IQVIA

Medication Treatments for Mental Health Disorders in Canada

An independent IQVIA report on drug utilization data, 2019–2023
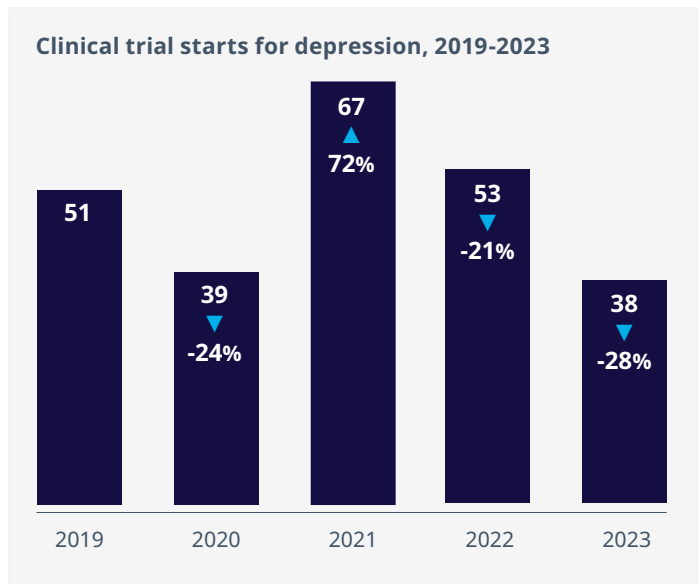
Introduction

According to Health Canada, mental illness is characterized by changes in an individual's thinking, mood, or behaviour, and is usually associated with significant distress or impaired functioning in social, occupational, or other activities. By all accounts, mental illnesses have a significant impact on the health of Canadians, as well as on the Canadian economy, including our health and social services systems.

Mental illness indirectly affects all Canadians at some point, either through their own experience or that of a family member, friend, or colleague. In any given year, 1 in 5 Canadians experience a mental illness, and by the time Canadians reach the age of 40, 1 in 2 Canadians are experiencing – or have experienced – a mental illness. The economic cost of mental illness to Canada's health and social service systems was estimated at $79.9 billion in 2021[1]. This includes health care costs, lost productivity, and reductions in health-related quality of life.

The CIHI report, "Repeat Hospital Stays for Mental Health and Substance Use"[2] reveals that in Canada, 1 in 7 patients with a mental illness requires repeated hospitalization. Depending on the availability of mental health care in the various health regions, this is at best 1 in 12 patients, and at worst 1 in 4.

While medication utilization statistics were the primary focus of this report, other effective treatments and services are also available, including psychotherapy and crisis lines, virtual services/telemedicine, community supports, alternative medicine, prevention and promotion interventions, and workplace supports. However, the increased demand for these services in the post-pandemic era and the shortage of specialized professionals has meant that psychotropic medications are often used to achieve positive clinical outcomes from psychosis to depression. In 2023, the number of clinical trials for depression worldwide decreased by 25% compared to 2022, with 40% of these trials initiated with psychedelics.[3]

Our focus at IQVIA is to help optimize health by bringing data and fact-based insights forward to better inform decision-makers in this critical area, with the utmost respect for privacy and data security. The statistics and analysis featured in this report were sourced from the IQVIA Health Insights Dashboard, as part of a collaboration with the IQVIA Advisory Council for the Advancement of Health, a group of Quebec opinion leaders from various health sectors. A true public-utility analysis tool, based on fully anonymized data, the dashboard is used to analyze drug usage in select treatment classes and is designed to answer three basic questions: how many prescriptions, for how many users, and by which prescriber medical specialties. Refer to page 6 for the limitations associated with using IQVIA data.

Clinical trial starts for depression, 2019-2023

Year	Value	Change
2019	51	
2020	39	▼ -24%
2021	67	▲ 72%
2022	53	▼ -21%
2023	38	▼ -28%

This report is produced independently by IQVIA Canada as a public service, without industry or government funding. IQVIA complies with all laws regarding the protection of personal health information and IQVIA does not collect or use any prescription drug data that could identify a patient.

1. https://cmha.ca/find-info/mental-health/general-info/fast-facts/
2. https://yourhealthsystem.cihi.ca/hsp/inbrief?lang=en#!/indicators/007/repeat-hospital-stays-for-mental-illness/;mapC5015;mapLevel2;overview;trend (C1,C5001)/
3. https://www.iqvia.com/insights/the-iqvia-institute/reports-and-publications/reports/global-trends-in-r-and-d-2024-activity-productivity-and-enablers

This report provides an overview of trends in drug treatments for mental health disorders, dispensed in community pharmacies across Canada over a five-year period (2019, 2020, 2021, 2022, and 2023), and how these vary by province. There are four subcategories included in our definition of the therapeutic class of drug treatments for mental health. Detailed data insights for each of these categories will be featured in separate IQVIA Snapshot publications.

