

## Profiles on Health

November 2016

### Mental health and substance use disorders in New Brunswick

Mental health and substance use disorders arise as a result of various genetic, biological, psychological, behavioural and socio-cultural factors. They contribute considerably to distress, pain, impaired functioning and risk of death [1]. They affect individuals, families, communities, schools, workplaces and the health-care system. These illnesses, such as mood disorders, anxiety disorders, psychoses and drug dependence, are among the main causes of disability in Canada and worldwide [2,3].



More than one in five New Brunswickers faces a mental health or substance use disorder at some point in their life.

#### Mental health disorders

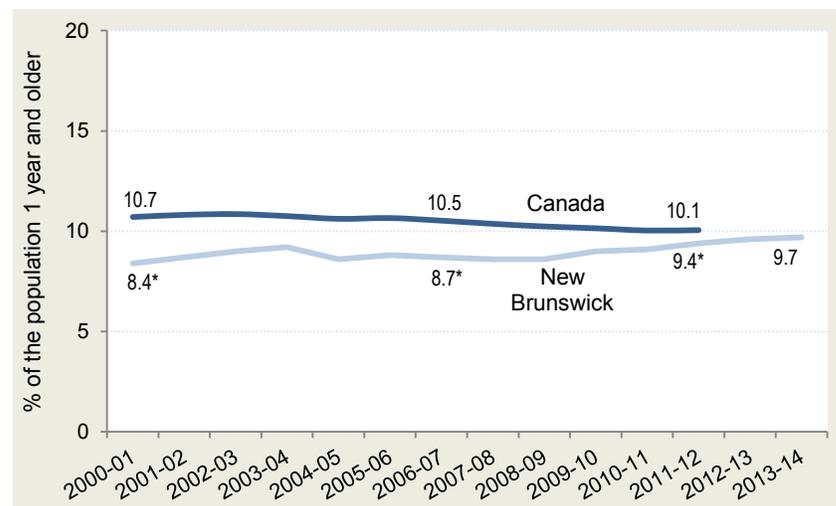
There are many types of mental health disorders, ranging from single, short-lived episodes to severe chronic disorders. About one in seven Canadians (14 per cent) uses health services for a mental illness each year, with mood and anxiety disorders the most common types [3,4]. Prevalence of the use of health services for mental health disorders is higher among females than males [3].

#### Nearly one in 10 New Brunswickers uses health services for a mood or anxiety disorder each year

An estimated 10 per cent of Canadians use health services for mood and anxiety disorders annually [4,5]. The rate has been significantly lower in New Brunswick in recent years, but the gap is narrowing (Figure 1) [5].

Upward trends in use of health services for mood and anxiety disorders may be due to real increases in the number of cases, or to heightened awareness of mental illness resulting in increased rates of detection and treatment.

Figure 1: Trends in the use of health services for mood and anxiety disorders, New Brunswick and Canada, 2000-01 to 2003-14



Note: \* = Significantly lower than the Canadian rate ( $p < 0.05$ ).

Source: New Brunswick Department of Health and Public Health Agency of Canada, using data from the Canadian Chronic Disease Surveillance System.

Among Canadians with mood or anxiety disorder, more than one-quarter (27 per cent) report that their disorder affects their life "quite a bit" or "extremely" [6]. Basic activities and the ability to work are challenging for many. Most people (93 per cent) take prescription medication, but few (20 per cent) receive psychological counselling to help manage their disorder.

