

Use of High Dose Opioids is Widespread in Canada

Prescribing of high dose formulations of opioids rose 23% in Canada between 2006 and 2011

What does this mean?

- Marked inter-provincial variation in the rate of high dose opioid prescribing in Canada was noted, with Ontario and Alberta exhibiting the highest annual rates and Quebec and PEI exhibiting the lowest annual rates.
- The selection of high dose opioid also varied across Canada. Ontario exhibited the highest annual rate of high dose oxycodone and fentanyl.
- Rates of high dose dispensing plateaued in 2009 and 2010 which aligns with the release of Canadian and American guideline recommending caution when escalating to high dose therapy in most patients.

Policy Implications

- ✓ Policy-makers may want to consider a national strategy to promote safe opioid prescribing; however this strategy must be flexible to address specific opioid prescribing issues within each province.
- ✓ Prescribing rates appear to have leveled off at rates that are still high and likely associated with a large number of opioid related deaths each year

How do we know this?

The ODPRN conducted a population-based cross-sectional study of all prescriptions for high dose formulations of morphine, oxycodone, hydromorphone and transdermal fentanyl dispensed by retail pharmacies in Canada between January 1, 2006 and December 31, 2011. High dose opioid formulations were defined as tablets or transdermal patches that would lead to a daily dose exceeding 200 mg morphine equivalents (MEQ) when taken twice daily. Specific thresholds were 100 mg, 80 mg, 20 mg, and 75 mcg/hour for morphine, oxycodone, hydromorphone and fentanyl, respectively. The rate of dispensing of high dose opioid formulations in Canada increased 23%, from 781 units per 1,000 population in 2006 to 961 units per 1,000 population in 2011. Although these rates remained relatively stable in Alberta (6.3% increase) and British Columbia (8.4% increase), rates in Newfoundland and Labrador (84.7% increase) and Saskatchewan (54.0% increase) rose substantially. Ontario exhibited the highest annual rate of high dose oxycodone and fentanyl dispensing (756 tablets and 112 units per 1,000 population, respectively), while Alberta's rate of high dose morphine dispensing was the highest in Canada (347 units per 1,000 population). Two of the highest rates of high dose hydromorphone dispensing were found in Saskatchewan and Nova Scotia (258 tablets and 369 tablets per 1,000 population, respectively). Conversely, Quebec had the lowest rate of high dose oxycodone and morphine dispensing (98 and 53 units per 1,000 population, respectively).

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to respond rapidly and directly to policy-makers' needs for relevant research.

Gomes T, Mamdani M, Paterson M, Dhalla I, Juurlink DN. Trends in High Dose Opioid Prescribing in Canada. Canadian Family Physician 2014 (in press).

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