Centers for Disease Control and Prevention
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Policy Impact: Prescription Painkiller Overdoses

What's the Issue?

In a period of nine months, a tiny Kentucky county of fewer than 12,000 people sees a 53-year-old mother, her 35-year-old son, and seven others die by overdosing on pain medications obtained from pain clinics in Florida.[1] In Utah, a 13-year-old fatally overdoses on oxycodone pills taken from a friend's grandmother.[2] A 20-year-old Boston man dies from an overdose of methadone, only a year after his friend also died from a prescription drug overdose.[3]

These are not isolated events. Drug overdose death rates in the United States have more than tripled since 1990 and have never been higher. In 2008, more than 36,000 people died from drug overdoses, and most of these deaths were caused by prescription drugs.[4]

Policy Impact: Prescription Painkiller Overdoses [460KB, 12 pages] (/HomeandRecreationalSafety/pdf/PolicyImpact-PrescriptionPainkillerOD.pdf)

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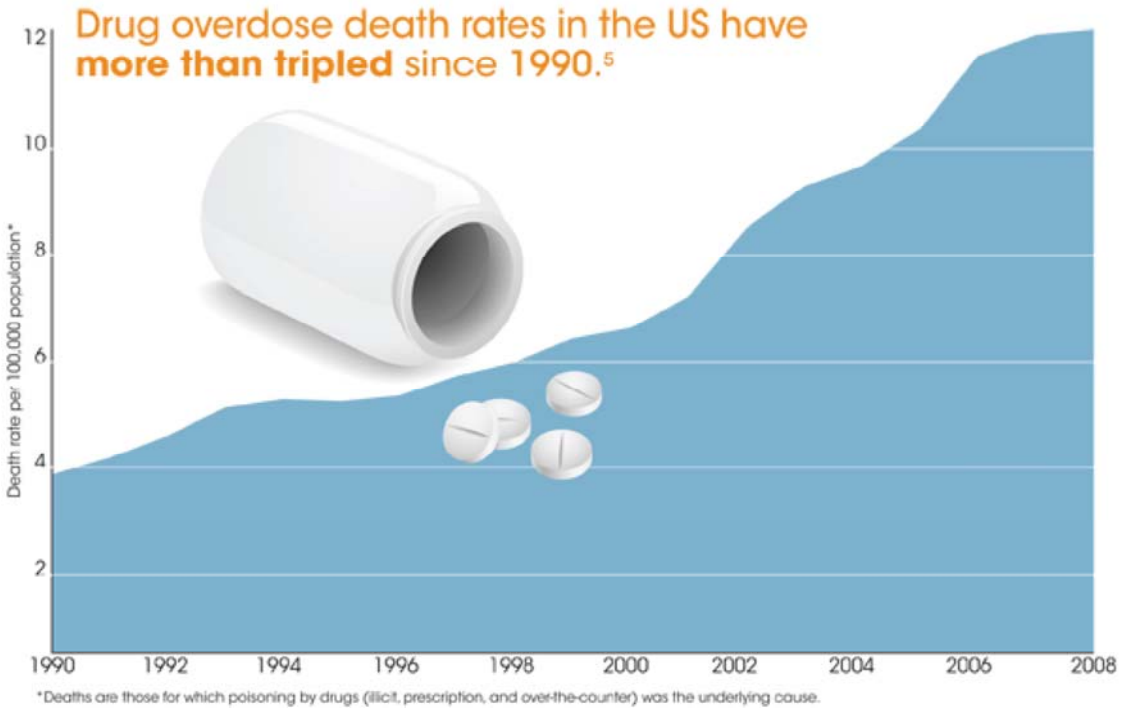
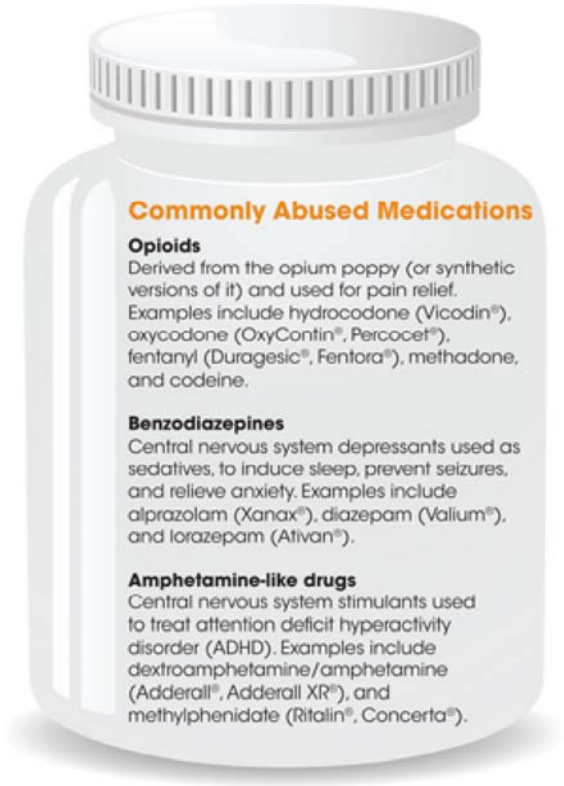
100 people die from drug overdoses every day in the United States.[4]