### One in eight New Brunswickers experiences depression in his or her lifetime

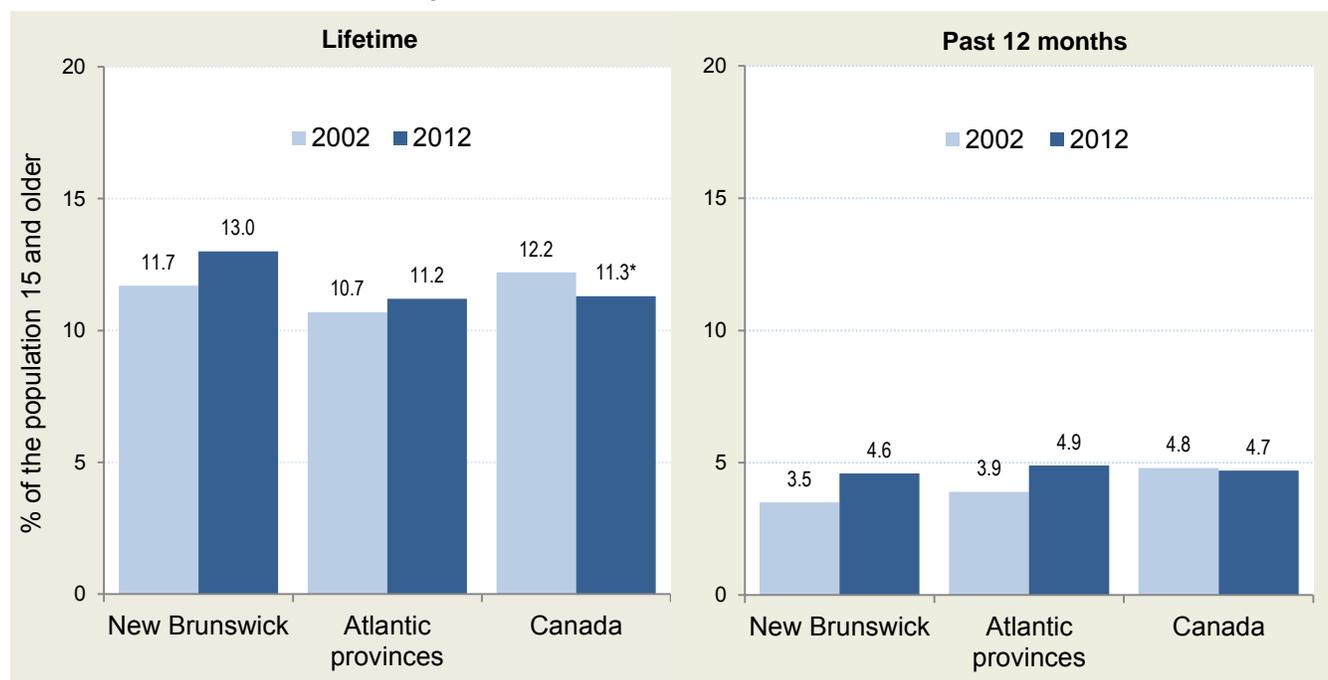
Depression accounts for most cases of mood disorder in Canada [1]. Based on data from the Canadian Community Health Survey (CCHS) supplement on mental health, 13 per cent of New Brunswickers 15 and older (about one in eight) have had a major depressive episode in their

lifetime (Figure 2) [7]. The rate is significantly different neither from 10 years earlier (12 per cent) nor from the average for the Atlantic provinces and across Canada.

Nearly 5 per cent of New Brunswickers 15 and older – some 28,200 individuals – report symptoms consistent with depression (such as decreased energy and persistent loss of interest in normal activities) in the past year. The level is essentially unchanged compared to a decade earlier, and similar to the average for the Atlantic provinces and across Canada.

These trends are consistent with other national studies, which have also found little evidence of change in depression prevalence during the past 15 years [8].

**Figure 2: Trends in the lifetime and past-year prevalence of depression among the population 15 and older, New Brunswick, Atlantic provinces and Canada, 2002 to 2012**



**Note:** \* = Significantly different from the 2002 rate (p<0.05). Rates for New Brunswick are not significantly different from the Canadian rates. Population 15 and older classified as meeting criteria for major depressive episode in their lifetime / in the 12 months prior to interview. Estimates are based on a modified World Health Organization (WHO) Composite International Diagnostic Interview.

**Source:** Statistics Canada, Canadian Community Health Survey – Mental Health, 2012; Mental Health and Well-being, 2002.

### One in 35 New Brunswickers experiences bipolar mood disorder in his or her lifetime

Bipolar disorder consists of extreme mood swings that include emotional highs (mania) and may include lows (depression). The CCHS data indicate 3 per cent of New Brunswickers have a profile consistent with bipolar disorder in their lifetime, with 1.5 per cent experiencing symptoms in the previous year (Figure 3) [7]. The difference between the lifetime and past-year rates reflects the episodic nature of this disorder.

Provincial rates of bipolar disorder are similar to the national and Atlantic regional averages.