- **Antidepressants:** Medications mainly used to treat major depression and anxiety disorders.
- **Anxiolytics/hypnotics:** Anxiolytics (tranquillizers) are used to treat anxiety disorders and insomnia.
- **Antipsychotics:** Also known as neuroleptic medications, antipsychotics are generally indicated for controlling the symptoms of schizophrenia and bipolar disorder.
- **Psychostimulants:** Medications used to treat attention deficit hyperactivity disorder (ADHD).

The majority of molecules in these therapeutic classes are generic and their prescriptions are reimbursed by public and private payers.

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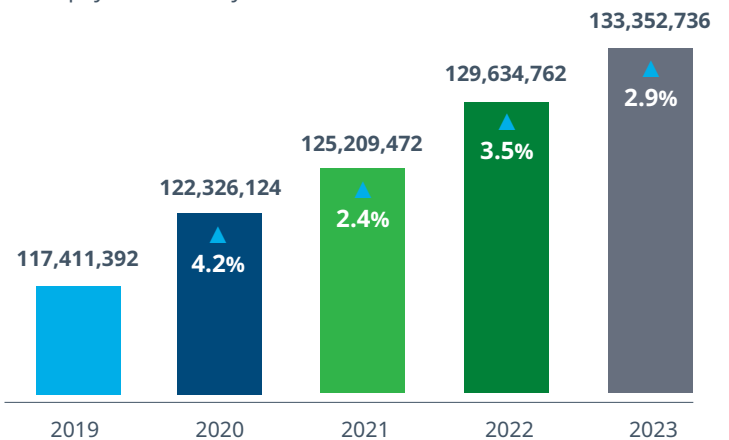Senior Consultant,
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National Drug Utilization Highlights

The number of prescriptions dispensed continues to grow

In 2023, more than 130 million prescriptions were dispensed in Canadian community pharmacies for the four categories of drugs combined, which represents an increase of 14% compared to 2019.

A similar trend is observed in the United States, where a growing number of Americans are seeking treatment for mental health disorders. In 2022, 567 million prescriptions were recorded, compared to 479 million in 2019, an increase of 18% or 88 million prescriptions.[4]

Total number of prescriptions dispensed in Canada, 2019 - 2023. Four categories: Antidepressants – Anxiolytics – Antipsychotics – Psychostimulants

Year	Prescriptions	Change
2019	117,411,392	
2020	122,326,124	4.2%
2021	125,209,472	2.4%
2022	129,634,762	3.5%
2023	133,352,736	2.9%

4. https://www.iqvia.com/-/media/iqvia/pdfs/institute-reports/the-use-of-medicines-in-the-us-2023/the-use-of-medicines-in-the-us-2023.pdf

Number of prescriptions dispensed in Canada 2019-2023					
	2019	**2020**	**2021**	**2022**	**2023**
Antidepressants	59,675,833	63,312,155 ▲ **6.1%**	65,103,241 ▲ **2.8%,**	67,984,504 ▲ **4.4%**	70,457,279 ▲ **3.6%**
Anxiolytics	25,971,158	25,918,750 ▼ **-0.2%**	25,199,645 ▼ **-2.8%**	24,687,657 ▼ **-2.0%**	23,938,001 ▼ **-3.0%**
Antipsychotics	23,497,716	24,320,984 ▲ **3.5%**	24,970,507 ▲ **2.7%**	25,535,154 ▲ **2.3%**	26,083,645 ▲ **2.1%**
Psychostimulants	8,266,685	8,774,235 ▲ **6.1%**	9,936,079 ▲ **13.2%**	11,427,447 ▲ **15.0%**	12,873,811 ▲ **12.7%**

In 2023, antidepressants had the highest number of prescriptions in Canada of the four drug classes, with over 70 million prescriptions, an increase of 18% from 2019. Anxiolytics saw a steady decline ranging from 0.2% to 3% over the years studied, representing a total decrease of 8% between 2019 and 2023, and antipsychotics saw their annual growth slow from 3.5% to 2.1% over the years.

