Alert #11 *Date: 08/22/2003*

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Ohio Early Warning Alert

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for Safe and Drug Free Schools and Communities

Heroin Abuse in Ohio

Heroin abuse and distribution are increasing in Ohio

The United States Drug Enforcement Administration (DEA), and the National Drug Intelligence Center (NDIC), has reported heroin abuse and distribution are increasing in Ohio. According to the Hamilton County Coroner's Office, until 1997 it was very rare to see a heroin overdose death in their area. During the six years since, there has been an average of more than 10 deaths per year. This represents a recent and dramatic upsurge. Heroin is sold in various packaging. In Youngstown, distribution groups sell South American heroin by the bag or in bundles. In Toledo, Mexican brown powdered heroin is sold in half-gram quantities packaged in aluminum foil. Mexican brown powdered heroin is sold in clear gelatin capsules in the Miami Valley and Dayton areas. Recently, the DEA seized "Havana Club" rum bottles containing a brown-colored liquid, that field- testing indicated contained heroin. Liquid heroin is very unusual, however, intelligence suggests that this method of smuggling heroin may be on the rise.
Heroin is shipped into Ohio from major distribution centers such as Chicago, Detroit, New York and various cities along the southwest border. Interstate 75 and 71 continue to be major thoroughfares for drug traffickers. Heroin is also transported on commercial airline flights into Ohio. Wholesalers use major Ohio cities such as Cleveland, Cincinnati, Columbus, and Toledo as distribution centers for smaller cities in and outside the state. Gram quantities sell between $140-$250 and ounce quantities $2400-$7000. The average purity of heroin in Ohio can vary greatly from less than two percent to over 80 percent depending on how many times it was "cut" with a diluting agent. The Ohio Department of Alcohol and Drug Addiction Services (ODADAS) data indicates the number of treatment admissions for heroin abuse increased overall from 5,769 in 2001 to 6,878 in 2002. The Ohio Substance Abuse Monitoring (OSAM) Network analysis of data from treatment centers, law enforcement agencies, personal interviews, and focus groups suggests that heroin abuse is increasing among young adults. In June 2001 OSAM Network research revealed an emerging population of new, young heroin users in Akron, Cleveland, Dayton, Toledo, and Youngstown.

Prevalence Estimates:

Percent of Students in Ohio Reporting Heroin Use, 2002

Student Cocaine Use	Eighth Grade	Tenth Grade	Twelfth Grade
Past month use	1.0	1.8	2.0
Past year use	1.6	2.8	3.2

Source: Pride Survey / Ohio Student Survey 2002

What is Heroin and What Does it Look Like;

Heroin is an illegal, highly addictive drug. Heroin is processed from morphine, a naturally occurring substance extracted from the seedpod of certain varieties of poppy plants. It is typically sold as a white or brownish powder or as the black sticky substance known on the streets as "black tar heroin." Although purer heroin is becoming more common, most street heroin is "cut" with other drugs or with substances such as sugar, starch, powdered milk, or quinine. Street heroin can also be cut with other poisons. While it initially received widespread acceptance from the medical profession, physicians remained unaware of its potential for addiction for years. Today, heroin is an illicit substance having no medical utility in the United States. It is in Schedule I of the Controlled Substance Act. (CSA.)

How is Heroin Administered:

In the past, heroin in the United States was almost always **injected**, because this is the most practical and efficient way to administer low-purity heroin. Typically, a heroin abuser may inject up to six and eight times a day. Some users prefer to inject heroin because they are also addicted to the act of using the needle. Intravenous injection provides the greatest intensity and most rapid onset of euphoria (7 to 8 seconds), while intramuscular injection produces a relatively slow onset of euphoria (5 to 8 minutes). However, the recent availability of higher purity heroin at relatively low cost has meant that a larger percentage of today's users are either **snorting** or **smoking** heroin, instead of injecting it. When heroin is sniffed or smoked, peak effects are usually felt within 10 to 15 minutes. Although smoking and sniffing heroin do not produce a "rush" as quickly or as intensely as intravenous injection, National Institute on Drug Abuse (NIDA) researchers have confirmed that all three forms of heroin administration are addictive. According to the March, 2003 National Household Survey on Drug Abuse Report, combined data from the 1999 to 2001 surveys indicated that young adults aged 18 to 25 were more likely than youths aged 12 to 17 or adults aged 26 or older to have injected drugs during the past year. Snorting or smoking heroin is more appealing to new users because it eliminates both the fear of acquiring syringe-borne diseases, such as HIV and hepatitis, as well as the social stigma attached to intravenous heroin use. Many new users of heroin mistakenly believe that smoking or snorting heroin is a safe technique for

avoiding addiction. However, both the smoking and the snorting of heroin are directly linked to high incidences of dependence and addiction.

