

## Deaths related to narcotic pain relievers have doubled since 1991: Study

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Deaths from opioid use in Ontario have doubled -- from 13.7 deaths per million residents in 1991 to 27.2 deaths per million residents in 2004 -- according to a new study led by physicians at St. Michael's Hospital and the Institute for Clinical Evaluative Sciences (ICES) in Toronto.

Researchers also found that the addition of a long-acting form of [oxycodone \(OxyContin\)](#) to the province's drug formulary in January 2000 corresponded with a five-fold increase in oxycodone-related deaths.

"Many doctors are aware that prescription opioids can have fatal side effects by depressing breathing and decreasing level of consciousness," explains lead author Dr. Irfan Dhalla, a physician at St. Michael's Hospital. "But we suspect most will be surprised to learn just how many deaths occur each year in Ontario from prescription opioids."

Opioids, also known as narcotic pain relievers, are among the most commonly prescribed medications in Canada. They are used to treat people with moderate-to-severe acute or chronic pain.

The researchers manually reviewed nearly 7,100 files at the Office of the Chief Coroner for Ontario. They then linked these files with provincial data on physician visits and medication prescribing. They also analyzed data from IMS Health Canada—an organization that tracks the sales of prescription drugs.

Here are the researchers' key findings:

- Prescriptions for oxycodone rose by more than 850 per cent during the study period. This increase was much larger than for any other [opioid](#). Oxycodone accounted for about one-third of the almost 7.2 million prescriptions for opioids dispensed in Ontario in 2006.
- The increase in deaths was especially pronounced after OxyContin was added to the provincial drug benefit plan in 2000. Over the next five years, deaths related to any opioid increased by 41 per cent, and the number of deaths related to oxycodone (the active ingredient in OxyContin) rose fivefold.
- Deaths from prescription opioids in Ontario far outnumbered those from heroin.
- Most opioid-related fatalities (54 per cent) were accidental. The manner of death was undetermined in 22 per cent of cases and deemed to be suicide in 24 per cent.
- Most people whose deaths involved an opioid had visited a doctor and received a prescription for the drug in the month before they died.

"These findings highlight the tremendous societal burden of opioid-related morbidity and mortality and morbidity" says the study's co-author Dr. David Juurlink, a senior scientist at the Institute for Clinical Evaluative Sciences (ICES) and a staff physician at Sunnybrook Health Sciences Centre in Toronto. "Patients and doctors may not fully appreciate the potential danger of these drugs, particularly when they are taken in combination with other sedating drugs or alcohol."

Based on the study findings for Ontario, the estimated annual national incidence of opioid-related deaths in 2004 (27.2 deaths per million population) came somewhere between the incidence of death from HIV infection (12 deaths per million) and the incidence of death from sepsis, or severe infection (40 deaths per million).

To reduce the number of deaths related to opioid prescriptions, the researchers suggest the creation of real-time electronic databases accessible to physicians and pharmacists. This would make it harder for people to obtain opioids improperly from multiple doctors or pharmacies and easier for health care providers to predict and prevent potentially dangerous drug interactions. The researchers also call for more and better education about the risks of opioid use and suggest greater restrictions on opioid prescribing.

Source: St. Michael's Hospital

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