The category of psychostimulants, used primarily to treat attention deficit hyperactivity disorder (ADHD), has seen a significant increase, from 8 million prescriptions in 2019 to nearly 13 million in 2023, an increase of 56% between these two years.

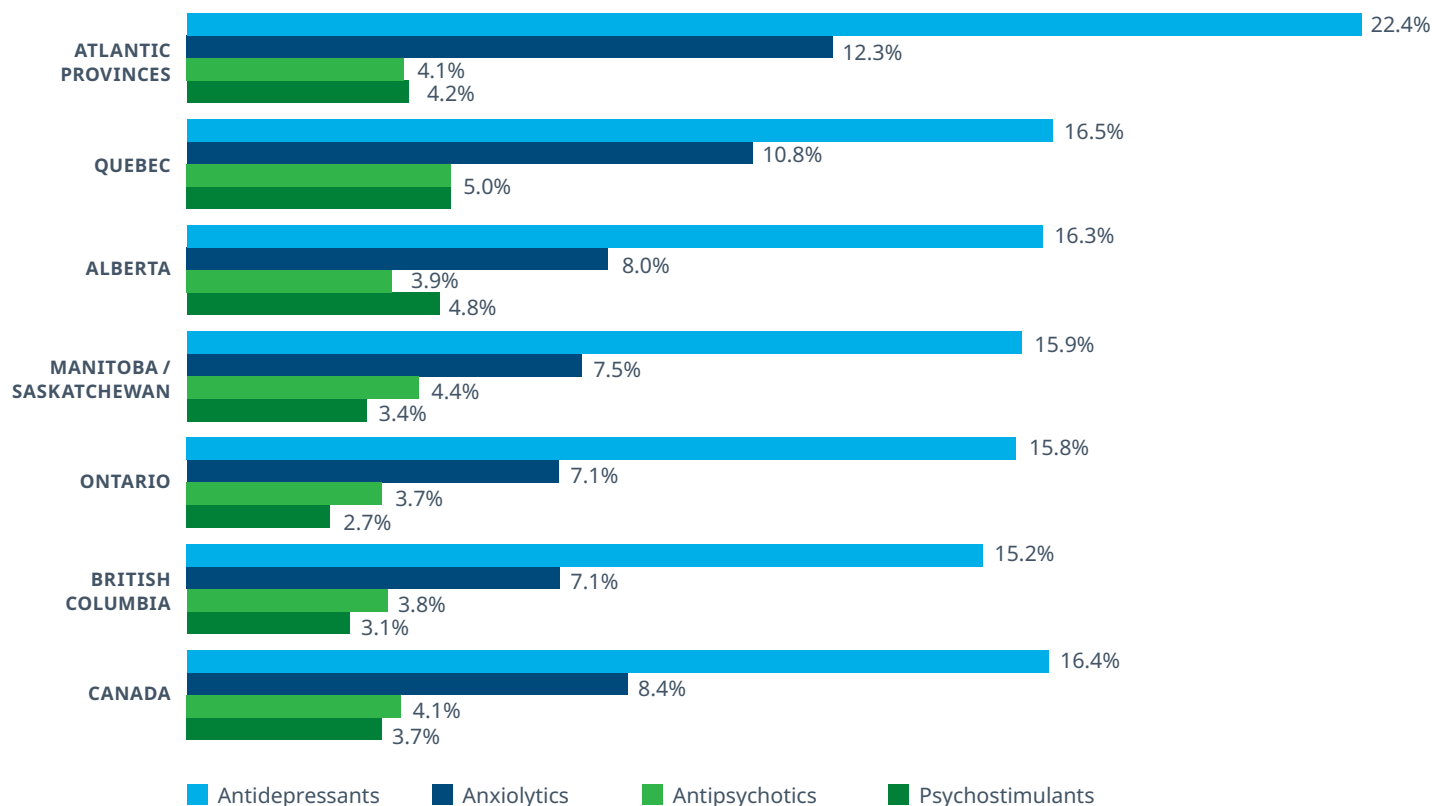| Prevalence in utilization of mental health medications by category, Canada					
	2019	**2020**	**2021**	**2022**	**2023**
Antidepressants	15.4%	15.7%	16.8%	16.3%	16.4%
Anxiolytics	9.8%	9.4%	9.3%	8.7%	8.4%
Antipsychotics	3.9%	4.1%	4.3%	4.1%	4.1%
Psychostimulants	2.4%	2.5%	2.9%	3.3%	3.7%

In 2023, antidepressants had the highest prevalence rate in Canada at 16.4%. In contrast, the prevalence of anxiolytics has steadily declined over time, while the prevalence of antipsychotics has remained relatively stable. Psychostimulants, used to treat ADHD, have seen a continued increase in prevalence from 2019 to 2023.