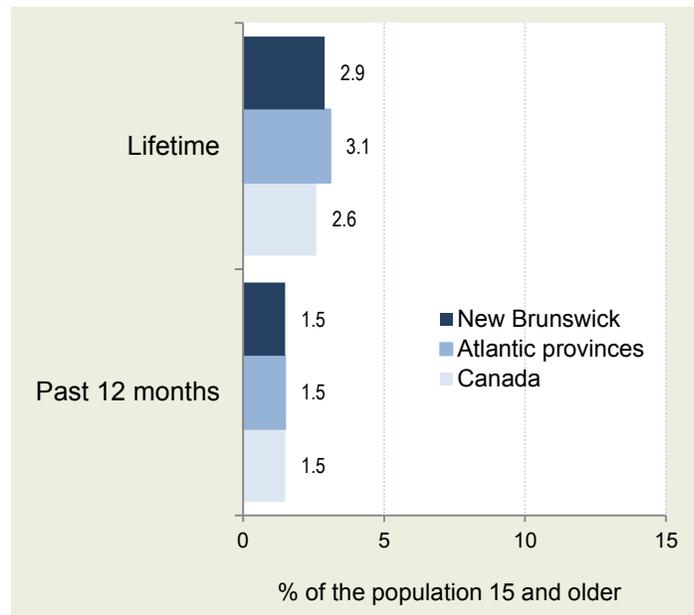
### One in 10 experiences generalized anxiety disorder

Anxiety disorders are characterized by excessive and persistent feelings of apprehension, worry and even fear, and they interfere with an individual's everyday life for an extended period. Based on population survey data, about 10 per cent of New Brunswickers report symptoms consistent with generalized anxiety disorder during their lifetime, with 3 per cent experiencing symptoms in the past year (Figure 4) [7].

Provincial rates of generalized anxiety disorder are similar to the national and Atlantic regional averages.

While depression is more common among New Brunswickers than anxiety disorder, people may have more than one mood or anxiety disorder. National data indicate more than one-half (53 per cent) of those with generalized anxiety disorder have a co-occurrence of depression [1].

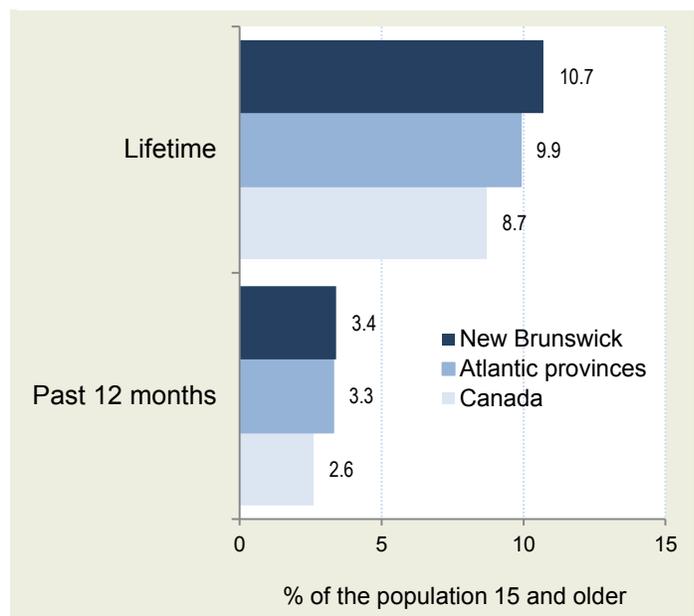
**Figure 3: Lifetime and past-year prevalence of bipolar disorder, New Brunswick, Atlantic provinces and Canada, 2012**



**Note:** Rates for New Brunswick are not significantly different from the Canadian rates (within 95 per cent confidence intervals). Population 15 and older classified as meeting criteria for bipolar disorder in their lifetime / in the 12 months prior to interview, based on a modified WHO Composite International Diagnostic Interview.

**Source:** Statistics Canada, Canadian Community Health Survey: Mental Health, 2012.

**Figure 4: Lifetime and past-year prevalence of generalized anxiety disorder, New Brunswick, Atlantic provinces and Canada, 2012**



**Note:** Rates for New Brunswick are not significantly different from the Canadian rates (within 95 per cent confidence intervals). Population 15 and older classified as meeting criteria for generalized anxiety disorder in their lifetime / in the 12 months prior to interview, based on a modified WHO Composite International Diagnostic Interview.