What Do We Know?

The role of prescription painkillers

Although many types of prescription drugs are abused, there is currently a growing, deadly epidemic of prescription painkiller abuse. Nearly three out of four prescription drug overdoses are caused by prescription painkillers—also called opioid pain relievers. The unprecedented rise in overdose deaths in the US parallels a 300% increase since 1999 in the sale of these strong painkillers.[4] These drugs were involved in 14,800 overdose deaths in 2008, more than cocaine and heroin combined.[4]

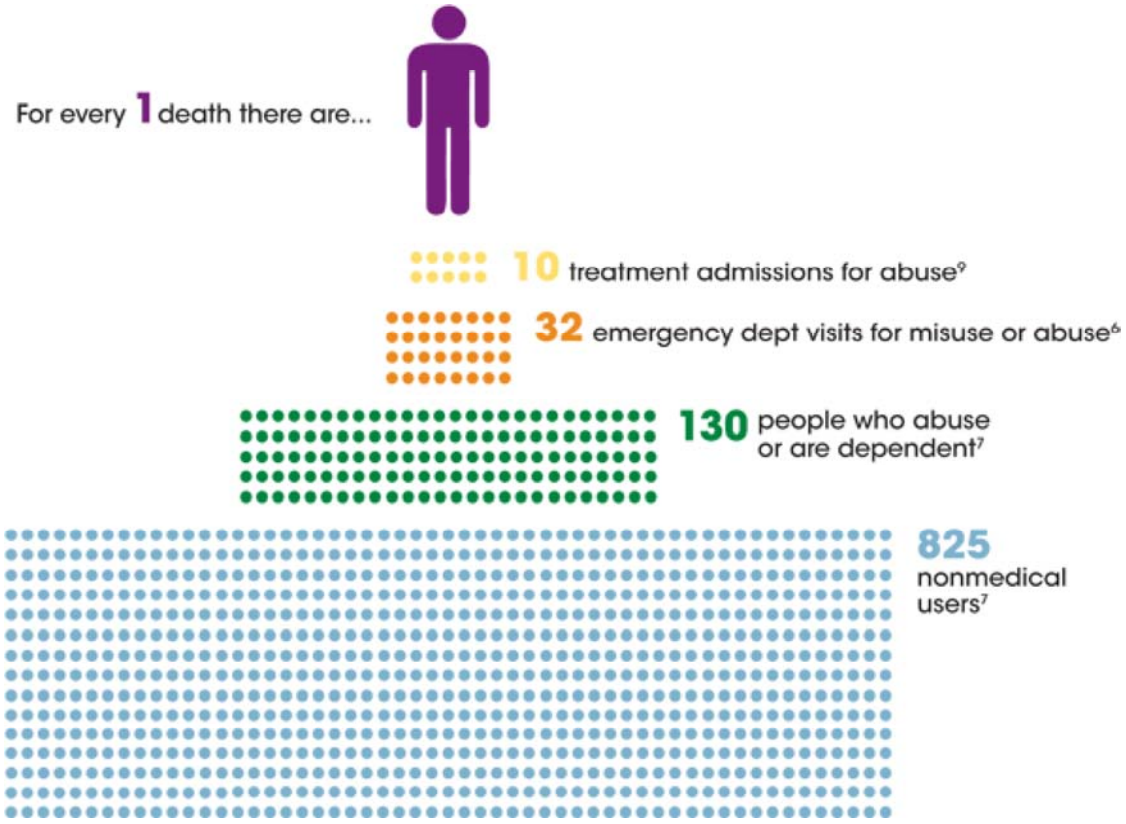
The misuse and abuse of prescription painkillers was responsible for more than 475,000 emergency department visits in 2009, a number that nearly doubled in just five years.[6]

More than 12 million people reported using prescription painkillers nonmedically in 2010, that is, using them without a prescription or for the feeling they cause.[7]