These trends illustrate an evolution in the use of mental health medications in Canada. In this regard, we encourage readers to consult the category-specific "Snapshots" developed by IQVIA.

In 2023, antidepressants had the highest prevalence rates in all Canadian provinces, followed by anxiolytics, with the Atlantic provinces having the highest prevalence rates for these two categories at 22.4% and 12.3%, respectively. British Columbia and Ontario had the lowest prevalence rates for anxiolytics at 7.1%. The highest prevalence for psychostimulants was in Quebec at 5%, while Ontario had the lowest at 2.7%. IQVIA's "Snapshots" provide more detailed information by drug category.

Prevalence by province and by category of mental health medication, 2023

Legend: ■ Antidepressants ■ Anxiolytics ■ Antipsychotics ■ Psychostimulants

Province	Antidepressants	Anxiolytics	Antipsychotics	Psychostimulants
ATLANTIC PROVINCES	22.4%	12.3%	4.1%	4.2%
QUEBEC	16.5%	10.8%	5.0%	
ALBERTA	16.3%	8.0%	3.9%	4.8%
MANITOBA / SASKATCHEWAN	15.9%	7.5%	4.4%	3.4%
ONTARIO	15.8%	7.1%	3.7%	2.7%
BRITISH COLUMBIA	15.2%	7.1%	3.8%	3.1%
CANADA	16.4%	8.4%	4.1%	3.7%

IQVIA has recently developed new indicators to enrich the reports, by integrating data on health regions from various Canadian provinces. Among these, Ontario is subdivided into 26 regions and Quebec has 15. The following table presents some examples. For more information, do not hesitate to contact us.

Prevalence of mental health medication dispensing by category and selected health regions							
	British Columbia		Alberta		Ontario		Quebec	
	Vancouver	Interior	Edmonton	South	Toronto	Middlesex-London	Montréal	Ville Québec
Antidepressants	11.5%	19.8%	19.2%	20.7%	11.4%	25.6%	10.6%	21.2%
Anxiolytics	6.9%	9.3%	9.7%	10.9%	5.6%	9.0%	6.5%	18.6%
Antipsychotics	3.7%	4.3%	5.6%	5.6%	3.1%	6.3%	4.3%	7.0%
Psychostimulants	3.0%	4.4%	5.1%	5.7%	1.9%	3.4%	2.7%	6.2%

Recommendations for health interest groups

Everyone who studies, provides healthcare, or sets policies and standards of care for mental health disorders must persevere in the search for solutions. At IQVIA, we aim to improve care by providing policymakers, researchers, and educators with essential, evidence-based data.

A Statistics Canada study[5], which aimed to assess the mental health impacts of the COVID-19 pandemic on the population, revealed that in 2022, more than 5 million Canadians met the diagnostic criteria for a mood disorder, anxiety disorder or substance use disorder, with a prevalence that has risen sharply over the past 10 years. The largest increases were observed among young people, particularly young women aged 15 to 24, for whom the prevalence of generalized anxiety disorder tripled and that of major depressive episodes doubled. According to the same study, counselling services (43.8%) were the most common type of care received by people suffering from mental health disorders, followed by medication (36.5%) and mental health information (32.0%).

Some studies, including the meta-analysis conducted at McGill University and published in BMJ[6], suggest that the pandemic has not had a significant negative impact on mental health. However, the Canadian Mental Health Association notes that this study has many limitations, particularly methodologically, and that many people in Canada have experienced significant distress, which is still present in many cases, during the pandemic and have not been able to obtain support[7].

As such, the long-term mental health impacts of COVID-19 remain uncertain, and unmet mental health needs persist. There is an urgent need for objective evidence to facilitate effective decision-making and appropriate resource allocation. This information can support the development of mental health services, programs, and policies across Canadian provinces. In particular, it can:

- Systematically review national and provincial prescription data from all sources in order to, governments or regulatory authorities;

- Monitor and evaluate prescription trends that may vary significantly from one province to another and assess the impact of programs implemented;

- Pay particular attention to provinces or regions where the consumption of psychotherapeutic drugs is increasing the most and develop an awareness and training strategy for the professionals concerned.

