



Prescription Drug Monitoring Program Training and Technical Assistance Center

Assessing Risk for Overdose: Key Questions for Intake Forms

The misuse and abuse of drugs, in particular prescription and illicit opioids, are related to many types of crime ranging from unlawful possession or illegal sale or distribution to violent offenses. Drug use and abuse is involved in more than half of all violent crimes, in 60-80% of child abuse and neglect cases, and in 75% of drug dealing and manufacturing cases.^{1,2} It is estimated that about half of all state and federal prisoners are either addicted to or abuse drugs; however, few receive treatment while incarcerated and the risk for drug overdose is often higher upon release.^{3,4,5} Multiple studies have found that drug abuse treatment is effective in reducing relapse and recidivism, which can prevent overdoses and result in significant savings to society.^{6, 7, 8, 9, 10, 11, 12} The most effective treatment models integrate criminal justice and drug treatment systems and services, creating a multi-disciplinary approach to providing treatment that includes drug use screening, treatment placements, drug testing and monitoring, and ongoing supervision with the use of sanctions and rewards.¹³ This document is intended to augment effective screening tools to better identify criminal justice involved individuals at risk of drug overdose.

Appropriate screening and assessment of individuals within the criminal justice system is critical in identifying a person's clinical needs and effectively allocating supervision and service resources to reduce the risk of drug overdose.¹⁴ An issue [brief](#) from the Council for State Governments Justice Center, "Adults with Behavioral Health Needs Under Correctional Supervision: A Shared Framework for Reducing Recidivism and Promoting recovery", indicates that, when risk and needs assessments are developed and used correctly, they can help criminal justice officials accurately classify offenders, target treatment and other services to reduce recidivism, improve public safety and reduce costs. Research has found that there are eight (8) risk/need factors that are associated with future criminal behavior: presence of antisocial behavior, antisocial personality pattern, pro-criminal attitudes, social supports for crime, substance abuse, poor family/marital relationships, low school/work performance, and lack of pro-social recreational activities.

The use of validated tools to screen and assess for the presence of a substance use disorder and the risk for recidivism are two widely recommended practices.¹⁵ There are a number of validated screening and assessment tools available; however, it is critical to select the correct tool for the client, taking into account demographics, current situation, and other factors. The Substance Abuse and Mental Health Services Administration (SAMHSA) has compiled a listing of widely-used screening and assessment tools which can be found at: [Substance Abuse Treatment for Adults in the Criminal Justice System, Appendix C](#). Existing tools may be too broad in focus to reliably identify individuals who are at risk of overdose; therefore, the

questions listed below are provided for your consideration when specifically identifying risk of overdose. The questions are derived from relevant research findings and can help identify specific substance(s) being abused and risk of overdose. Following each set of questions is a summary of their rationale and supporting evidence from applicable research.

SUGGESTED QUESTIONS

- 1) Have you experienced a non-fatal overdose:**
 - a. In your lifetime**
 - b. In the past year**
 - c. In the past month**

Rationale: Having a prior overdose is the strongest predictor of subsequent overdose and overdose death. Research has established a list of circumstances and behaviors that can increase the likelihood of opioid overdose, which has facilitated the development of evidence-based interventions. These risk factors include having had a prior overdose, concurrent use of alcohol, cocaine, or benzodiazepines, more frequent injecting, and HIV infection.¹⁶ It has been shown that experiencing an overdose results in high rates of enrollment in substance abuse treatment.¹⁷

- 2) Are you currently using heroin?**
- 3) Are you currently using prescription opioids non-medically?**
- 4) Are you currently using other prescription, recreational or street drugs besides opioids? If so, what drugs?¹⁸**

Rationale: According to Jones, et al. (2015), heroin use has increased significantly among the entire population of this country; every demographic group has been impacted. During 2002–2013, past-year heroin use increased among persons reporting past-year use of other substances. The largest percentage increase, 138.2%, occurred among non-medical users of opioid pain relievers. In this group, the past-year heroin use rate increased from 17.8 to 42.4 per 1,000. Overall, 96% of past-year heroin users reported use of at least one other drug during the past year, and 61% reported using at least three different drugs. The percentage of heroin users with past-year marijuana, cocaine, or alcohol abuse or dependence remained stable during most of the study periods. However, the percentage of heroin users with opioid pain reliever abuse or dependence more than doubled from 20.7% in 2002–2004 to 45.2% in 2011–2013. By 2011–2013, opioid pain reliever abuse or dependence was more common among heroin users than alcohol, marijuana, or cocaine abuse or dependence.¹⁹ The number of drug overdose deaths involving heroin increased from 2,088 in 2006 to 12,989 in 2015. The CDC reports that "The rate of drug overdose deaths involving heroin increased slightly during 2006–2010 but more than tripled during 2010–2015 for all age groups shown. In 2015, the rate of drug overdose deaths involving heroin was highest for persons aged 25–34." The rate of drug overdose deaths involving heroin for persons aged 25–34 increased from 1.6 per 100,000 in 2010 to 7.4 per 100,000 in 2015.²⁰ Evidence suggests a connection between increases in non-medical use of opioid pain relievers and increases in heroin use.²¹ Opioids were frequently implicated in overdose deaths involving other pharmaceuticals. In 2010, they were involved in

