

Opioid-Related Mortality Leads to Considerable Burden in Ontario

The burden of premature mortality from opioid overdose has increased dramatically over the past two decades, resulting in an extraordinary number of potential years life lost (YLL). In 2010, 1 out of 8 deaths among young adults was related to opioid use.

What does this mean?

- Overall, opioid-related mortality increased 242% over the study period. Among those aged 25 to 34 years, almost 1 in 8 deaths in 2010 involved an opioid.
- The annual YLL due to premature death involving opioids increased 3-fold during the study period.

Clinical Implications

- ✓ Physicians should be aware of potentially serious adverse effects of opioids, particularly when prescribing to the younger population.

How do we know this?

The ODPRN conducted a serial cross-sectional study of all opioid-related deaths in Ontario between January 1, 1991 and December 31, 2010 using data abstracted from the Office of the Chief Coroner of Ontario. Patients were stratified into 7 age groups (0 to 14 years, 15 to 24 years, 25 to 34 years, 35 to 44 years, 45 to 54 years, 55 to 64 years, and 65 years or older). We identified 5,935 people whose deaths were opioid-related in Ontario. The median age at death was 42 years (interquartile range 34 to 50 years), 64.4% (N=3,822) of decedents were men and 90.0% (N=5,340) lived in an urban neighborhood. Rates of opioid-related death increased dramatically, rising 242% from 12.2 deaths per million in 1991 (127 deaths annually) to 41.6 deaths per million in 2010 (550 deaths annually; $p < 0.0001$). In 2010, 1 out of every 170 deaths in Ontario was related to opioid use, and 1 in 8 of all deaths among individuals aged 25 to 54 involved an opioid. Opioid-related deaths result in 21,927 years of potential life lost annually. In 2010, this exceeds the YLL attributable to alcohol use disorders, pneumonia, HIV/AIDS and influenza.

Gomes T, Mamdani M, Dhalla I, Cornish S, Paterson M, Juurlink D. The burden of premature opioid-related mortality. *Addiction*

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