Street Names:

The number of street names are endless, and include names such as: “Smack”, “H”, “Junk”, “Big H”, “Hell Dust”, “Horse” and “Thunder”. Other names may refer to types of heroin produced in a specific geographical area, such as “Mexican Black Tar”, and “China White”

Signs and Symptoms of Heroin Use:

Symptoms of use: lethargy, drowsiness, nodding, itching, euphoria, nausea, slowed breathing, blue lips, restlessness, decreased appetite, irregular heartbeat, and going back and forth between feeling alert and drowsy.

Behavioral signs: loss of enthusiasm and involvement, withdrawal from family, friends, and hobbies, reluctance to introduce new friends, loss of interest and deterioration in quality of performance at work or school, unusual request for money, sudden change in mood and behavior, devious and manipulative behavior. Increase in theft and prostitution.

Medical Consequences of Heroin Use:

Heroin abuse is associated with serious health conditions, including fatal overdose, spontaneous abortion, collapsed veins, and infectious disease, including HIV/AIDS and hepatitis. Because heroin abusers do not know the actual strength of the drug or its true contents, they are at risk of overdose or death. Heroin also poses special problems because of the transmission of HIV and other diseases that can occur from sharing needles or other injection equipment. Heroin is a highly addictive drug, as higher doses are used over time, physical dependence and addiction develops.

Summary of Effects of Heroin Use and Abuse:

Short Term Effect:
The short-term effects of heroin abuse appear soon after a single dose and disappear in a few hours. After an injection of heroin, the user reports feeling a surge of euphoria ("rush") accompanied by a warm flushing of the skin, a dry mouth, and heavy extremities. Following this initial euphoria, the user goes "on the nod," an alternately wakeful and drowsy state. Mental functioning becomes clouded due to the depression of the central nervous system. Other effects include slurred speech, slow gait, constricted pupils, droopy eyelids, impaired night vision, vomiting, and constipation.

Long Term Effect: (Other than addiction)
Long-term effects of heroin appear after repeated use for some period of time. Chronic users may develop collapsed veins, infection of the heart lining and valves, abscesses, cellulitis, and liver disease. Pulmonary complications, including various types of pneumonia, may result from the poor health condition of the abuser, as well as from heroin's depressing effects on respiration.

In addition to the effects of the drug itself, street heroin may have additives that do not readily dissolve and result in clogging the blood vessels that lead to the lungs, liver, kidneys, or brain. This can cause infection or even death of small patches of cells in vital organs.

Maternal Effect:
Heroin abuse can cause serious complications during pregnancy, including miscarriage and premature delivery. Children born to addicted mothers are at greater risk of SIDS (sudden infant death syndrome), as well. Pregnant women should not be detoxified from opiates because of the increased risk of spontaneous abortion or premature delivery; rather, treatment with methadone is strongly advised. Although infants born to mothers taking prescribed methadone may show signs of physical dependence, they can be treated easily and safely in the nursery if the physician is **aware** of the potential for withdrawal. Research has demonstrated also that the effects of in utero exposure to methadone are relatively benign.

Product information input from: Earl Siegel, Pharm.D., Co-Director Cincinnati Drug & Poison Information Center (1-513-636-5111).

Addiction:

Addiction is a chronic problem, characterized by compulsive drug seeking and use, and by neurochemical and molecular changes in the brain. With regular heroin use, tolerance develops. This means the abuser must use more heroin to achieve the same intensity or effect. As higher doses are used over time, physical dependence and addiction develop. With physical dependence, the body has adapted to the presence of the drug and withdrawal symptoms may occur if use is reduced or stopped.

Withdrawal:

Withdrawal, which in regular abusers may occur as early as a few hours after the last administration, produces drug craving, restlessness, muscle and bone pain, insomnia, diarrhea and vomiting, cold flashes with goose bumps ("cold turkey"), kicking movements ("kicking the habit"), and other symptoms. Major withdrawal symptoms peak between 48 and 72 hours after the last dose and subside after about a week. Sudden withdrawal by heavily dependent users who are in poor health is occasionally fatal, although heroin withdrawal is considered much less dangerous than alcohol or barbiturate withdrawal.

Treatment:

There is a broad range of treatment options for heroin addiction, including medications as well as behavioral therapies. Science has taught us that when medication treatment is integrated with other supportive services, patients are often able to stop heroin (or other opiate) use and return to more stable and productive lives.

In November 1997, the National Institutes of Health (NIH) convened a Consensus Panel on Effective Medical Treatment of Heroin Addiction. The panel of national experts concluded that opiate drug addictions are diseases of the brain and medical disorders that indeed can be treated effectively. The panel strongly recommended (1) broader access to methadone maintenance treatment programs for people who are addicted to heroin or other opiate drugs; and (2) the Federal and State regulations and other barriers impeding this access be eliminated. This panel also stressed the importance of providing substance abuse counseling, psychosocial therapies, and other supportive services to enhance retention and successful outcomes in methadone maintenance treatment programs.

