

Medical News & Perspectives

CDC: Major Disparities in Opioid Prescribing Among States Some States Crack Down on Excess Prescribing

Bridget M. Kuehn, MSJ

The first few months of 2010 marked a dramatic turn in Florida's efforts to curb rampant "pill mills," clinics that inappropriately prescribe large quantities of opioids for nonmedical reasons. The state required all pain clinics within its borders to register no later than January 2010. In that year, federal, state, and local law enforcement began a major crackdown, called Operation Pill Nation.

By February 2011, undercover officers had made 340 purchases of medication from 60 physicians at more than 40 pain clinics without showing evidence of a valid medical complaint, according to the US Drug Enforcement Administration. Ultimately, officials arrested 22 people and seized \$2.2 million in cash as well as 70 vehicles (<http://1.usa.gov/1qnV9UV>).

In a recent publication, Florida public health leaders credited this law enforcement effort and a slew of recent laws with reducing drug overdose deaths in the state. From 2003 to 2009, the number of overdose deaths increased 61%, from 1804 to 2905, driven mostly by overdoses involving painkillers or the anti-anxiety medication alprazolam (Johnson H et al. *MMWR Morb Mortal Wkly Rep.* 2014;63[16]:347-351). Most of the deaths involved more than 1 drug, according to the report. Since the crackdown began, however, the state has begun to see a decline in deaths, from 3201 in 2010 to 2666 in 2012, based on data from state medical examiners.

Despite some progress in certain states, a new report from the US Centers for Disease Control and Prevention (CDC) finds that nationwide prescribing rates for narcotic medications remain high and worrisome variations persist among states (Paulozzi LJ et al. *MMWR Morb Mortal Wkly Rep.* 2014;63[26]:563-568). Clinicians in the United States wrote 259 million opioid prescriptions in 2012, enough for every adult to have a bottle, noted CDC director Thomas Frieden, MD, MPH, during a press briefing July 1.

"Prescription opiates can be an important tool for doctors to use, and some con-

ditions are best treated with opioids," Frieden said. "But they are not the answer every time someone has pain."

The CDC found that in 2012, for every 100 people in the United States, US clinicians wrote 82.5 prescriptions for opioid painkillers and 37.6 prescriptions for benzodiazepines, a class of anti-anxiety drugs that has a long history of abuse. State-by-state differences in prescribing were large and difficult to explain. Hawaii had the lowest prescribing rate for painkillers—just 52 per 100, compared with 143 per 100 in the 2 top prescribing states, Tennessee and Alabama.

States in Crisis

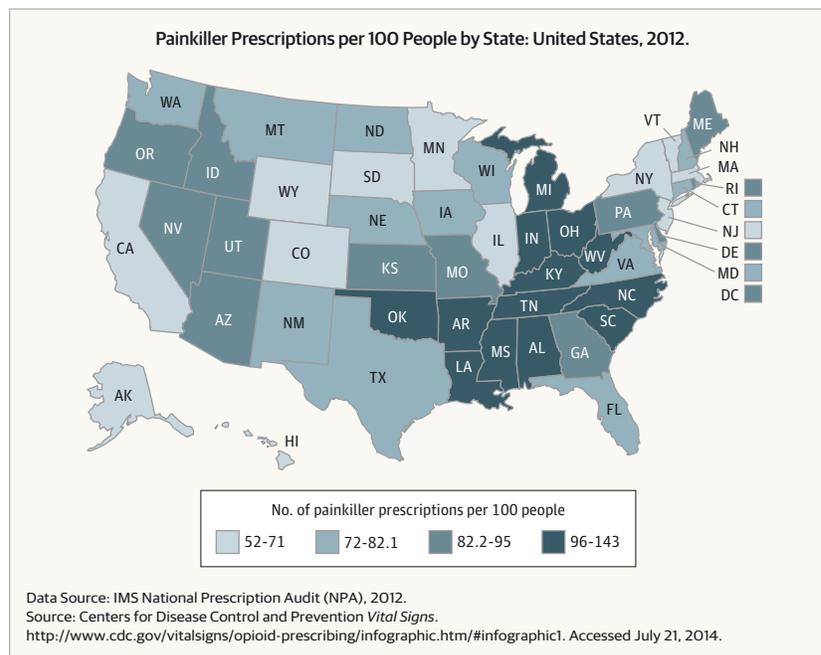
Florida's crackdown followed widespread publicity about rampant pill mills in the state fueling opioid abuse there and in other southern states. News articles documented the rise of pill mill empires (<http://buswk.co/1jc2iJO>), where people showed up at pain clinics without appointments, paid cash, and left with a month's supply of pills.

Florida had become a haven for physicians who were prescribing and dispensing a high volume of oxycodone in their clinics, with 98 of the nation's top 100 opioid-dispensing prescribers in 2010. In 2011, the state's top public health official declared an emergency.

Since 2009, Florida legislators have passed a raft of laws intended to curb high-volume prescribing. The new legislative provisions include the following:

- A ban on physicians dispensing narcotics
- Tighter controls of drug wholesalers
- Registration and inspection of pain clinics
- Mandated reporting of data to a prescription monitoring program
- Tougher penalties for those illegally prescribing

The legislative efforts seek to reduce diversion and doctor shopping, explained Hal Johnson, MPH, lead author of the *MMWR* report on the reductions in opioid deaths in Florida. The state's new prescription drug monitoring program has seen increasing use



Many southern states have disproportionately high rates of opioid painkiller prescribing.

among physicians, said Johnson, who is a behavioral health epidemiology consultant working with the Florida Department of Health. Some efforts are under way to further increase physicians' use of data from the prescription monitoring program prior to prescribing.