Limitations

There are limitations to the use of IQVIA data, which does not include information on:

- Prescriptions written but never dispensed

- Prescriptions dispensed in hospitals and prisons

- Medications that were not consumed by patients

- Diagnoses for which prescriptions were dispensed

- Clinical indication or morbidity

5. https://www150.statcan.gc.ca/n1/pub/75-006-x/2023001/article/00011-eng.htm
6. https://www.bmj.com/content/bmj/380/bmj-2022-074224.full.pdf
7. https://cmha.ca/news/a-message-to-our-government-leaders-the-impact-of-covid-19-on-mental-health-is-real-lets-listen-to-the-evidence/

Data Sources and Methodology

The statistics are generated from [fully anonymized] prescriptions for psychotherapeutic medications dispensed by a panel of community pharmacies during 2019, 2020, 2021, 2022, and 2023, and correspond to approximately 80% of all prescriptions dispensed in Canada (new Rx and refills). Estimation algorithms were used to assess the missing 20%, thus obtaining a complete picture of the dispensing of these drugs and allowing a representative analysis. Population data from Statistics Canada[8] was used to calculate proportions and per capita rates.

This report is based on the following IQVIA data services: IQVIA Geographic Prescription Monitoring (GPM), IQVIA Longitudinal Prescription data, and IQVIA Prescriber-level data.

List of molecules included in each category of psychotherapeutic drugs:

ANTIDEPRESSANTS	
1st generation	2nd generation
Amitriptyline	Bupropion
Amoxapine	Citalopram
Clomipramine	Duloxetine
Desipramine	Desvenlafaxine
Doxepine	Esketamine
Imipramine	Escitalopram
Moclobemide	Fluoxetine
Nortriptyline	Fluvoxamine
Phenelzine	Levomilnacipran
Tranylcypromine	Mirtazapine
Trimipramine	Paroxetine
	Sertraline
	Trazodone
	Venlafaxine
	Vilazodone
	Vortioxetine

ANTIPSYCHOTICS	
1st generation	2nd generation
Chlorpromazine	Aripiprazole
Droperidol	Asenapine
Flupentixol	Brexpiprazole
Fluphenazine	Clozapine
Haloperidol	Lurasidone
Loxapine	Olanzapine
Mesoridazine	Paliperidone
Methotrimeprazine	Quetiapine
Periciazine	Risperidone
Perphenazine	Ziprasidone
Pimozide	**Injectable - Depot**
Pipotiazine	Aripiprazole
Promethazine	Paliperidone
Thioridazine	Risperidone
Thiothixene	
Trifluoperazine	
Zuclopenthixol	

ANXIOLYTICS/HYPNOTICS		
Benzodiazepines	DORA	Z Drugs
Alprazolam	Lemborexant	Eszopiclone
Bromazepam	Suvorexant	Zaleplon
Chlordiazepoxide		Zopiclone
Clobazam		Zolpidem
Clonazepam		
Clorazepate		
Diazepam		
Flurazepam		
Lorazepam		
Midazolam		
Nitrazepam		
Oxazepam		
Temazepam		
Triazolam		

PSYCHOSTIMULANTS
Benzodiazepines
Amphetamine
Atomoxetine
Destroamphetamine
Guanfacine
Lisdexamfetamine
Methylphenidate (Ritalin)

8. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/dt-td/Index-eng.cfm?LANG=E&SUB=98P1001&SR=0&RPP=10&SORT=date

ABOUT IQVIA

IQVIA is a leading global provider of advanced analytics, technology solutions, and clinical research services to the life sciences industry. IQVIA creates intelligent connections across all aspects of healthcare through its analytics, transformative technology, metadata resources and extensive domain expertise. IQVIA Connected Intelligence™ delivers relevant insights with speed and agility—enabling its customers to accelerate the clinical development and commercialization of innovative medication treatments that improve healthcare outcomes for patients. With approximately 87,000 employees, IQVIA conducts operations in more than 100 countries.

Established in Canada since the 1960s with over 1,600 employees, IQVIA is a leading provider of evidence-based health information services to the Canadian medical and pharmaceutical industry. Its excellent reputation is based on its ability to forge partnerships with various stakeholders in the public and private sectors who share the same goal: to constantly improve the quality of health care in a more connected ecosystem.

Offering the world's largest source of healthcare data, IQVIA provides Canada-wide data for both the public and private sectors. IQVIA's insights and execution capabilities help biotech, medical device, and pharmaceutical companies, medical researchers, government agencies, payers, and other healthcare stakeholders tap into a deeper understanding of disease, human behaviour, and scientific advances to improve patient health.