

CARFENTANIL

Over **100x** more dangerous than fentanyl, **5,000x** more dangerous than heroin

Using opioid drugs often leads to physical dependence, where a person needs to take the drug or they get serious withdrawal symptoms, craving for the drug, and addiction. While these drugs can be useful medicines, they also are dangerous ingredients in the illegal drug supply. Abusing opioids, whether prescribed or not, has real and severe consequences. If you are in Alberta and are struggling with prescribed or unprescribed opioid use, you can get meaningful help today.^a

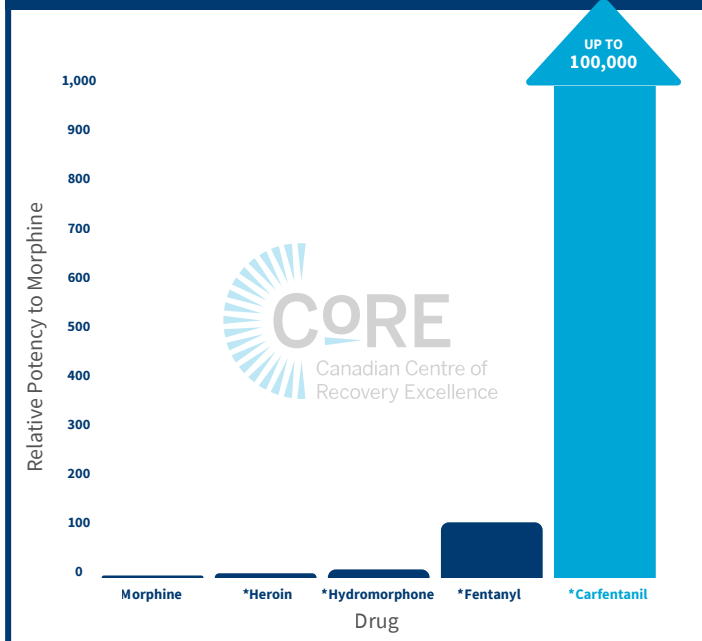
Drug potency refers to the dose of a drug needed for a specific effect. While a high potency drug produces a response in low doses, a low potency drug requires larger amounts to have the same effect.¹ This Mental Health and Addiction Brief shows the potency or the strength of 1mg of a given opioid compared to 1mg of morphine in Table 1. Many of these opioids were detected in regions across Canada in 2024, especially various fentanyl analogues including carfentanil.² Figure 1 highlights the relative strength of carfentanil next to both prescribed and unprescribed opioids.^{3,4} Carfentanil was estimated to be between 10,000 and 100,000 times more potent than morphine, meaning that extremely small doses are likely to lead to severe consequences, including death. Opioid agonist treatments are effective. Start your recovery journey today.

Table 1. Opioid Drug Potency Relative to Morphine

Drug	Relative Potency to Morphine
Codeine	0.10
Morphine	1
Oxycodone	1.5
Heroin	2 – 4
Hydromorphone	4 – 5
Methadone	5 – 10
Buprenorphine	80
Fentanyl	80 – 100
Methylfentanyl	400 – 6,000
Carfentanil	10,000 – 100,000



Figure 1. Potency of Select Opioids Relative to Morphine²



1. <https://pmc.ncbi.nlm.nih.gov/articles/PMC6474477/>
2. <https://www.ccsa.ca/sites/default/files/2025-03/CCENDU-Newsletter-Issue-4-en.pdf>
3. <https://www.ncbi.nlm.nih.gov/books/NBK537482/table/appannex6.tab2/>
4. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10082801/>

^a Addiction Helpline at 1-866-332-2322 or the Virtual Opioid Dependency Program (VODP) at 1-844-383-7688.
* Indicate drugs with a potency range; the lower-end values are represented in the figure.