Medication Treatment:

Methadone, a synthetic opiate medication that blocks the effects of heroin for about 24 hours, has a proven record of success when prescribed at a high enough dosage level for people addicted to heroin. *LAAM*, also a synthetic opiate medication for treating heroin addiction, can block the effects of heroin for up to 72 hours. Other approved medications are *naloxone*, which is used to treat cases of overdose, and *naltrexone*, both of which block the effects of morphine, heroin, and other opiates. *Buprenorphine* has proven to be as effective as methadone in the treatment of opiate addiction. Buprenorphine (Subutex®) is the new schedule III partial opiate agonist that will block withdrawal symptoms/cravings of those addicted to opiates (ex. heroin, morphine, codeine, and hydromorphone). Since this drug is a partial opiate agonist it will not produce the "high" feeling that is associated with other opiate narcotics. Buprenorphine alone is intended for use only in the presence of a physician since it does have potential for abuse. Suboxone® is a combination of buprenorphine and naloxone, an opiate antagonist, which is meant for use on an outpatient basis. Naloxone is added to decrease the street value of the drug, the opiate antagonistic properties of naloxone would cause unpleasant side effects if the drug were to be crushed and injected. These two drugs are a potentially safer alternative to methadone in those patients who are mildly or moderately addicted to opiates. Subutex® and Suboxone® have the potential to revolutionize the way addicts are treated. Previously, patients had to go to methadone clinics, which are not always practical. These new drugs will allow patients to be treated by their personal physicians on an outpatient basis. Also, since the drugs are classified as schedule III medications doctors may be more willing to get involved in outpatient treatment (vs. methadone, which is a schedule II medication).

Behavioral Treatment:

There are many effective behavioral treatments available for heroin addiction. These can include residential and outpatient approaches. Several new behavioral therapies are showing particular promise for heroin addiction. *Contingency management* therapy uses a voucher-based system, where patients earn "points" based on negative drug tests, which they can exchange for items that encourage healthful living.
Cognitive-behavioral interventions are designed to help modify the patient's thinking, expectancies, and behaviors and to increase skills in coping with various life stressors.

First Aid Treatment:

If, after checking, the person has no pulse and is not breathing, **Institute CPR IMMEDIATELY,** and call for a life squad.

Heroin Pictures

Brown Powder Heroin

White Powder Heroin

Heroin Paraphernalia

Poppy Flower

Mexican black tar

Poppy seedpod with opium drying

References / Resources:

U.S. Drug Enforcement Agency. www.dea.gov
Ohio Department of Alcohol and Drug Addiction Services. www.odadas.state.oh.us
Ohio Resource Network. www.ebasedprevention.org
Cincinnati Drug and Poison Information Center. www.cincinnatichildrens.org
Substance Abuse and Mental Health Services Administration. www.samhsa.gov
Ohio Substance Abuse Monitoring Network. www.med.wright.edu/citar/osam/html
Office of National Drug Control Policy. www.whitehousedrugpolicy.gov
National Drug Intelligence Center. www.usdoj.gov/ndic
National Institute on Drug Abuse. www.nida.nih.gov
Partnership for a Drug Free America. www.drugfreeamerica.org
Center for Substance Abuse Prevention. www.samhsa.gov/centers/csap
National Clearinghouse for Alcohol and Drug Information. www.ncadi.samhsa.gov
Drug Rehabilitation Information. www.drug-rehabs.org
Stop Addiction / Narconon. www.stopcocaineaddiction.com
Teen Challenge. www.teenchallenge.com
Central Intelligence Agency. www.cia.gov

This warning is being sent to inform parents, prevention and treatment professionals, law enforcement, and educators of this emerging trend. Please distribute this information through list serves, newsletters or bulletin boards, etc. using the Ohio Early Warning Network as your source.

For additional information on the above alert contact: The Ohio Resource Network for Safe and Drug Free Schools and Communities, P.O. Box 210109, 2624 Clifton Ave Cincinnati, Ohio 45221-0109 Phone # 1-800-788-7254 or fax# 1-513-556-0782.

To participate in this OEWN initiative, visit www.ebasedprevention.org and fill out the OEWN registration form. Anyone in Ohio can report an issue to the Ohio Early Warning Network by calling the toll-free non-emergency InfoLine at 1-866-OhioEWN.

This alert is brought to you by the Ohio Early Warning Network initiative sponsored by: the Ohio Department of Alcohol and Drug Addictions Services, The Ohio Department of Education, and the Ohio National Guard