crack Cocaine	54.7%	19.9 (3.5)
Methamphetamine	49.2%	19.8 (3.9)
Psilocybin	44.4%	17.6 (3.1)
Ketamine	38.1%	18.7 (4.0)
Rx Stimulants	28.6%	17.6 (4.4)
Inhalants	23.8%	16.0 (5.0)
PCP	15.9%	19.2 (4.0)
DXM	15.9%	16.0 (5.0)

injected as well as the most frequently injected drug (Table 6).

Almost 90% reported using other drugs in combination with heroin. Powdered cocaine was the substance most commonly used with heroin. Use of other substances often increased daily drug-related expenses. Most resorted to illegal activities to obtain money for drugs, including stealing from family and friends, overcharging customers, shoplifting, drug dealing, and prostitution.

About 40% of the participants reported a heroin overdose. The majority of these participants reported using other drugs in combination with heroin at the time they overdosed. Benzodiazepines were the most frequently reported drugs involved in overdose cases. A few individuals reported use of alcohol, powdered cocaine or crack. Almost 80% reported trying to quit heroin use on their own. These attempts were either done “cold turkey,” or by using illegally obtained pharmaceutical opioids used to self-medicate withdrawal symptoms. In most cases, abstinence from heroin use among these “self-quitters” was brief.

Injection-Related Risks

More than 75% reported injection drug use. First injection of a drug occurred at the mean age of 21. Most reported heroin as the most frequently injected drug.

In relation to injection-related risks, more than half reported past experiences of sharing syringes without first cleaning them, and almost

Table 4.	First heroin use	No
	Age at first heroin use	
	Range	13 - 30
	Mean (SD)	20.7 (3.8)
	Administration at first use	
	Snort	49 (73.1%)
	Inject	17 (25.4%)
	Smoke	1 (1.5%)
	Addicted to pharmaceutical opioids before first heroin use?	
	No	27 (40.3%)
	Yes	40 (59.7%)
	If yes, pharmaceutical opioids used most frequently:	
	OxyContin®	28 (68.3%)
	Vicodin®	5 (12.2%)
	Percocet®	4 (9.8%)
	Other	4 (9.8%)
	Who introduced to heroin?	
	Boyfriend/girlfriend	11 (16.7%)
	Close friend	24 (36.4%)
	Relative	9 (13.4%)
	Casual friend	12 (18.1%)
	Dealer	5 (7.6%)
	Other	5 (7.6%)
	How long before second heroin use?	
	Within a week	54 (81.8%)
	More than a week later	12 (18.2%)
Table 5.	Patterns of heroin use	No
	Addicted to heroin	
	Yes	61 (92.5%)
	No	6 (7.5%)
	Other drugs with heroin?	
	Yes	59 (88.1%)
	No	8 (11.9%)
	What other drugs with heroin?	
	Powdered cocaine	31 (46.3%)
	Benzodiazepines	16 (23.8%)
	Marijuana	15 (22.4%)
	Crack	12 (17.9%)
	Alcohol	11 (16.5%)
	Pharmaceutical opioids	3 (4.5%)
	An experience of heroin OD?	
	Yes	26 (38.8%)
	No	41 (61.2%)
	Tried to quit heroin on your own?	
	Yes	52 (78.8%)
	No	14 (21.2%)

70% reported sharing other injection paraphernalia (Table 6).

There was some regional variation in injection related risks observed across the state. Heroin users interviewed in Toledo were less likely to switch to injection than users in other areas of the state. Users in Cincinnati reported riskier drug injection practices (e.g., more likely to share needles or other drug paraphernalia).

Nearly all of the participants who reported injection drug use reported being previously tested for HIV and Hepatitis C. Four individuals reported they were HIV positive, and 16 reported they were infected with hepatitis C (31.4%).

Treatment Experiences

About half of the participants were attending a substance abuse treatment program at the time interviews took place (Table 7). Nearly 30% reported that they had never been to a substance abuse treatment program. Some participants reported that they had been to a treatment program, but never for heroin abuse/dependence. Almost 40% reported they had been in treatment for heroin abuse/dependence on two or more occasions.

The majority reported that they did not have any trouble accessing substance abuse treatment. About 45% reported being placed on a waiting list for treatment, with a mean waiting period of about 1.5 months. About 47% felt there were insufficient services available for individuals who were using heroin, and another 16.7% were uncertain (Table 7).

Among the most commonly reported barriers to accessing treatment for heroin was lack of information about available treatment options, a perception that waiting lists are very long, inconvenient locations of treatment programs, administrative and financial issues related to accessing publicly funded services, and negative views about methadone therapy (e.g., it is harder to get off methadone than heroin, methadone is just an addiction to a different drug).

Table 6. Injection experiences	No (%)
Ever injected drugs?	
Yes	51 (76.1%)
No	16 (23.9%)
Age at first injection, mean (SD)	21.0 (3.9)
First drug injected	
Heroin	38 (74.5%)
OxyContin®	4 (7.8%)
Powdered cocaine	3 (5.9%)
Other	4 (7.8%)
Drug injected most frequently	
Heroin	48 (94.1%)
OxyContin®	1 (2.0%)
Powdered cocaine	2 (3.9%)
Shared used syringe without cleaning with bleach?	
Never	23 (46.9%)
Less than half times	18 (36.7%)
About half times	5 (10.2%)
Almost always	3 (6.1%)
Shared cookers, cottons, rinse water?	
Never	16 (33.3%)
Less than half times	13 (27.1%)
About half times	5 (10.4%)
Almost always	14 (29.2%)

Treatment Admission Data

The Treatment Episode Data Set (TEDS), from the Substance Abuse and Mental Health Services Administration (<http://oas.samhsa.gov/>) is an external data source that OSAM uses to compare its findings. The TEDS indicates that in Ohio, treatment admissions for heroin abuse increased from 2.1% in 1992 to 9.2% in 2005. In 1992, individuals younger than 30 comprised about 18.1% of all heroin treatment admissions. In 2005, this number increased to 45%.

