



## Series on Seniors

# Seniors and Prescription Drug Use

### Information Sheet

CIHI presents **Series on Seniors** to bring together and profile data and reports from different CIHI areas, on topics related to seniors' health. Seniors in this series are defined as persons age 65 and older.

### Who We Are

Established in 1994, CIHI is an independent, not-for-profit corporation that provides essential information on Canada's health system and the health of Canadians. Funded by federal, provincial and territorial governments, we are guided by a Board of Directors made up of health leaders across the country.

### Our Vision

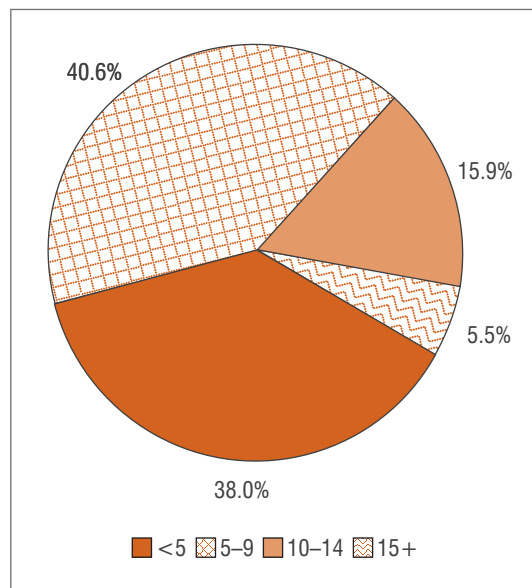
To help improve Canada's health system and the well-being of Canadians by being a leading source of unbiased, credible and comparable information that will enable health leaders to make better-informed decisions.

## Drug Spending and Utilization

Based on data collected from six provinces, we know the following:

- Spending is increasing: public drug spending on seniors increased from \$603.5 million in 2002 to \$1.0 billion in 2008.
- The top 10 drug classes accounted for almost half (48%) of public drug program spending among seniors. Five of the 10 are used to treat cardiovascular conditions.
- The most common drug class used by seniors is statins to lower cholesterol levels.
- The majority of seniors are using multiple drugs: 62% of seniors on public drug programs are using five or more drug classes.
- The number of drug classes being used by seniors increases with age: 29% of seniors age 85 and older had claims for 10 or more drugs.

Figure 1: Percentage of Seniors on Public Drug Programs in Six Provinces, by Number of Drug Classes Claimed, 2008



Source: National Prescription Drug Utilization Information System Database, Canadian Institute for Health Information.

## Drug Use in Nursing Homes

Thirty-eight percent of nursing home residents on public drug programs made claims for antipsychotics, compared to only 3% of residents in the community. The higher prevalence of dementia among nursing home residents is likely a contributing factor. (Data is from 2006–2007, based on three provinces.)

## Information Sheet

More information related to this topic can be found in the following CIHI databases:

Continuing Care Reporting System (CCRS)  
www.cihi.ca/ccrs

Discharge Abstract Database (DAD)  
www.cihi.ca/dad

Home Care Reporting System (HCRS)  
www.cihi.ca/homecare

Hospital Morbidity Database (HMDB)  
www.cihi.ca/morbidity

National Ambulatory Care Reporting System (NACRS)  
www.cihi.ca/nacrs

National Health Expenditure Database (NHEX)  
www.cihi.ca/nhex

National Prescription Drug Utilization Information System (NPDUIS) Database  
www.cihi.ca/drugs

Ontario Mental Health Reporting System (OMHRS)  
www.cihi.ca/omhrs

## Bibliography

Canadian Institute for Health Information, *Antipsychotic Use in Seniors: An Analysis Focusing on Drug Claims, 2001 to 2007* (Ottawa, Ont.: CIHI, 2009).

Canadian Institute for Health Information, *Bisphosphonates in Osteoporosis: An Analysis Focusing on Drug Claims by Seniors, 2001 to 2007* (Ottawa, Ont.: CIHI, 2009).

Canadian Institute for Health Information, *Drug Claims by Seniors: An Analysis Focusing on Potentially Inappropriate Medication Use, 2000 to 2006* (Ottawa, Ont.: CIHI, 2007).

Canadian Institute for Health Information, *Drug Use Among Seniors on Public Drug Programs in Canada, 2002 to 2008* (Ottawa, Ont.: CIHI, 2010).

Canadian Institute for Health Information, *Hormone Replacement Therapy: An Analysis Focusing on Drug Claims by Female Seniors, 2000 to 2007* (Ottawa, Ont.: CIHI, 2008).

## Need more information?

Email: [seniors@cihi.ca](mailto:seniors@cihi.ca)  
Website: [www.cihi.ca](http://www.cihi.ca)

## Series on Seniors

### Use of Potentially Inappropriate Drugs

The Beers Criteria is an internationally recognized list of drugs that are potentially inappropriate for seniors, due to an elevated risk of adverse effects.

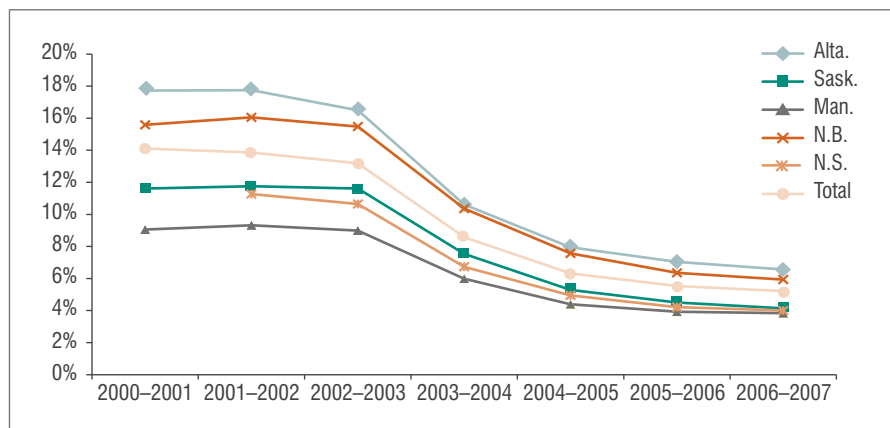
Based on chronic users in four provinces, the top five drugs on this list were the following:

- Oral conjugated estrogens for hormone replacement
- Amitriptyline, an antidepressant
- Digoxin for heart failure
- Oxybutynin for incontinence
- Temazepam, a benzodiazepine used to treat sleep disorders

### Decline in Hormone Replacement Therapy, Increase in Bisphosphonates

- A significant decline in hormone replacement therapy (HRT) use (-30% annual average) in five provinces occurred in the two years following the release of the 2002 Women's Health Initiative study. This study indicated that cancer risks relating to HRT far exceeded the benefits.
- Inversely, the use of bisphosphonates for preventing osteoporosis has increased. For seniors in Canada, this is one of the top 10 fastest-growing drug classes, in terms of spending.

Figure 2: Age-Standardized Rates of HRT Use Among Female Seniors on Public Drug Programs in Five Provinces, 2000–2001 to 2006–2007



#### Source

National Prescription Drug Utilization Information System Database, Canadian Institute for Health Information.