The role of alcohol and other drugs

About one-half of prescription painkiller deaths involve at least one other drug, including benzodiazepines, cocaine, and heroin. Alcohol is also involved in many overdose deaths.[8]

In 2008, there were 14,800 prescription painkiller deaths.[4]



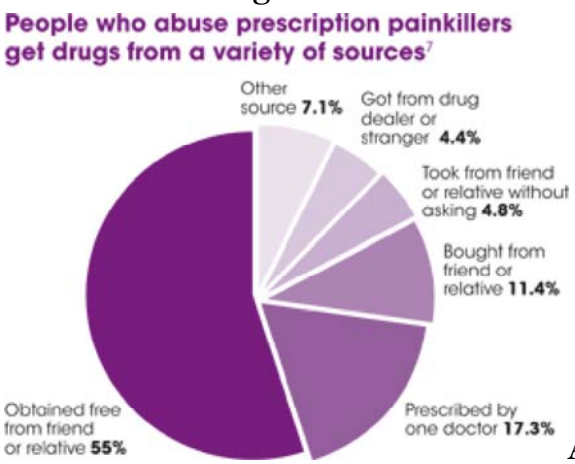
How Prescription Painkiller Deaths Occur

Prescription painkillers work by binding to receptors in the brain to decrease the perception of pain. These powerful drugs can create a feeling of euphoria, cause physical dependence, and, in some people, lead to addiction. Prescription painkillers also cause sedation and slow down a person's breathing.

A person who is abusing prescription painkillers might take larger doses to achieve a euphoric effect and reduce withdrawal symptoms. These larger doses can cause breathing to slow down so much that breathing stops, resulting in a fatal overdose.

In 2010, 2 million people reported using prescription painkillers nonmedically for the first time within the last year—nearly 5,500 a day.[7]

Where the drugs come from



Almost all prescription drugs involved in overdoses come from prescriptions originally; very few come from pharmacy theft. However, once they are prescribed

and dispensed, prescription drugs are frequently diverted to people using them without prescriptions. More than three out of four people who misuse prescription painkillers use drugs prescribed to someone else.[7]

Most prescription painkillers are prescribed by primary care and internal medicine doctors and dentists, not specialists.[10] Roughly 20% of prescribers prescribe 80% of all prescription painkillers.[11,12,13]

Who is most at risk

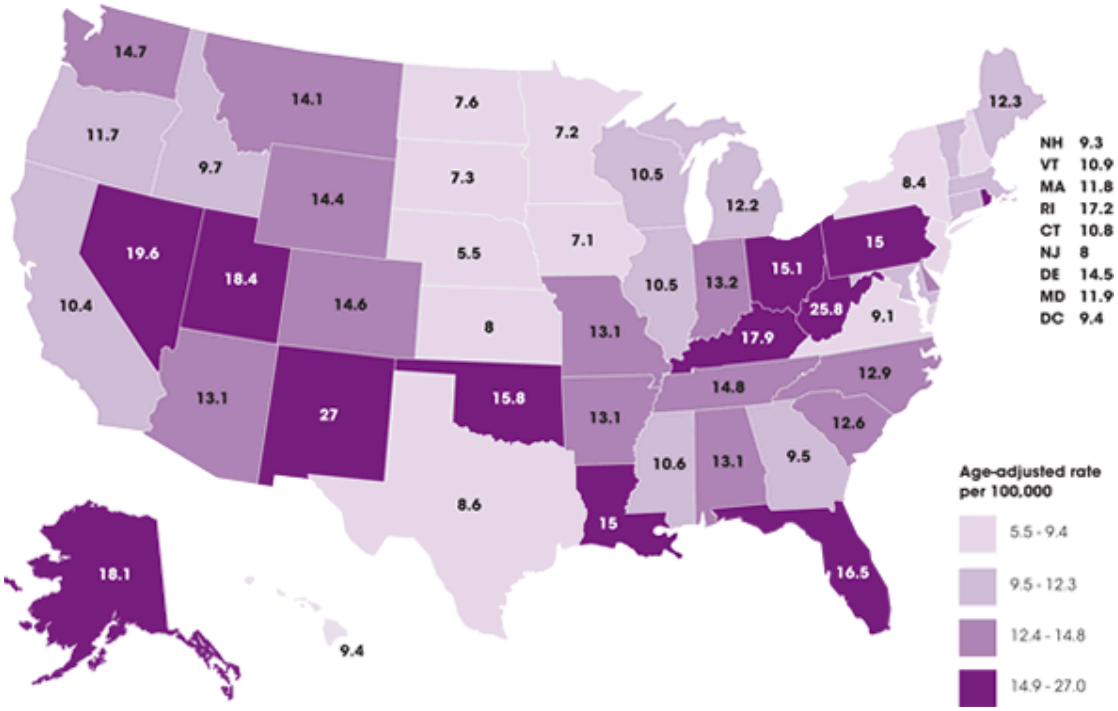
Understanding the groups at highest risk for overdose can help states target interventions. Research shows that some groups are particularly vulnerable to prescription drug overdose:

