

Canada, the country with the second largest geographical area in the world, is divided into 3 territories and 10 provinces. It is a member of the Organisation for Economic Co-operation and Development (OECD) and the Group of Seven (G7). In 2019, the country's population was 37.4 million. In 2019, life expectancy at birth for women was 84.4 years, while for men it was 80.4 years.

The population grew by 29.6% between 1990 and 2015. In 1990, the structure was stationary for people under the age of 25, but in 2015 there was a trend toward aging and a predominantly stationary trend in terms of reduced fertility and mortality.

The economy is the 10th largest worldwide, fueled by Canada's abundant natural resources and trade. In 2013, the per capita gross domestic product (GDP) was US\$ 42,780. The country has evolved into a multicultural society with a highly diverse population.

THE DISEASE BURDEN AFFECTING MENTAL HEALTH

Mental, neurological, substance use disorders and suicide (MNSS) cause 24% of all disability-adjusted life years (DALYs) and 35% of all years lived with disability (YLDs).

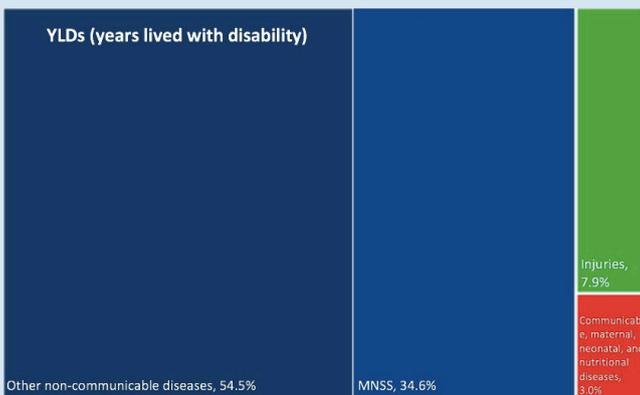


Figure 1. Distribution of YLDs with a focus on mental, neurological, substance use disorders and self harm (MNSS)

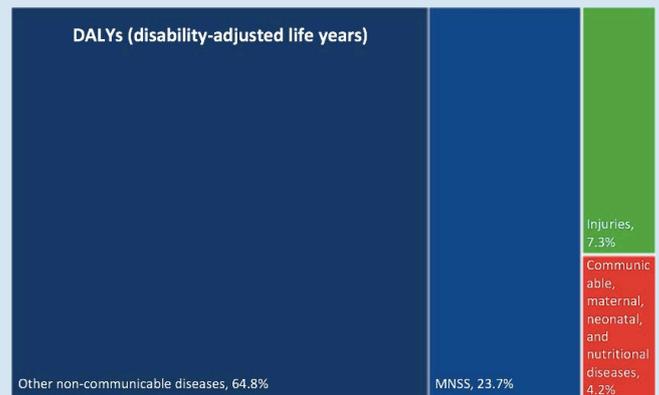


Figure 2. Distribution of DALYs with a focus on mental, neurological, substance use disorders and self harm (MNSS)

THE BURDEN AFFECTING MENTAL HEALTH ACROSS THE LIFETIME

Fig. 3 shows the changes in disease burden across age-groups. NCDs (in shades of blue) surpass 70% of the burden at 5 years old, and will remain the largest burden throughout the lifetime. MNSS account for a third to a half of the total burden between 10 and 50 years of age, the largest burden of all disease groups during this period.

Fig. 4 focuses exclusively on the burden resulting from MNSS. Until 5 years old, the MNSS burden is mostly due to autism (62%) and epilepsy (29%). Between 5 and 15 years old, the burden of conduct disorders, anxiety disorders, and headaches –including migraine and tension-type- gain prominence, with 20% of the MNSS burden each. Around 20 years of age, a pattern emerges that will remain stable throughout youth and adulthood: common disorders (anxiety, depression, self-harm and somatic symptom disorder) account for 45% of the burden, substance use disorders for 21% (8% due to alcohol), headaches 17%, and severe mental disorders (schizophrenia and bipolar disorders) around 8%. Of note, the burden of drug use disorders nears a fifth among those aged 20 to 34. The elderly suffer mostly from neurocognitive disorder due to Alzheimer's disease, which surpasses 50% of the burden around 80 years old and remains above 70% after 85 years old.