**Source:** Statistics Canada, Canadian Community Health Survey: Mental Health, 2012.

## Other mental disorders are less common but may remain a lifelong health condition

The CCHS data offer insights about certain chronic mental health conditions other than mood disorders and generalized anxiety disorder. Some people may experience more than one of these disorders.

About 2.5 per cent of New Brunswickers 15 and older report being diagnosed by a health-care professional as currently having attention deficit disorder (ADD) (Figure 5) [7].

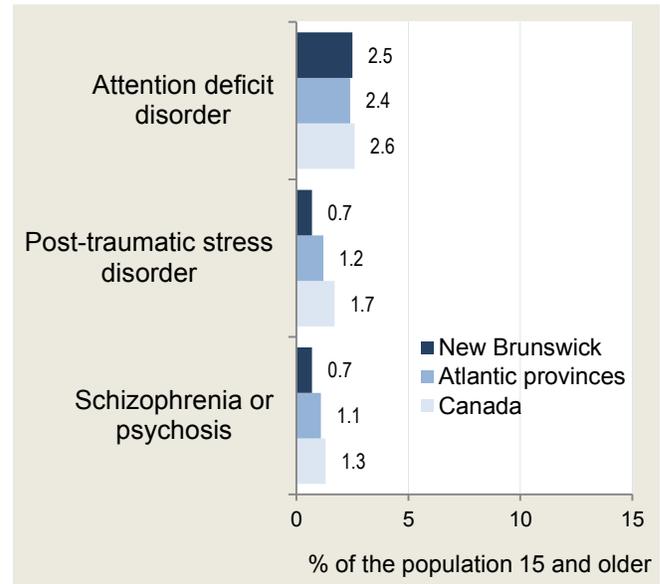
A condition that typically starts to affect people when they are young, ADD is characterized by inattention, distractibility and disorganization. Provincial student wellness surveys indicate 4.7 per cent of children in grades 4 and 5 have ADD [9]. While many cases of ADD observed in childhood do not necessarily persist throughout adolescence and adulthood, in others ADD may not be recognized or diagnosed until the person is an adult.

Post-traumatic stress disorder (PTSD), a type of anxiety disorder that can develop after a person is exposed to a life-threatening or other traumatic event, is experienced by nearly 1 per cent of New Brunswick's population (Figure 5) [7]. The rate is comparable to the average for Canada and the Atlantic provinces.

A similar proportion of New Brunswickers (slightly less than 1 per cent) has been diagnosed with psychoses, including schizophrenia, a complex brain disorder characterized by distortions in thinking, perception, emotions, language and behaviour (Figure 5) [7].

Although schizophrenia is not as common as many other mental illnesses, it affects more than 21 million people worldwide [10]. Measuring the true prevalence of schizophrenia is challenging because there are no laboratory tests to confirm diagnosis; a prevalence rate of about 1 per cent is generally accepted as the best national estimate [11].

**Figure 5: Prevalence of diagnosed attention deficit disorder, post-traumatic stress disorder and psychosis among the population 15 and older, New Brunswick, Atlantic provinces and Canada, 2012**



**Note:** Rates for New Brunswick are not statistically different from the Canadian rates (within 95 per cent confidence intervals). Population 15 and older reporting having been diagnosed by a health-care professional with selected mental disorders.

**Source:** Statistics Canada, Canadian Community Health Survey: Mental Health, 2012.

## Substance use disorders

As with mental health disorders, substance use disorders can have biological, psychological and social components. The use of substances such as alcohol, prescription pharmaceuticals and other drugs occurs along a continuum from beneficial use to problematic use. Problematic substance use arises when recurrent use causes significant health risks and other problems associated with intoxication behaviours (e.g., family, school, work or legal problems) and withdrawal symptoms (due to psychological and/or physical dependence on a substance). The severity of the problem can be mild, moderate or severe.

Unlike the gender pattern for many mental health disorders, where females tend to have higher rates, males generally have higher rates of substance use disorders [1].