- People who obtain multiple controlled substance prescriptions from multiple providers—a practice known as "doctor shopping."[14,15]
- People who take high daily dosages of prescription painkillers and those who misuse multiple abuse-prone prescription drugs.[15,16,17,18,19]
- Low-income people and those living in rural areas.
  - People on Medicaid are prescribed painkillers at twice the rate of non-Medicaid patients and are at six times the risk of prescription painkillers overdose.[20,21] One Washington State study found that 45% of people who died from prescription painkiller overdoses were Medicaid enrollees.[20]
- People with mental illness and those with a history of substance abuse.[19]

Where overdose deaths are the highest

The drug overdose epidemic is most severe in the Southwest and Appalachian region, and rates vary substantially between states. The highest drug overdose death rates in 2008 were found in New Mexico and West Virginia, which had rates nearly five times that of the state with the lowest rate, Nebraska.[4]

Drug Overdose Rates by State, 2008[4]



What Can We Do?

There are many different points of intervention to prevent prescription drug overdoses. States play a central role in protecting the public health and regulating health care and the practice of the health professions. As such, states are especially critical to reversing the prescription drug overdose epidemic.

The following state policies show promise in reducing prescription drug abuse while ensuring patients have access to safe, effective pain treatment.

CDC Recommendations

Prescription Drug Monitoring Programs

Thirty-six states have operational Prescription Drug Monitoring Programs.[22]

Prescription Drug Monitoring Programs (PDMPs) are state-run electronic databases used to track the prescribing and dispensing of controlled prescription drugs to patients. They are designed to monitor this information for suspected abuse or diversion—that is, the channeling of the drug into an illegal use—and can give a prescriber or pharmacist critical information regarding a patient's controlled substance prescription history. This information can help prescribers and pharmacists identify high-risk patients who would benefit from early interventions.

CDC recommends that PDMPs focus their resources on

- patients at highest risk in terms of prescription painkiller dosage, numbers of controlled substance prescriptions, and numbers of prescribers; and
- prescribers who clearly deviate from accepted medical practice in terms of prescription painkiller dosage, numbers of prescriptions for controlled substances, and proportion of doctor shoppers among their patients.

CDC also recommends that PDMPs link to electronic health records systems so that PDMP information is better integrated into health care providers' day-to-day practices.

Patient review and restriction programs

State benefits programs (like Medicaid) and workers' compensation programs should consider monitoring prescription claims information and PDMP data (where applicable) for signs of inappropriate use of controlled prescription drugs. For patients whose use of multiple providers cannot be justified on medical grounds, such programs should consider reimbursing claims for controlled prescription drugs from a single designated physician and a single designated pharmacy. This can improve the coordination of care and use of medical services, as well as ensure appropriate access, for patients who are at high risk for overdose.

Health care provider accountability

States should ensure that providers follow evidence-based guidelines for the safe and effective use of prescription painkillers. Swift regulatory action taken against health care providers acting outside the limits of accepted medical practice can decrease provider behaviors that contribute to prescription painkiller abuse, diversion, and overdose.

