

## CIHI's Hospital and ED 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 data from hospitalizations and emergency departments (EDs) can help answer questions such as the following:

- How many people were seen in EDs or hospitalized with a diagnosis of poisoning due to a high-risk drug?
- What treatments were most common for people diagnosed with disorders due to opioid use?
- What was the average length of stay in acute care for people with a primary diagnosis of substance abuse?

CIHI's <u>Discharge Abstract Database (DAD)</u> has data from acute inpatient facilities in all jurisdictions except Quebec; data for that province is included in the <u>Hospital Morbidity Database (HMDB)</u>.

Data on all ED visits in Ontario and Alberta — and some ED visits in Prince Edward Island, Nova Scotia, Manitoba, Saskatchewan, British Columbia and Yukon — is in the <u>National Ambulatory Care Reporting System (NACRS)</u>.



Examples of the types of data held in the DAD/HMDB and NACRS appear in Table 1.

**Table 1** Types of data in the DAD/HMDB and NACRS

Type of data	Examples	Database
Patient information	Date of birth	DAD/HMDB and NACRS
	Gender	DAD/HMDB and NACRS
	Postal code	DAD/HMDB and NACRS
Administrative information	Admission or registration and discharge dates	DAD/HMDB and NACRS
	Visit disposition	NACRS
	Discharge disposition	DAD/HMDB
	Provider service	DAD/HMDB and NACRS
Clinical information	Diagnoses (using ICD-10-CA codes)	DAD/HMDB and NACRS
	Diagnosis type	DAD/HMDB
	Interventions (using CCI codes)	DAD/HMDB and NACRS
Service-specific information	Canadian Triage and Acuity Scale level	NACRS
	Special Care Unit	DAD/HMDB
	Mental Health indicators	DAD/HMDB

## Notes

ICD-10-CA: International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada. CCI: Canadian Classification of Health Interventions.

The DAD and HMDB feed the <u>Hospital Mental Health Database (HMHDB)</u> information on hospitalizations for mental illness and addictions from across the country. <u>The Ontario Mental Health Reporting System (OMHRS)</u> provides the HMHDB with data from all hospitals with designated adult mental health beds — and from 2 psychiatric facilities with child/adolescent mental health beds — in that province.

OMHRS also has data from 3 facilities outside Ontario.

## Diagnosis codes related to use of opioids, sedatives/ hypnotics and stimulants

Both the DAD and NACRS use diagnosis codes from ICD-10-CA, a classification system developed by the World Health Organization and enhanced by CIHI to meet Canadian morbidity data needs.

A diagnosis may be coded either as the "main problem" or "other problem" using the ICD-10-CA coding system or the *Diagnostic and Statistical Manual of Mental Disorders*, *4th Edition* (DSM-IV). The Canadian Emergency Department Diagnosis Shortlist (CED-DxS) is mapped to ICD-10-CA codes.

There are 3 types of prescription drugs at high risk for abuse:

- Opioids (normally used to treat pain);
- Benzodiazepines (normally used to treat anxiety and sleep disorders); and
- Stimulants (normally used to treat attention deficit disorder).

Relevant drug-specific ICD-10-CA diagnostic codes are as follows:

- F11 Mental and behavioural disorders due to use of opioids
- F13 Mental and behavioural disorders due to use of sedatives or hypnotics
- F15 Mental and behavioural disorders due to use of other stimulants, including caffeine
- F19 Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances

These are all associated with specific extensions:

- FXX.0 Acute intoxication
- FXX.1 Harmful use
- FXX.2 Dependence syndrome
- FXX.3 Withdrawal state
- FXX.4 Withdrawal state with delirium
- FXX.5 Psychotic disorder
- FXX.6 Amnesic syndrome
- FXX.7 Residual and late-onset psychotic disorder
- FXX.8 Other mental and behavioural disorders
- FXX.9 Unspecified mental and behavioural disorder

Other codes relevant to this research include

- T40.2 Poisoning by other opioids (morphine and codeine)
- T40.3 Poisoning by methadone
- T40.4 Poisoning by other synthetic narcotics (pethidine, also known as meperidine)
- T40.6 Poisoning by other and unspecified narcotics
- T42.4 Poisoning by benzodiazepines
- T42.7 Poisoning by antiepileptic and sedative-hypnotic drugs, unspecified
- X42 Accidental poisoning by and exposure to narcotics and psychodysleptics, not elsewhere classified
- X62 Intentional self-poisoning by and exposure to narcotics and psychodysleptics, not elsewhere classified
- Y12 Poisoning by and exposure to narcotics and psychodysleptics not elsewhere classified, undetermined intent
- Y45.0 Opioids and related analysesics causing adverse effects in therapeutic use
- Y47 Sedatives, hypnotics and antianxiety drugs causing adverse effects in therapeutic use

Using these codes, you may request specific information through a custom data request.



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