## Use of psychoactive and addictive substances is widespread

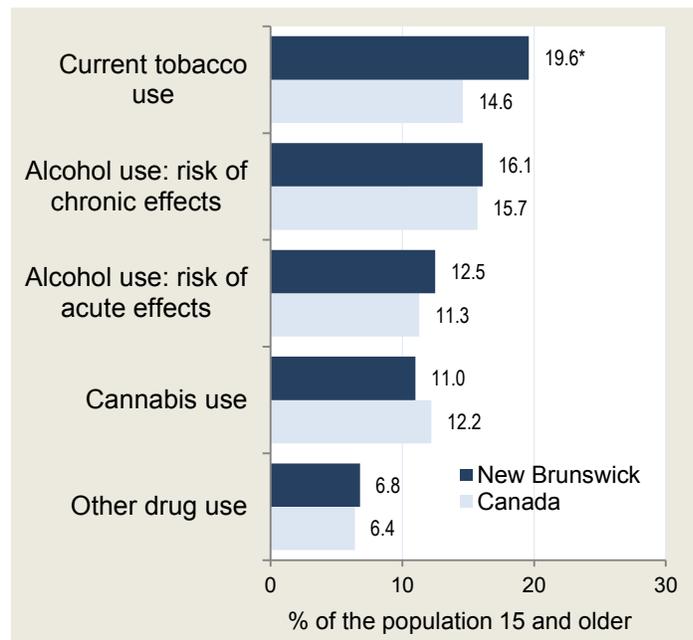
Common substance use disorders include those related to alcohol, tobacco, cannabis (marijuana), stimulants, hallucinogens and opioids. While the use of psychoactive and addictive substances is very common in Canada and New Brunswick, exactly how common and how severe are associated problems are difficult to determine. Population surveys are the best tools for measuring substance use and misuse, but people may not accurately report their use, especially if the substances are illegal [11]. As a result, the statistics presented here should be interpreted with caution.

Tobacco, the most widely used addictive substance, is the leading cause of premature death across Canada [12]. One in five New Brunswickers 15 or older smokes tobacco (20 per cent), a rate well above the national average of 15 per cent (Figure 6) [13]. Among daily smokers, 57 per cent are considered to be highly addicted, smoking within 30 minutes of waking up. One-half of all smokers (49 per cent) make at least one attempt to quit each year, and more than one-third make multiple attempts [13].

While most people who consume alcohol do so in moderation, alcohol is the substance that causes the most harm in Canada after tobacco [14]. In New Brunswick, 16 per cent of the population 15 and older consume more alcohol than recommended to address long-term (chronic) health risks such as liver disease and certain cancers, and 12 per cent exceed consumption guidelines for this psychoactive drug to reduce short-term (acute) effects such as injuries and overdoses (Figure 6) [13]. The rates are similar to the national average.

Cannabis is the most-used drug after tobacco and alcohol. Provincial prevalence of past-year

Figure 6: Selected indicators of problem substance use among the population 15 and older, New Brunswick and Canada, around 2013



Note: \* = Significantly different from the Canadian rate ( $p < 0.05$ ). Current tobacco use refers to daily and non-daily smoking. Risk of effects from alcohol use based on past-year alcohol use exceeding Canada's Low-Risk Alcohol Drinking Guidelines to reduce immediate and long-term alcohol-related harm. Cannabis use refers to any past-year use of cannabis or hashish. Other drug use refers to past-year use of club drugs, heroin, solvents or other illicit drugs (excluding cannabis) or non-medical use of prescription stimulants, sedatives or analgesics.

Source: Statistics Canada, Canadian Community Health Survey: Mental Health, 2012; Canadian Tobacco, Alcohol and Drugs Survey, 2013.

cannabis use, at 11 per cent, is similar to the national average (Figure 6) [7]. The provincial rate is essentially unchanged compared to a decade earlier (12 per cent in 2002) [7].

Provincial student drug use surveys show the level of cannabis use among middle and high school students remained stable between 2007 and 2012, around one in four teens reporting past-year use [15].

Use of other illicit drugs such as club drugs, heroin or solvents, or non-medical use of prescription stimulants, sedatives or analgesics (e.g., opioids), is less widespread than cannabis among New Brunswickers at some 7 per cent of the population 15 and older (Figure 6) [7].

## More than one in five New Brunswickers experiences an alcohol or drug use disorder in his or her lifetime

Excessive drinking and drug use can increase the risk of substance use disorders in addition to other health and safety problems. Survey data indicate that 137,800 New Brunswickers 15 and older – 23 per cent of the population or more than one in five – have a profile consistent with an alcohol or drug use disorder in their lifetime [7]. Five per cent – about 28,900 New Brunswickers – report symptoms consistent with alcohol or drug use disorder in the past year [7].

