

## Thousands of Ontarians at increased risk of death from high opioid doses

**People prescribed high doses of opioids may be up to 3 times more likely to die from opioid-related overdose compared to those treated with lower doses.**

### What does this mean?

- Opioids are a group of drugs that relieve pain; however they can be addictive and even result in fatal overdose when taken at high doses, in combination with other drugs (such as sedatives) and alcohol, or when taken by someone with no history of opioid use.
- Ontario residents dispensed opioids at doses that exceed recommendations in clinical guidelines are at a much higher risk of opioid-related mortality than those dispensed lower doses.

### Policy Implications

The relationship between opioid dose and drug-related mortality should be of concern to policy makers, patients, and physicians. Policy makers may want to consider various strategies so that high doses are prescribed only when benefits clearly outweigh risks.

### How do we know this?

These findings are the results of a population-based study investigating the relationship between opioid dose and opioid-related mortality. Ontario residents aged 15 to 64 who died of opioid-related overdose between 1997 and 2008 were identified, and their past opioid prescribing history was obtained. Opioid-related deaths were retrieved through the Office of the Chief Coroner of Ontario. A total of 1,463 Ontarians treated with opioids died of drug-related causes over the study period. Opioid doses exceeding 200 mg of morphine (or equivalent) daily were associated with an almost 3 times higher risk of opioid-related mortality compared to lower doses (odds ratio, 2.9; 95% confidence interval, 1.8-4.6). Even moderate doses (between 50 and 199 mg morphine equivalents daily) were associated with a doubled risk of opioid-related mortality.

Gomes T, Mamdani MM, Dhalla IA, Paterson JM, Juurlink DN. Opioid dose and drug-related mortality in patients with nonmalignant pain. *Arch Intern Med* 2011;171(7):686-691.

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