Opioid Overdose Risk

An average of 115 people die from opioid overdose every day in the United States. Deaths from drug overdoses are more frequent than motor vehicle-related deaths in some U.S. states, and around the world the most common cause of death for opioid users is overdose.

WHAT IS AN OPIOID OVERDOSE?

An opioid overdose occurs if more of an opioid is ingested than a person's body can handle at that moment. In this case, the opioid **slows down the breathing** so that the person does not get enough oxygen. Breathing can also stop completely, and the heart can stop. If intervention measures are not taken, the overdose victim may become unconscious, fall into a coma, have long-term brain/nerve or physical damage, or even die. Most opioid overdose deaths are not instantaneous; they usually occur over 1-3 hours after use, so even if the person is not breathing or is unresponsive, an intervention can still help.

115

*An average of **115** people die from opioid overdose every day in the United States.*

RISK FACTORS FOR AN OVERDOSE

TOLERANCE SHIFT

Individuals with decreased tolerance due to recent release from incarceration, drug treatment/detoxification, hospitalization, abstinence, or intermittent nondaily use of opioids are at risk.

MIXING DRUGS

Combining opioids with other legal or illegal substances may enhance their effects and thus increase the overdose risk. Combining opioids with alcohol, benzodiazepines, barbiturates, or other psychotropic medications, such as antidepressants, is very dangerous.

PREVIOUS HISTORY OF OVERDOSE

Individuals who have had a prior overdose event at any point in their lifetime are more likely to experience another overdose.

PHYSICAL HEALTH

If a person's body is already burdened with an acute or chronic illness (e.g. asthma, other substance use disorder, HIV, etc.), the person is more vulnerable to overdose.

VARIATION IN OPIOID STRENGTH/CONTENT

Illegally purchased substances vary greatly in their strength (e.g., one bag of heroin or fentanyl might not be as strong as another bag even when obtained from the same seller).

SWITCHING FROM SNORTING/SMOKING TO INJECTION

How a person ingests a substance plays an important role in overdose risk. Injecting is usually riskier than other forms of administration, but an overdose can also occur when a person just swallows a single pill.

USING ALONE

If no one is there, no one can help. Overdose reversal can be effective 1-3 hours after use of the opioid, but the risk of fatality is high if the user is alone.

Combining opioids with other legal or illegal substances may enhance their effects and thus increase the overdose risk.

POPULATIONS AT RISK OF OPIOID OVERDOSE

PERSONS WITH CONCURRENT MEDICAL ILLNESSES THAT INCREASE BREATHING DIFFICULTY (PARTICULARLY HEART AND PULMONARY PROBLEMS, OR SLEEP APNEA)

Any medical problem that independently impairs respiration or increases the risk of respiratory depression will increase the risk that opioid consumption may result in an overdose.

PERSONS WITH CHRONIC PAIN

Persons with chronic pain who are exposed to high-dose opioids for extended periods of time have an increased opportunity for an overdose event to occur. This population is also highly likely to be coprescribed other medications that could interact with or increase the risk of respiratory depression and/or have concurrent medical illnesses that could further increase their risk.

OLDER INDIVIDUALS

The rate of overdose among older persons continues to increase. This is likely due to the presence of concurrent medical illnesses and concurrent prescriptions that reduce their threshold for respiratory depression. Not adhering to medication dosing schedules (e.g., doubling up medications or taking them too close together in time) could also increase the risk of an overdose.

CHILDREN

The incidence of opioid overdose among children under 2 years of age who are accidentally exposed to opioids has steadily increased over the past decade. It is important for opioids to be kept in childproof containers and stored in secure places to minimize the risk of accidental exposure.

WOMEN

Data suggest that the rate of overdose between 1999 and 2010 tripled among women in comparison with men. Although the basis for this growing discrepancy in risk is not well understood, it suggests women may have unique risk factors contributing to opioid overdose.

PERSONS LIVING IN URBAN AREAS

A recent large-scale evaluation of the National Survey on Drug Use and Health and the National Vital Statistics System reported that in 2015, there were six times more overdoses among persons living in metropolitan (45,059 overdoses) versus rural (7,345 overdoses) areas. The rate of fatal overdoses remained relatively similar among the metropolitan (17/100,000) and rural (16.2/100,000) settings.

IN 2015, there were

6x more overdoses

among persons living in metropolitan than in rural areas.

REFERENCES

Centers for Disease Control and Prevention. (2009). Overdose deaths involving prescription opioids among Medicaid enrollees–Washington, 2004-2007. *Morbidity and Mortality Weekly Report*, *58*(42), 1171-1175.

Centers for Disease Control and Prevention. (2012). Vital signs: Risk for overdose from methadone used for pain relief–United States, 1999-2010. *Morbidity and Mortality Weekly Report, 61*(26), 493-497.

Centers for Disease Control and Prevention. (2013). Vital signs: Overdoses of prescription opioid pain relievers and other drugs among women–United States, 1999-2010. *Morbidity and Mortality Weekly Report, 62*(26), 537-542.

Centers for Disease Control and Prevention. (2017). Illicit drug use, illicit drug use disorders, and drug overdose deaths in metropolitan and nonmetropolitan areas–United States. *Morbidity and Mortality Weekly Report, 66*(19), 1-12.

Published by the American Psychological Association on behalf of the members of the Cross-Divisional Task Force on Clinical Responses to the Opioid Crisis. This publication may be copied and disseminated for noncommercial purposes.