Methadone and Prescription Drug Overdose

By Hollie Hendrikson and Melissa Hansen

Methadone, a synthetic opioid medication, is approved by the U.S. Food and Drug Administration (FDA) for two purposes: to treat narcotic drug addiction and to manage pain. Use of methadone to manage pain began increasing in the 1990s. Methadone has since become a significant contributor to overdoses caused by prescription drugs. During the past decade, fatal overdoses from prescription painkillers have skyrocketed across the United States, killing more than 16,000 people each year. Data from the Centers for Disease Control and Prevention (CDC) show that, while methadone accounted for only 2 percent of painkiller prescriptions in 2009, it was responsible for more than 30 percent of prescription painkiller deaths. In 2010, state-based prescribing of methadone—which represents use of the drug for pain management, not addiction treatment—ranged from 4.5 percent to 18.5 percent of all opioids dispensed. These data suggest that the rise in methadone overdose deaths is due to its use for pain management, not its use to mitigate symptoms of heroin or opioid withdrawal.

Several generic versions of methadone exist, making it a relatively low-cost prescription painkiller. Other perceived advantages of using methadone to treat pain include the drug’s longer duration of action and its availability as an oral liquid. These factors likely contribute to increased use of the drug.

Methadone’s disproportionate share of prescription painkiller-related deaths is related to several factors that are unique to the drug. Unlike other opioid painkillers, the pain relief methadone provides stops long before the drug is fully metabolized—its effects on the lungs and heart continue, even when the pain relief wears off. This sometimes results in patients taking another dose too soon, inadvertently overdosing because of the discrepancy between short-term pain relief and the longer-term respiratory depression and cardiac effects. These effects can be magni-
methylene blue, which can exacerbate disturbances in cardiac rhythm.

Despite these concerns, preferred drug lists (PDLs) in most state Medicaid programs identify methadone as a preferred drug for managing chronic pain, according to the American Academy of Pain Medicine. These lists, which are developed by committees led by physicians, pharmacists and other health care practitioners, are intended to encourage the use of drugs the committee has determined to be effective and safe for specific diseases and conditions. Many pain management experts argue methadone should not be on preferred drug lists, and that there are several alternatives that have been associated with less harm to patients.

**State Action**

Since methadone frequently is placed on states’ preferred drug lists, providers may be more likely to prescribe it as a first-line treatment for pain. However, concerned about its negative effects, a few states—including Nevada, Oregon and West Virginia—have removed methadone from the list of preferred drugs for pain management in their fee-for-service Medicaid programs. In other states, either the fee-for-service program, the managed care Medicaid programs, or both, list methadone as a preferred pain therapy.

**Federal Action**

In response to increased methadone-related overdose deaths, the FDA issued a public health advisory for methadone used as a painkiller and added a warning on all labeling about the drug’s risks. The agency also increased the recommended dosing interval from every three to four hours to every eight to 12 hours. The CDC encourages prescribers to refrain from using methadone as a drug of first choice for pain management and recommended that public and private insurance companies remove it as a preferred drug for pain relief.

The Substance Abuse and Mental Health Services Administration (SAMHSA) also has focused on educating providers and the public about the potential dangers of using methadone for managing pain. In 2008, SAMHSA funded the American Academy of Pain Medicine to educate practitioners across the nation about the risks of using methadone to manage pain.

**NCSL Contact and Resource**

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NCSL, Prevention of Prescription Drug Overdose and Abuse: Legislation Tracking

**Additional Resources**

Centers for Disease Control and Prevention, *Use and Abuse of Methadone as a Painkiller*

The Pew Charitable Trusts, *Prescription Drug Abuse Epidemic: Methadone*