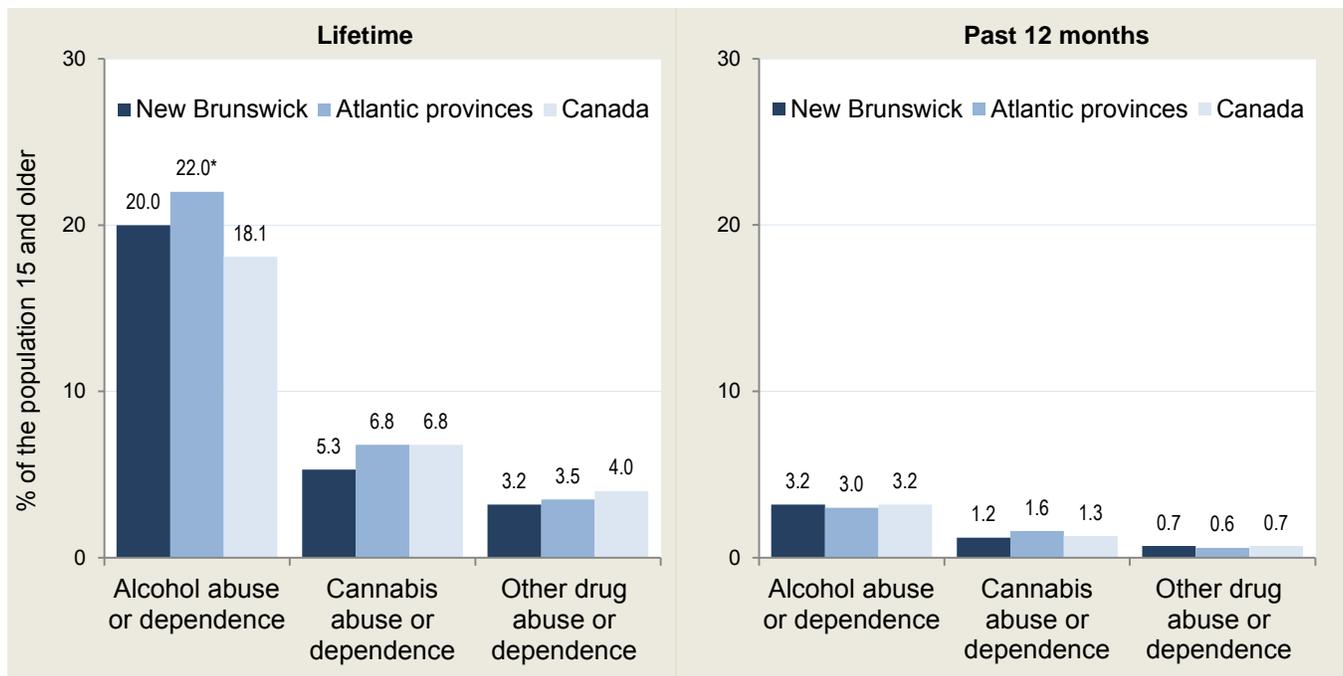
Alcohol abuse or dependence is the most common type of substance use disorder [1]. Twenty per cent of New Brunswickers meet

the criteria for alcohol abuse or dependence in their lifetime, with 3 per cent having measured symptoms in the past year (Figure 7) [7].

The proportion of New Brunswickers with measured cannabis abuse or dependence in their lifetime (more than 5 per cent) is almost double that of other drug abuse or dependence (3 per cent) (Figure 7) [7]. Individuals may move along a continuum of substance use problems over time. The rate of those demonstrating symptoms of cannabis use disorder in the past year is 1 per cent, slightly higher than that for other drugs.

Rates of alcohol and drug use disorders in New Brunswick are not significantly different from the national averages (Figure 7) [7].

**Figure 7: Lifetime and past-year prevalence of alcohol and drug use disorders among the population 15 and older, New Brunswick, Atlantic provinces and Canada, 2012**



**Note:** \* = Significantly different from the Canadian rate ( $p < 0.05$ ). Population 15 and older classified as meeting criteria for selected substance use disorders in their lifetime / in the 12 months prior to interview, based on a modified WHO Composite International Diagnostic Interview. Other drug abuse or dependence refers to use of club drugs, heroin, solvents or other illicit drugs (excluding cannabis) or non-medical use of prescription sedatives, analgesics or stimulants.