the majority of deaths involving benzodiazepines (77.2%), antiepileptic and antiparkinsonism drugs (65.5%), antipsychotic and neuroleptic drugs (58.0%), antidepressants (57.6%), other analgesics, antipyretics, and antirheumatics (56.5%), and other psychotropic drugs (54.2%).²²

5) Do you have a history of intravenous opioid use? If so, which drugs and when was the last time you injected the drug(s)?

Rationale: Individuals abusing prescription opioids have been known to change the route of administration to intensify the effect of the drug. This includes both snorting and injecting. Injecting prescription opioids and other drugs has been linked to Hepatitis C infections and non-fatal overdoses.²³

6) Have you been released from jail, prison, or residential substance abuse treatment in the last six weeks?

Rationale: Formally incarcerated individuals have been found to be at an increased risk of death following release. One study discovered that, during the first two weeks after release, the risk of death was 12.7 times greater than others in the same demographic.²⁴ Research of mortality rates after prison release from 1999-2009 showed that opioids were involved in 15% of all deaths, most commonly pharmaceutical opioids.²⁵

Additional Questions to Consider

1) Do you and/or your friends/family have access to naloxone or Narcan to reverse an overdose?

2) Have you ever been administered naloxone or Narcan?

Rationale: Frequent use, use in high quantities, and injecting prescription opioids or heroin are indicators of high overdose risk. Expanding access to naloxone or Narcan may reduce the immediate risk of overdose.²⁶ Research has found that distributing naloxone or Narcan kits to individuals with an opioid use disorder and their family/friends can save one life for every 227 kit distributed.²⁷ When an individual's responses reveal some form of substance use disorder treatment is appropriate, then the individual should be referred to an overdose prevention education professional or be provided with naloxone or Narcan.

3) Are you currently receiving or have you ever received methadone, buprenorphine or naltrexone for your use of opioids?

Rationale: One study attributes an increased risk of overdose following substance abuse treatment; attributable to the loss of tolerance and erroneous judgment of dose when they returned to abusing opioids. Therefore, some individuals can have an increased risk of overdose during the first few weeks of substance use disorder treatment and need to be more closely monitored than an individual not receiving treatment.²⁸ In addition, the type of medication can have an impact on effectiveness of the substance abuse treatment. Research has shown that methadone is superior to buprenorphine in retaining people in treatment and methadone equally suppresses illicit opioid use.²⁹