Figure 3. Burden of disease, by disease group and age

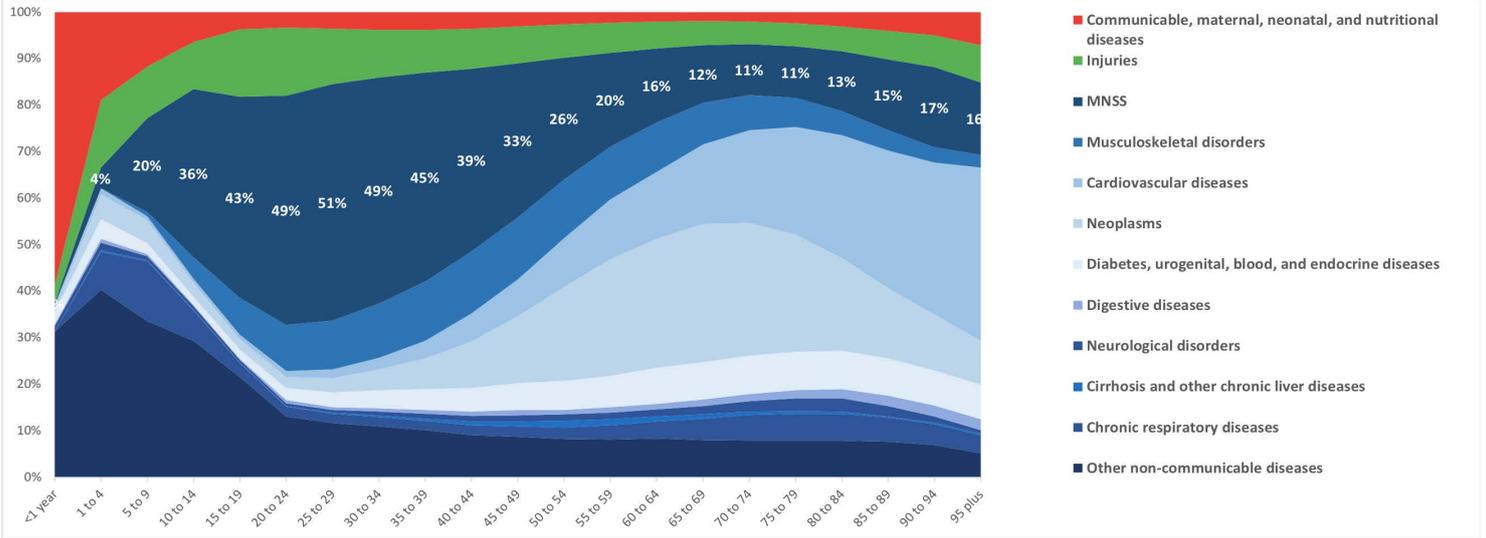
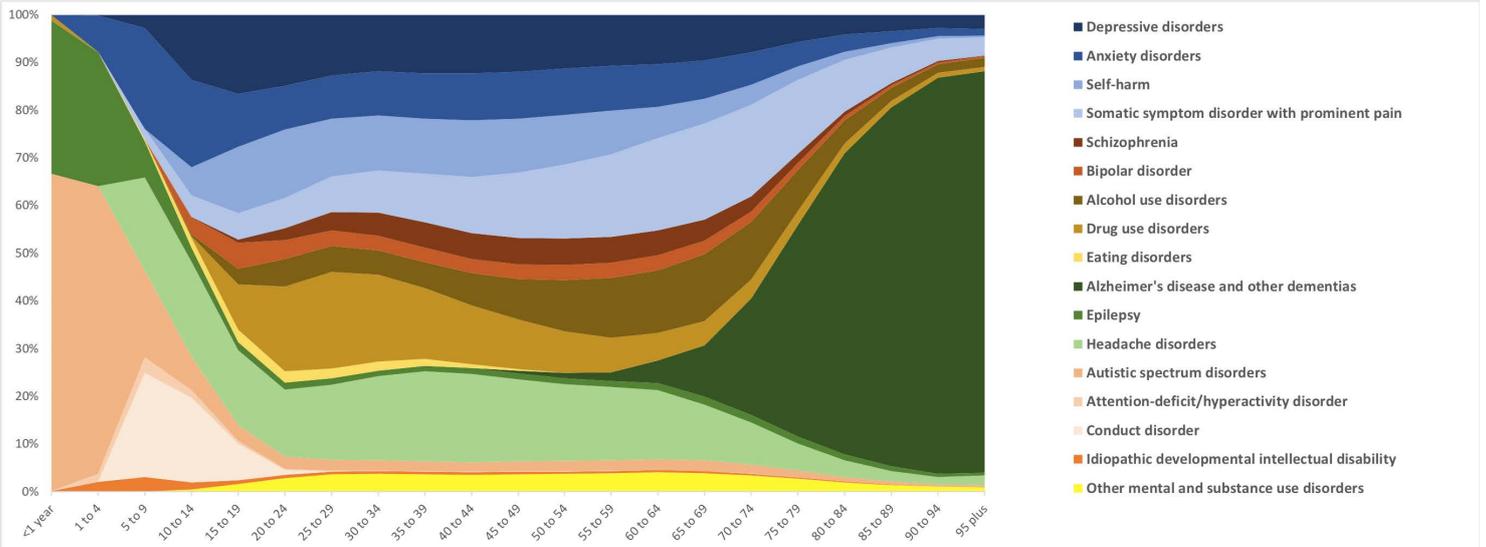


Figure 4. Burden of disease, by MNSS and age



THE BURDEN AFFECTING MENTAL HEALTH IN MEN AND WOMEN

The top three disorders in terms of disability-adjusted life-years –accounting for 35 to 50% of total MNSS burden- are not the same for men and women: While men are mostly affected by drug use disorders, self-harm and suicide, and headaches, women are mostly affected by headaches, depressive disorders and somatic symptom disorder with prominent pain.

Men		Women	
Disorder	DALYs per 100 000	Disorder	DALYs per 100 000
MNSS (all)	5095	MNSS (all)	5063
Drug use disorders	733	Headache disorders	1052
Self-harm and suicide	733	Depressive disorders	739
Headache disorders	498	Somatic symptom disorder with prominent pain	624
Somatic symptom disorder with prominent pain	488	Anxiety disorders	612
Alcohol use disorders	484	Drug use disorders	405

Conclusions:

Considering these estimates, primary care providers should receive training and tools to prioritize detection and treatment or referral for the common disorders highlighted above for each age-group and sex. For the severe disorders –such as autism, schizophrenia, bipolar disorder and Alzheimer’s– as well as for severe, comorbid, or complex presentations of other disorders –e.g. depression during pregnancy, substance use in public service professions, etc.– primary care providers and families need access to adequate supports, such as:

- Referral and/or supervision platforms that allow for continued treatment in the community, including the use of digital technology to increase access to distant geographically concentrated resources.
- Emergency, inpatient, and residential services for the management of high-risk acute situations and high-need patients. These services should be community-based as much as possible, including for crisis management, inpatient treatment in general hospitals, supported housing, and residential services.