Laws to prevent prescription drug abuse and diversion

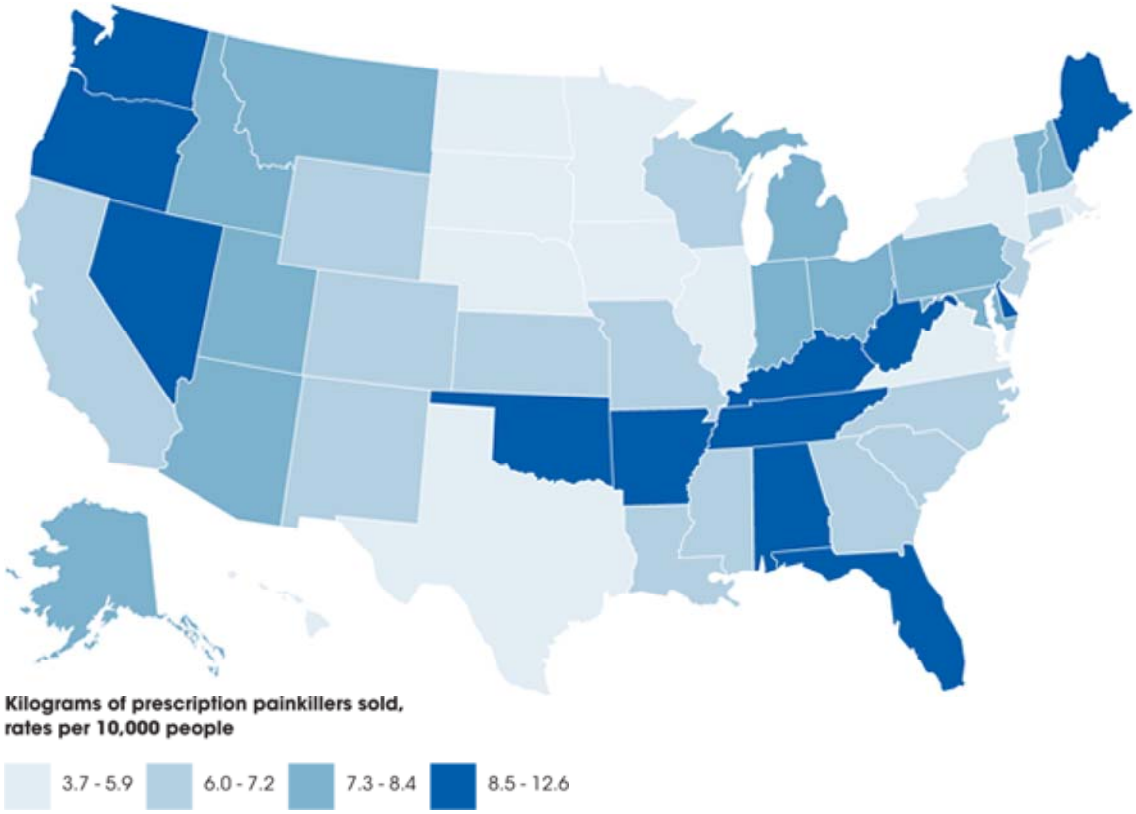
States can enact and enforce laws to prevent doctor shopping, the operation of rogue pain clinics or "pill mills," and other laws to reduce prescription painkiller diversion and abuse while safeguarding legitimate access to pain management services. These laws should also be rigorously evaluated for their effectiveness. View your state's prescription drug laws. (/HomeandRecreationalSafety/Poisoning/laws/index.html)

Better access to substance abuse treatment

Effective, accessible substance abuse treatment programs could reduce overdose among people struggling with dependence and addiction. States should increase access to these important programs.

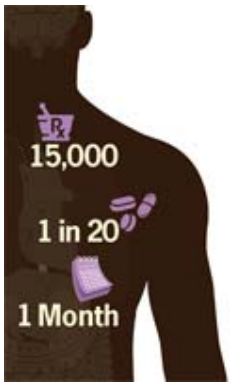
These recommendations are based on promising interventions and expert opinion. Additional research is needed to understand the impact of these interventions on reducing prescription drug overdose deaths.

The amount of prescription painkillers sold in states varies.[4]



The quantity of prescription painkillers sold to pharmacies, hospitals, and doctors' offices was 4 times larger in 2010 than in 1999. Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for one month.

Additional Resources



CDC Vital Signs: Prescription Painkiller Overdoses in the US (http://www.cdc.gov/vitalsigns/PainkillerOverdoses/index.html)

MMWR: Vital Signs: Overdoses of Prescription Opioid Pain Relievers --- United States, 1999--2008 (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm60e1101a1.htm)

CDC Feature Article: Prescription Painkiller Overdoses in the U.S. (http://www.cdc.gov/Features/Vitalsigns/PainkillerOverdoses/)

Science Clips: CDC Vital Signs, Opioid Pain Reliever (OPR) Abuse (http://www.cdc.gov/phlic/sciclips/issues/v3issue44.html)

Prescription Drug Overdose: State Laws (/HomeandRecreationalSafety/Poisoning/laws/index.html)

Nearly 15,000 people die every year of overdoses involving prescription painkillers. In 2010, 1 in 20 people in the US (age 12 or older) reported using prescription painkillers for nonmedical reasons in the past year. Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for a month.

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Page last reviewed: December 19, 2011
Page last updated: November 29, 2012
Content source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention

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