



# CIHI's Drug Claims Data Related to Prescription Drug Abuse

Prescription drug abuse (PDA) — also referred to as “problematic prescription drug use” — can lead to addiction, overdose, chronic ill health and death. Pan-Canadian claims data can provide insight into the prescribing and utilization of those drugs at high risk of abuse to help answer questions such as

- How long do people use a high-risk drug, on average, and how has this changed over time?
- Which opioids are used most often? Is there variation by province?
- Does use of high-risk drugs differ by age and gender?

CIHI's [National Prescription Drug Utilization Information System \(NPDUIS\) Database](#) has de-identified record-level information from claims accepted by public drug programs for reimbursement or to be applied toward a deductible — and, where available, claims paid by private insurers or with cash — from all provinces except Quebec. The data provides insight on areas such as

- Claimants and dispensed dates;
- Prescribers;
- Service providers (most often pharmacies);
- Prescription drug names and quantities; and
- Costs including markup, dispensing fees and ingredient cost.



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Coverage as of March 2016 is summarized in Table 1.

**Table 1** Data availability in NPDUIS

Province	Coverage	Available starting	Linkable to other CIHI databases
N.L.	Seniors and social assistance	January 2006	Yes
P.E.I.	Seniors and social assistance	April 2004	Yes
N.S.	Seniors	April 2001	No
N.B.	Seniors and social assistance	January 2000	No
Ont.	Seniors and social assistance	April 2010	No
Man.	General public	January 2000	Yes
Sask.	General public	January 2000	No
Alta.	Seniors	January 2000	Yes
B.C.	General public	January 2006	Yes

## Drug classification codes

Drug products in the NPDUIS Database are identified using the Health Canada Drug Identification Number (DIN) and World Health Organization Anatomical Therapeutic Chemical (WHO ATC) classification system. Information about the codes most often of interest for research and analysis related to opioids, benzodiazepines and ADHD drugs is summarized in Table 2.

**Table 2** Codes and related information for opioids, benzodiazepines and ADHD drugs

ATC3	ATC3 description	ATC4	ATC4 description	Chemical examples	Brand name examples
<b>M03B</b>	Muscle Relaxants, Centrally Acting Agents	M03BA	Carbamic acid esters	Methocarbamol in combination	Robaxacet-8
		M03BB	Oxazol, thiazine, and triazine derivatives	Chlorzoxazone in combination	Acetazone Forte C8
<b>N01A</b>	Anesthetics, General	N01AH	Opioid anesthetics	Fentanyl, alfentanil, sufentanil	
<b>N02A</b>	Opioids	N02AA	Natural opium alkaloids	Morphine, oxycodone, hydromorphone, codeine combinations	Statex, OxyNeo, Dilaudid, Tylenol #3
		N02AB	Phenylpiperidine derivatives	Meperidine, fentanyl	Demerol, Duragesic
		N02AD	Benzomorphan derivatives	Pentazocine	Talwin
		N02AE	Oripavine derivatives	Buprenorphine	Butrans
		N02AF	Morphinan derivatives	Butorphanol, nalbupine	Nubain
		N02AX	Other opioids	Tapentadol, tramadol, tramadol combinations	Nucynta, Zytram XL, Tramacet

ATC3	ATC3 description	ATC4	ATC4 description	Chemical examples	Brand name examples
N02B	Other Analgesics and Antipyretics	N02BA	Salicylic acid and derivatives	Acetylsalicylic acid in combination	282s, 222s, Fiorinal C1/4
		N02BE	Anilides	Acetaminophen combinations	Atasol 15, Percocet, Tylenol #2
		N02BG	Other analgesics and antipyretics	Cannabinoids	Sativex
N03A	Antiepileptics	N03AE	Benzodiazepine derivatives	Clonazepam	Rivotril
		N03AX	Other antiepileptics	Gabapentin, pregabalin	Neurontin, Lyrica
N05B	Anxiolytics	N05BA	Benzodiazepine derivatives	Diazepam, oxazepam, lorazepam	Valium, Serax, Ativan
N05C	Hypnotics and Sedatives	N05CD	Benzodiazepine derivatives	Flurazepam, nitrazepam, temazepam	Somnol, Dalmene, Mogadon
		N05CF	Benzodiazepine-related drugs	Zolpidem	Sublinox
N06B	Psychostimulants, Used for ADHD	N06BA	Centrally acting sympathomimetics	Amphetamine derivatives, methylphenidate,	Adderall XR, Ritalin, Vyvanse
N07B	Drugs Used in Addictive Disorders	N07BC	Drugs used in opioid dependence	Methadone, buprenorphine in combination	Metadol, Methadose, Suboxone
R02A	Throat Preparations	R02AD	Anesthetics, local	Cocaine	PMS-cocaine topical solution
R05D	Cough Suppressants, Excluding Combinations With Expectorants	R05DA	Opium alkaloids and derivatives	Hydrocodone, codeine, combinations	Hycodan, Codeine Contin, Tussionex
		R05FA	Opium derivatives and expectorants	Opium derivatives and expectorants	Calmylin, Robitussin AC, Benylin 2 with codeine

#### Sources

Health Canada. [Drug Product Database](#). Accessed March 22, 2016.

WHO Collaborating Centre for Drug Statistics Methodology. [Guidelines for ATC classification and DDD assignment, 2016](#). 2015.

You may request specific information through a [custom data request](#).



**Talk to us**

Prescription Drug Abuse Project team: [pda@cihi.ca](mailto:pda@cihi.ca)