Trends of Heroin Availability and Abuse

Availability of heroin was rated as high by most participants. Consistent with previous reporting periods, heroin availability in the Toledo area was reportedly lower than in most other areas. There was some regional variation in relation to the types of heroin available (Table 8). Brown or beige powder was the most commonly reported heroin available, excluding Columbus, Athens, and Toledo. In these areas black tar was reported as available or even more available than brown powder. Some participants reported the availability of white powder heroin, but these reports are less reliable, since the majority of the individuals had no knowledge about white powder heroin. Participants from Shelby and Darke Counties reported obtaining heroin from Dayton.

In Dayton, heroin availability was rated as high. Consistent with reports from young heroin users, the crime lab in Toledo reported heroin availability in

Table 7. Treatment experiences	No (%)
Recovery or treatment now?	
Yes	32 (48.5%)
No	34 (51.5%)
Ever attended a substance abuse treatment program?	
Yes	47 (70.1%)
No	20 (29.9%)
Heroin-related treatment?	
Never	20 (29.9%)
1 time	17 (25.4%)
2 times	12 (17.9%)
3 or more times	14 (20.9%)
Not able to get into treatment for heroin abuse when wanted?	
Yes	18 (31.0%)
No	40 (69.0%)
Ever on a waiting list to get into treatment for heroin abuse?	
Yes	28 (45.9%)
No	30 (54.1%)
Enough services for heroin abusers?	
No	28 (46.7%)
Yes	22 (36.7%)
Don't know	10 (16.7%)

Table 8. Area	Average availability (scale 0 to 10)		
	Brown powder	Black tar	White powder
Cincinnati area	8.5	5.5	3
Dayton area	9.5	3	3*
Columbus area	4.5	8	1*
Shelby/Darke area	8.5	2	-
Athens area	7.5	6	-
Toledo area	5.6	5.5	4*
Akron area	8	1	7*
Cleveland area	7	4.5	9*
Youngstown area	8	1	5

*Reported by less than half of the participants.

that area as low. Different from user reports, the crime lab in Columbus rated heroin availability as low and reported a decreased number of heroin-related cases, which may be related to an emergence of new heroin distribution networks reportedly dominated by people from Mexico. Excluding Dayton, Toledo, and Columbus, crime labs across the state reported heroin availability as moderate. Consistent with user reports, crime lab data indicate that brown powder is the most commonly seen heroin in most areas of the state, except Columbus, where black tar is the most common form of heroin. Heroin purity was reported to be moderate (30%-60% pure) and unchanged in Cleveland and Dayton. The crime lab in Toledo and the Bureau of Criminal Identification and Investigation (BCI&I), covering Southern and Central Ohio, reported purity above 60%.

Several cases of heroin mixed with clandestinely manufactured fentanyl were reported across the state, including Dayton and Columbus (Dayton Daily News, June 11, 2006). There are significant concerns related to this trend given that numerous overdose deaths have been contributed to this mixture of fentanyl and heroin. This trend was first identified in late 2005 in Detroit, Chicago, and other cities in the Midwest.

Heroin prices varied across the state. Participants from Cincinnati, Columbus, and Toledo reported average prices of \$160-\$170 per gram for brown powder heroin. This same type of heroin was selling on average for \$120 per gram in Dayton, Athens, and Cleveland. Youngstown and Akron reported average prices of \$140 to \$150 per gram. Black-tar heroin was more expensive, selling for \$200-300 per gram in Columbus.

Seventy-three percent of participants thought that heroin use had been increasing, and about 20% thought it had stayed the same. The remaining participants either did not have an opinion, or thought use had been decreasing.

Participants were asked to describe their drug-using networks in terms of modes of administration. Excluding Youngstown and Toledo, injection was described as the most common mode of administration. Users from the Youngstown area perceived injection and intranasal inhalation as being equally common in their networks. In the Toledo area, users commented that besides injection and intranasal inhalation, smoking was a fairly "popular" method of administration among new heroin users.

Characteristics of Users.

The most commonly seen group of new heroin users were young (late teens and 20s), white individuals. This increasing population of young white heroin users was first reported in 2001. In Dayton, intranasal heroin use was reported to be increasingly common among African-American youth and young adults involved in drug dealing.

Conclusions

The majority of the participants thought that heroin availability and use have been increasing. Brown powder heroin remains the most common. Reports of increasing availability of tar heroin were obtained.

Young whites are the most common new users. Many of these individuals were addicted to pharmaceutical opioids before transitioning to heroin. The majority of these users began by inhaling the drug intranasally. Addiction typically escalated rapidly and intranasal inhalation quickly transitioned to injection. Frequently, other substances, especially powdered cocaine, were used in combination with heroin.

Most participants reported sharing syringes and other injection paraphernalia. Many did not have adequate knowledge about the risks associated with sharing “cookers,” “cottons,” and rinse water. Among injectors, four were HIV positive, and 16 were positive for Hepatitis C. Given that black tar heroin is better suited for IV injection, the reports of increased availability of the drug is cause for concern.

Most participants had been in a substance abuse treatment program for heroin abuse/dependence. The majority of users either felt there were enough services available to heroin users or were uncertain about the availability of these services. Less than half believed there were not enough services available to heroin users. Some participants perceived that there was a lack of information available about treatment options, long waiting lists, lack of transportation, administrative and financial issues related to accessing publicly funded services, and apprehensions about methadone therapy.