

# Higher opioid dose linked to overdose risk in chronic pain patients (w/ Video)

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More and more Americans with chronic pain not caused by cancer are taking medically prescribed opioids like Oxycontin (oxycodone) and Vicodin (hydrocodone). The January 19 *Annals of Internal Medicine* features the first study to explore the risk of overdose in patients prescribed opioids for chronic noncancer pain in general health care. The study links risk of fatal and nonfatal opioid overdose to prescription use -- strongly associating the risk with the prescribed dose.

A team led by Michael Von Korff, ScD, a senior investigator at Group Health Research Institute, studied nearly 10,000 patients who received multiple opioid prescriptions for common chronic pain conditions like back pain and [osteoarthritis](#). Patients who received higher opioid doses were 9 times more likely to [overdose](#) than were those receiving low doses. Still, most of the overdoses occurred among patients receiving low to medium doses, because prescriptions at those levels were much more common.

More than 8 million U.S. adults -- 3 percent of all of them -- are estimated to be using opioids long-term for chronic pain. The [Centers for Disease Control and Prevention](#) (CDC) recently reported that nearly 14,000 U.S. deaths involved prescription opioids in 2006, more than triple the number in 1999. Between 1999 and 2006, nearly 65,000 drug overdose deaths in the United States were reported to involve opioid analgesics.

"Some studies have indicated that fatal opioid overdoses occur most

often among people abusing prescription drugs or obtaining them from non-medical sources," Dr. Von Korff said. "But our results suggest that many overdoses may occur among people using prescribed opioids."

Dr. Von Korff said that this research and the data reviewed cannot determine whether higher doses are a cause of overdose, but he noted that physicians should carefully evaluate and closely monitor patients using opioids long-term.

Previous research had not tracked nonfatal overdoses. "Fatal overdose may be only the tip of the iceberg," said Dr. Von Korff. "For every fatal overdose in our study, 7 nonfatal overdoses occurred, and most of the nonfatal overdoses were medically serious."

"Our findings are concerning and need to be studied in larger populations," said the study's first author, Kate M. Dunn, PhD, senior lecturer in epidemiology at the Arthritis Research Campaign National Primary Care Centre at Keele University in the U.K.

Opioid overdose occurred at similar rates across all ages. The overdose events identified were not directly evaluated to assess all potential contributing factors, such as suicide attempts, opioids obtained from nonmedical sources, or accidental or intentional ingestion of more opioid than prescribed. Although suicide attempts and drug abuse were noted in only a minority of the overdoses in this study, opioid overdoses appeared to occur more often among patients with a history of depression or substance abuse, Dr. Dunn said. Depression tends to be common among [chronic pain](#) patients using opioids long-term.

"Nationwide, opioids are widely prescribed long-term for many patients with chronic non-cancer pain," said coauthor Bruce M. Psaty, MD, PhD, a senior investigator at Group Health Research Institute and a professor of medicine, epidemiology, and health services at the University of

Washington, where he co-directs the Cardiovascular Health Research Unit. "So a significant opportunity exists to improve safety and the risk-benefit profile through more careful and cautious prescribing."

Opioids include not only opiates, which come from the opium poppy, he explained—but also similar synthesized chemicals.

Provided by Group Health Cooperative Center for Health Studies

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