Footnotes

- ¹ NIDA. Legislative Testimony to Congress (2006)) <https://www.drugabuse.gov/about-nida/legislative-activities/testimony-to-congress/2006/02/examination-drug-treatment-programs-needed-to-ensure-successf>
- ² The National Center on Addiction and Substance Abuse at Columbia University. (2010). Behind Bars II: Substance Abuse and America's Prison Population.
- ³ R. N. Hansen, G. Oster, J. Edelsberg, G. E. Woody, and S. D. Sullivan, (March-April 2011) "Economic Costs of Nonmedical Use of Prescription Opioids," *Clinical Journal of Pain* 27: 194–202.
- ⁴ Binswanger, I., Stern, M., Yamashita, T., Mueller, S., Baggett, Tp., Blatchford, P. (2016). Clinical risk factors for death after release from prison in Washington State: a nested case-control study. *Addiction*. 111(3), 499-510.
- ⁵ Binswanger, I., Blatchford, P., Mueller, S., Stern, M. (2013). Mortality after prison release: opioid overdose and other causes of death, risk factors, and time trends from 1999 to 2009. *Annals of Internal Medicine*. 159, 592-600.
- ⁶ Anglin, M.D., et al. (2013) Offender diversion into substance use disorder treatment: the economic impact of California's Proposition 36. *American Journal of Public Health* 103(6):1096-1102.
- ⁷ Chandler, R.K; Fletcher; B.W.; and Volkow, N.D. (2009) Treating drug abuse and addiction in the criminal justice system: Improving public health and safety. *JAMA* 301(2):183–190.
- ⁸ Friedmann, P.D.; Rhodes, A.G.; and Taxman, F.S. (2009) For the Step'n Out Research Group of CJ-DATS. Collaborative behavioral management: integration and intensification of parole and outpatient addiction treatment services in the Step'n Out study. *Journal of Experimental Criminology* 5(3):227–243.
- ⁹ Greenfield, S.F., Brooks, A.J., Gordon, S.M., Green, C.A., Kropp, F., McHugh, R.K., Lincoln, M., Hien, D., and Miele, G.M. (2007) Substance abuse treatment entry, retention, and outcome in women: a review of the literature. *Drug and Alcohol Dependence* 86:1–21.
- ¹⁰ Kinlock, T.W., Gordon, M.S., Schwartz, R.P., Fitzgerald, T.T., and O'Grady, K.E. (2009) A randomized clinical trial of methadone maintenance for prisoners: Results at 12 months post-release. *Journal of Substance Abuse Treatment* 37(3):277–285.
- ¹¹ Lee, J. D., et al (2016). Extended-release naltrexone to prevent opioid relapse in criminal justice offenders. *New England Journal of Medicine*, 374(13), 1232-1242.
- ¹² Rich, J. D., et al (2015). Methadone continuation versus forced withdrawal on incarceration in a combined US prison and jail: a randomised, open-label trial. *The Lancet*, 386(9991), 350-359.
- ¹³ National Institute on Drug Abuse. Principles of Drug Abuse Treatment for Criminal Justice Populations, A Research-Based Guide; (Accessed on November 2, 2016) <https://www.drugabuse.gov/publications/principles-drug-abuse-treatment-criminal-justice-populations/principles>.
- ¹⁴ Council of State Governments Justice Center. (2012) Adults with Behavioral Health Needs Under Correctional Supervision: A Shared Framework for Reducing Recidivism and Promoting Recovery; https://www.bja.gov/Publications/CSG_Behavioral_Framework.pdf
- ¹⁵ National Institutes of Health.(2008) Screening, Assessment, and Referral Practiced in Adult Correctional Settings; Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2367319/>
- ¹⁶ Darke, S., Ross, J. and Hall, W. (1996), Overdose among heroin users in Sydney, Australia: I. Prevalence and correlates of non-fatal overdose. *Addiction*, 91: 405–411.
- ¹⁷ Pollini, R., McCall, L., Mehta, S., Vlahov, D., Strathdee, S., (2006). Non-fatal overdose and subsequent drug treatment among injection drug users. *Journal of Drug and Alcohol Dependence*. 83, 104-110.
- ¹⁸ An example of polydrug use is the combination of carisoprodol with other drugs, particularly hydrocodone and Alprazolam). This combination is known as the Holy Trinity.

- ¹⁹ Jones, C., Logan, J., Gladden, R., Bohn, M., 2015. Vital Signs: Demographic and Substance Use Trends Among Heroin Users – United States, 2002-2013. *Morbidity and Mortality Weekly Report* 64, 719-727.
- ²⁰ QuickStats: (2017) Rates of Drug Overdose Deaths Involving Heroin, by Selected Age Groups — United States, 2006–2015. *Morbidity and Mortality Weekly Report* 65, 1497.
- ²¹ Jones, C., (2012). Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers – United States, 2002-2004 and 2008-2010. *Drug Alcohol Depend.* 132, 95-100.
- ²² Jones, C., Mack, K., Paulozzi, L., (2013). Pharmaceutical Overdose Deaths, United States, 2010. *Journal of the American Medical Association.* 309(7), 657-659.
- ²³ Lake, S., Milloy, M., Dong, H., Hayashi, K., Wood, E., Kerr, T., DeBeck, K., (2016). Initiation into prescription opioid injection and associated trends in heroin use among people who use illicit drugs. *Journal of Drug Alcohol Dependence.* 169, 73-79.
- ²⁴ Binswanger, I., Stern, M., Yamashita, T., Mueller, S., Baggett, T., Blatchford, P., (2016). Clinical risk factors for death after release from prison in Washington State: a nested case-control study. *Addiction.* 111(3), 499-510.
- ²⁵ Binswanger, I., Blatchford, P., Mueller, S., Stern, M., (2013). Mortality after prison release: opioid overdose and other causes of death, risk factors, and time trends from 1999 to 2009. *Annals of Internal Medicine* 159, 592-600.
- ²⁶ Jones, Christopher, (2012). Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers – United States, 2002-2004 and 2008-2010. *Drug Alcohol Depend.* 132, 95-100.
- ²⁷ Coffin, P., Sullivan, S., (2013). Cost-effectiveness of distributing naloxone to heroin users for lay overdose reversal. *Annals of Internal Medicine.* 158, 1-9.
- ²⁸ Strang, J., McCambridge, J., Best, D., Beswick, T., Bearn, J., Rees, S., Gossop, M., (2003). Loss of tolerance and overdose mortality after inpatient opiate detoxification: follow up study. *BMJ.* 326, 959-960.
- ²⁹ Mattick, R., Breen, C., Kimber, J., Davoli, M., (2014). Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database Systematic Reviews* 2014, Issue 2.

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