Still, Johnson noted that prescription monitoring alone is not enough; it has been necessary for Florida to increase regulation of drug wholesalers and pain clinics, too. "It has to be a multifaceted approach," he said.

One of several other states to place new limits on prescribing is Tennessee, which the CDC ranked as having the second-highest per capita rate of painkiller prescribing, with 143 prescriptions per 100 people, just behind Alabama. The state has seen dramatic increases in drug overdose deaths, with the number more than doubling from 422 in 2003 to 1059 in 2010.

To get a better sense of how risky prescribing was contributing to the deaths, Timothy F. Jones, MD, state epidemiologist at the Tennessee Department of Health, and colleagues from the CDC and other research institutions compared the prescription-related habits of those who died from overdose in 2009 and 2010 with matched controls. They found an increased risk of dying from overdose for individuals who were prescribed opioids by 4 or more physicians, who filled prescriptions at 4 or more pharmacies, or who were prescribed mean daily doses greater than 100 morphine milligram equivalents per year. More than half (55%) of those who died had 1 or more of these 3 risk factors.

In January 2013, Tennessee passed a law mandating that physicians check the state's prescription monitoring program before prescribing narcotics. Although pharmacies—particularly large chain stores—had been using the system, which had been in place since 2006, use had been spotty among physicians, Jones said.

The system can enable physicians and pharmacies to identify patients who are at high risk or who may be diverting drugs. For example, prior to the mandate, there were 3200 people in the system who had received more than 25 prescriptions in a year and about 5000 who'd gotten the drugs from 10 or more physicians. Some physicians using the system have been shocked to find their patients are in these high-risk groups, Jones noted.

Requiring physicians to look at the prescription monitoring data dramatically reduced the number of patients whose prescription behaviors place them at high risk

of overdose. From mid-2011 to mid-2013, the state saw a 50% decrease in patients using 5 or more prescribers or 5 or more dispensers in the preceding 90 days, Jones said.

"Making [prescription monitoring program] use mandatory is really the key," he said. "That's what really turned the corner for us."

Similarly, in 2012, New York State began requiring physicians to consult its prescription monitoring data before prescribing narcotics. By 2013, the state had documented a 75% decline in the risky use of multiple prescribers, according to the CDC report.

Jones said he and his colleagues hope to see more reductions in risky prescribing. He noted that Tennessee has passed several additional measures, including mandatory public health department inspections of the top 50 prescribers, a 30-day cap on opioid prescriptions, and a ban on physician dispensing. The state also passed a law granting immunity for those who administer naloxone to reverse an opioid overdose. This prevents individuals who assist someone during an overdose from being charged with drug-related crimes. Without such protection, some individuals may be afraid to intervene or call an ambulance.

Prescribing Patterns

Overall, the CDC data suggest disproportionately high prescribing of opioids and benzodiazepines in the South. The agency has also documented disproportionately high rates of overdose in other US regions, especially in Appalachia and parts of the West and Southwest (Chen LH et al. *MMWR Morb Mortal Wkly Rep.* 2014;63[26]:577). But these death rates include overdoses from illicit drugs and may not correspond with opioid prescribing rates.

Len Paulozzi, MD, a medical officer in CDC's injury center, said in an interview it's not clear why opioids and benzodiazepines are prescribed more in the South. The prevalence of pain or the number of older individuals is not higher in the region than others. The South does have a higher population of black people, but these individuals are less likely to be prescribed opioids. In fact, Tennessee's data suggest that high-risk users are disproportionately white males.

Paulozzi noted that prescribing rates for other drugs, such as medications for attention-deficit/hyperactivity disorder and antibiotics, are also disproportionately high in the South. Again, the reasons aren't clear, although poverty and differences in health care delivery may be factors, Paulozzi suggested.

Federal agencies have been working for years to try to reduce prescription overdose death rates, which in 2009 eclipsed car crashes as the leading cause of accidental death. The US Food and Drug Administration has approved abuse-resistant formulations of opioid medications and required manufacturers of some products to develop safety plans. The Substance Abuse and Mental Health Services Administration has worked to expand access to office-based buprenorphine treatment to make it easier for patients to receive help for opioid addiction. The CDC has issued numerous alerts and recommendations for clinicians and is currently evaluating state-level programs to identify interventions that work.

The latest data available suggest that although overdose deaths have continued to increase, the rate has slowed. Nationally, there were 16 917 deaths involving painkillers in 2011, a 2% increase over the 16 651 that occurred in 2010. From 2009 to 2010, painkiller overdoses increased 8%, from 15 597 to 16 917.

Paulozzi said there is agreement about the need to do more at the federal level to "bend the curve of overdose deaths."

One worry is that rising heroin use may be a sign that individuals are shifting from prescription opioid abuse to other opioid drugs. From 2010 to 2012, Florida saw a 24% decrease in oxycodone prescribing but a 37% increase in morphine prescribing. The state also saw an increase in heroin overdose deaths during the same period, from 48 to 108 (0.3 to 0.6 per 100 000 people in the state). Johnson said this increase, although concerning, is small compared with the simultaneous reductions in prescription overdoses, which decreased from 2722 in 2010 to 2116 in 2012. This reduced the prescription overdose rate to 11 per 100 000, the lowest in the state since 2007, according to the report on Florida's efforts.

Paulozzi said economic factors and greater availability of heroin may be driving some opioid users to heroin, as has been reported in some surveys. But there aren't clear data explaining why heroin use has increased in the northeastern United States.

For now, the CDC is focusing on preventing prescription opioid abuse.

"We are interested in upstream interventions," said Paulozzi. "We want to get ahead of the problem before people become dependent and prevent them from turning to heroin because of its lower price and high availability." ■