**Source:** Statistics Canada, Canadian Community Health Survey: Mental Health, 2012.

## Mental health and substance use disorders have a major impact on people's lives and on the health-care system

Good mental health is crucial to the overall well-being of individuals, families and society. A variety of factors can affect mental health. People with a mental or substance use disorder are significantly less likely to rate their mental health as positive, compared with those who do not have a mental health disorder [1]. At the same time, national survey data indicate 30 per cent of those with a mental or substance use disorder perceive their mental health as very good or excellent [1]. This may partly reflect the episodic nature of these disorders, since they can occur between periods of good health.

As with other health conditions, mental health and substance use disorders can result in help-seeking, diagnosis and treatment, including, in some cases, hospitalization. In New Brunswick, services for mental health and substance use disorders are estimated to cost at least \$360 per capita annually [16]. The largest components of costs are pharmaceuticals and hospitalization. In particular, mood disorders are the sixth leading cause of inpatient hospitalizations (excluding childbirth) – the cause of about 1,500 hospital admissions in the province each year [17].

Enhancing awareness and understanding about mental health and substance use disorders is important to help the more than one in five New Brunswickers facing these illnesses at some point in his or her life.



Care and support are available to help people in their recovery journey from mental health and substance use disorders.

### For more information

- New Brunswickers are encouraged to speak to a health-care professional or other trusted community member when emotional distress, substance use or a damaging behaviour occupies a central place in his or her life, or to call Tele-Care at **811** (24 hours a day).
- For information about mental health services in New Brunswick:  
[www.gnb.ca/0055/mental-health-e.asp](http://www.gnb.ca/0055/mental-health-e.asp).
- Addiction services in New Brunswick:  
[www2.gnb.ca/content/gnb/en/departments/health/Addiction.html](http://www2.gnb.ca/content/gnb/en/departments/health/Addiction.html).
- Canada's Low-Risk Alcohol Drinking Guidelines:  
[www.ccsa.ca/Eng/topics/alcohol/drinking-guidelines](http://www.ccsa.ca/Eng/topics/alcohol/drinking-guidelines).

### About the data

Measures of the use of health services for mood and anxiety disorders in New Brunswick were calculated using custom extracts of anonymized records from different provincial administrative databases, including the health insurance registry, physician billing and hospital discharge abstract databases, drawing on Canadian Chronic Disease Surveillance System (CCDSS) infrastructure and case definitions. New Brunswick has a universal single-payer health-care system that covers all physician and hospital services for residents. Factors such as coding/classification systems, clinical practices or billing methods may influence the rates that are estimated from administrative data.

Mood and anxiety disorders include depressive disorders, bipolar disorder, dysthymic disorder, generalized anxiety disorder, social anxiety disorder, adjustment disorders, obsessive-compulsive disorder, panic disorder, agoraphobia and specific phobias. The CCDSS may capture individuals

who do not meet all standard diagnostic criteria for mood and anxiety disorders but were assigned a diagnostic code based on clinical assessment. The data exclude care obtained exclusively from community-based or private settings.

Data on prevalence of mental and substance use disorders are drawn from the Canadian Community Health Survey (CCHS), a representative cross-sectional household survey compiled by Statistics Canada. Persons living on First Nations, residents of institutions and full-time members of the Canadian Armed Forces are excluded from the survey samples. Measures are based on a modified World Health Organization Composite International Diagnostic Interview, without clinical confirmation.

For key measures, 95 per cent confidence intervals were used to ascertain the degree of variability associated with the rates and help in reaching conclusions about whether the observed differences reflect a true pattern, rather than an effect driven by sampling variability, coincidence or chance.

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*Mental health and substance use disorders in New Brunswick* is available at [www.gnb.ca/health](http://www.gnb.ca/health).

Ce document est également disponible en français sur le site Web du Ministère de la Santé du Nouveau-Brunswick ([www.gnb.ca/santé](http://www.gnb.ca/santé)).

Images are courtesy of Centers for Disease Control and Prevention.