

CHAPTER 6

EATING DISORDERS

Highlights

- **Approximately 3% of women will be affected by an eating disorder during their lifetime.**
- **Eating disorders affect girls and women more than boys and men.**
- **Factors believed to contribute to eating disorders include biological and personal factors as well as society's promotion of the thin body image.**
- **Eating disorders carry with them a high risk of other mental and physical illnesses that can lead to death.**
- **Since 1987, hospitalizations for eating disorders in general hospitals have increased by 34% among young women under the age of 15 and by 29% among 15-24 year olds.**

What Are Eating Disorders?

Eating disorders involve a serious disturbance in eating behaviour - either eating too much or too little - in addition to great concern over body size and shape.¹ This chapter addresses anorexia nervosa, bulimia nervosa and binge eating disorder (BED).

Eating disorders are not a function of will but are, rather, unhealthy eating patterns that “take on a life of their own.” The voluntary eating of smaller or larger portions of food than usual is common, but for some people this develops into a compulsion and the eating behaviours become extreme.

Individuals with **anorexia nervosa** refuse to maintain a minimally normal body weight, carry an intense fear of gaining weight and

have a distorted perception of the shape or size of their bodies.²

Individuals with **bulimia nervosa** undertake binge eating and then use compensatory methods to prevent weight gain, such as induced vomiting, excessive exercise or laxative abuse. They also place excessive importance on body shape and weight. In order for a diagnosis of bulimia nervosa to be made, the binge eating and compensatory behaviours must occur, on average, at least twice a week for 3 months.²

A diagnosis of **binge eating disorder (BED)** is made if the binge eating is not followed by some compensatory behaviour, such as vomiting, excessive exercise or laxative abuse. This disorder is often associated with obesity.

<u>Symptoms</u> <u>Eating Disorders</u>		
<u>General</u>		
Distorted perception of the shape or size of one's own body		
<u>Anorexia</u>	<u>Bulimia</u>	<u>Binge Eating Disorder (BED)</u>
<ul style="list-style-type: none"> • Resistance to maintaining body weight at or above a minimally normal weight for age and height with an intense fear of gaining weight or becoming fat, even though underweight. 	<ul style="list-style-type: none"> • Recurrent episodes of binge eating, accompanied by inappropriate compensatory behaviour in order to prevent weight gain, such as self-induced vomiting, use of laxatives, or excessive exercise. 	<ul style="list-style-type: none"> • Binge eating without compensatory behaviours, such as vomiting, excessive exercise or laxative abuse • Individuals are often obese.

How Common Are Eating Disorders?

It is estimated that 3% of women will be affected by eating disorders in their lifetime.³ Approximately 0.5% to 4% of women will

develop anorexia nervosa during their lifetime, and about 1 to 4% will develop bulimia.¹ BED affects about 2% of the population.⁴

Impact of Eating Disorders

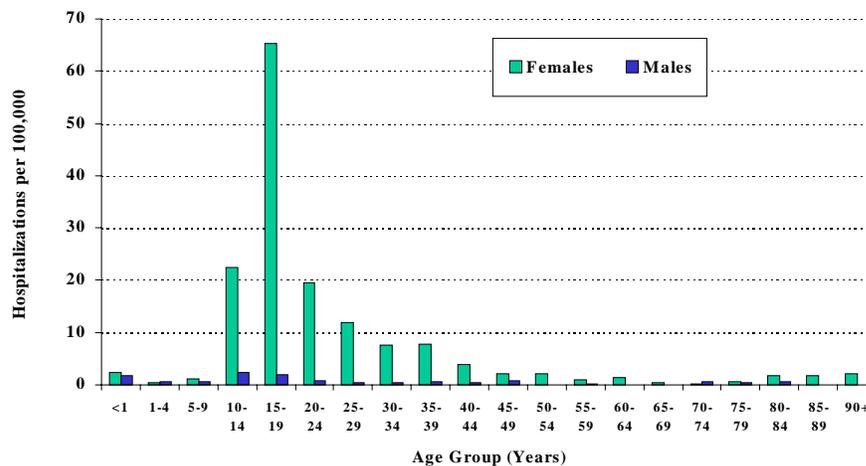
Who Is Affected by Eating Disorders?

Anorexia nervosa and bulimia predominantly affect young women. Some studies have found that young men represent only about 10% of individuals with the disorder.¹ An Ontario study found that 0.3% of men ages 15-64 and 2.1% of women had anorexia nervosa or bulimia.⁵ In most cases, BED starts during adolescence or young adulthood. Men

are more likely to be affected by BED than by other eating disorders.

Although most of the treatment of an eating disorder is provided in the community, occasionally hospitalization is needed. Hospitalization data provide a partial description of who is affected by severe eating disorders. The results must be viewed with caution, however, since this is only a subset of those with eating disorders.

Figure 6-1 Hospitalizations for eating disorders* in general hospitals per 100,000 by age group, Canada, 1999/2000.



* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

In 1999, women in all age groups had higher rates of hospitalization than men for eating disorders (Figure 6-1). Females accounted for 94% of all hospital admissions for eating disorders. Adolescents of both sexes between the ages of 10 and 19 years had the highest rates of hospitalization.

How Do Eating Disorders Affect People?

Individuals with anorexia and bulimia may recover after a single episode of the disorder. Others may have a fluctuating pattern of weight gain and relapse. Still others will continue to have issues with food and weight throughout their lives. A lifetime history of substance use disorders, drug or alcohol problems at the time of diagnosis and longer duration of symptoms before diagnosis are associated with poorer long-term outcomes.⁶

Individuals with anorexia and bulimia may develop serious physical problems such as heart conditions, electrolyte imbalance and kidney failure that can lead to death. Eating disorders may cause long-term psychological, social and health problems even after the acute episode has been resolved.⁷

Anorexic individuals are more susceptible to major depression, alcohol dependence and

anxiety disorders, either at the time of their illness or later in life.^{8,9} Suicide is also a possible outcome.

An eating disorder causes young people to miss school, work and recreational activities. The physical weakness associated with the illness also seriously affects their social interaction with friends and their involvement in life in general. Friends also have difficulty knowing how to react and how to help.

Families of individuals with eating disorders also live under great stress. They may blame themselves, feel anxious about their loved one's future, worry that the family member will die, and face the stigma associated with having a child with a mental illness. Parents especially experience the tension between their natural protective instinct to force healthy behaviours on the child (which can often make the situation worse) and the child's need to take control over his/her illness and health.

Stigma Associated with Eating Disorders

Anorexia nervosa and bulimia nervosa do not have the same public manifestation as other mental illnesses. In general, public embarrassment due to unusual behaviour is not an issue. Essentially, these illnesses are a private family affair. As a result, the stigma associated with eating disorders comes from the mistaken impression that others (parents

in particular) are to blame for the illness. The stigmatization isolates parents from their peers and other family members.

Individuals with BED who are obese must contend with negative societal attitudes toward obesity. These attitudes isolate them, and the loss of self-esteem exacerbates the illness.

Causes of Eating Disorders

Eating disorders are complex syndromes strongly associated with other mental illnesses, such as mood, personality and anxiety disorders. This suggests that the development of the disease results from a combination of biological, psychological and

social factors. In addition, the secondary effects of the maladaptive eating practices themselves likely contribute to the disorder. Steiger and Séguin have written an excellent in-depth discussion of the etiology of eating disorders.¹

Table 6-1 Summary of Possible Risk Factors for the Development of Eating Disorders

	<u>Eating-Specific Factors</u> (Direct Risk Factors)	<u>Generalized Factors</u> (Indirect Risk Factors)
Biological Factors	ED-specific genetic risk Physiognomy and body weight Appetite regulation Energy metabolism Gender	Genetic risk for associated disturbance Temperament Impulsivity Neurobiology (e.g., 5-HT mechanisms) Gender
Psychological Factors	Poor body image Maladaptive eating attitudes Maladaptive weight beliefs Specific values or meanings assigned to food, body Overvaluation of appearance	Poor self-image Inadequate coping mechanisms Self-regulation problems Unresolved conflicts, deficits, posttraumatic reactions Identity problems Autonomy problems
Developmental Factors	Identifications with body-concerned relatives, or peers Aversive mealtime experiences Trauma affecting bodily experience	Overprotection Neglect Felt rejection, criticism Traumata Object relationships (interpersonal experience)
Social Factors	Maladaptive family attitudes to eating, weight Peer-group weight concerns Pressures to be thin Body-relevant insults, teasing Specific pressures to control weight (e.g., through ballet, athletic pursuits) Maladaptive cultural values assigned to body	Family dysfunction Aversive peer experiences Social values detrimental to stable, positive self-image Destabilizing social change Values assigned to gender Social isolation Poor support network Impediments to means of self-definition

Treatment of Eating Disorders

Eating disorders can be treated and a healthy weight restored. Earlier diagnosis results in improved outcomes. Treatment is most effective if started in the early stages of the disorder. Therefore, routine assessment of teenaged girls for the early signs of an eating disorder can help identify those who would benefit from treatment.

Success of treatment depends on a comprehensive plan,¹⁰ including the following:

- Monitoring of physical symptoms
- Behavioural therapy
- Cognitive therapy
- Body image therapy
- Nutritional counselling
- Education
- Medication, if necessary

Treatment has changed dramatically over time.¹¹ The previous emphasis on long-term psychotherapy and potentially harmful medications has been replaced with nutritional stabilization as the initial approach.

Once the nutritional status has improved, then a variety of psychotherapy methods (cognitive/analytical, family and cognitive/behavioural) are used to improve functioning. Unfortunately, a recent review of psychological treatments of anorexia nervosa found that much more research needs to be done in this area.¹²

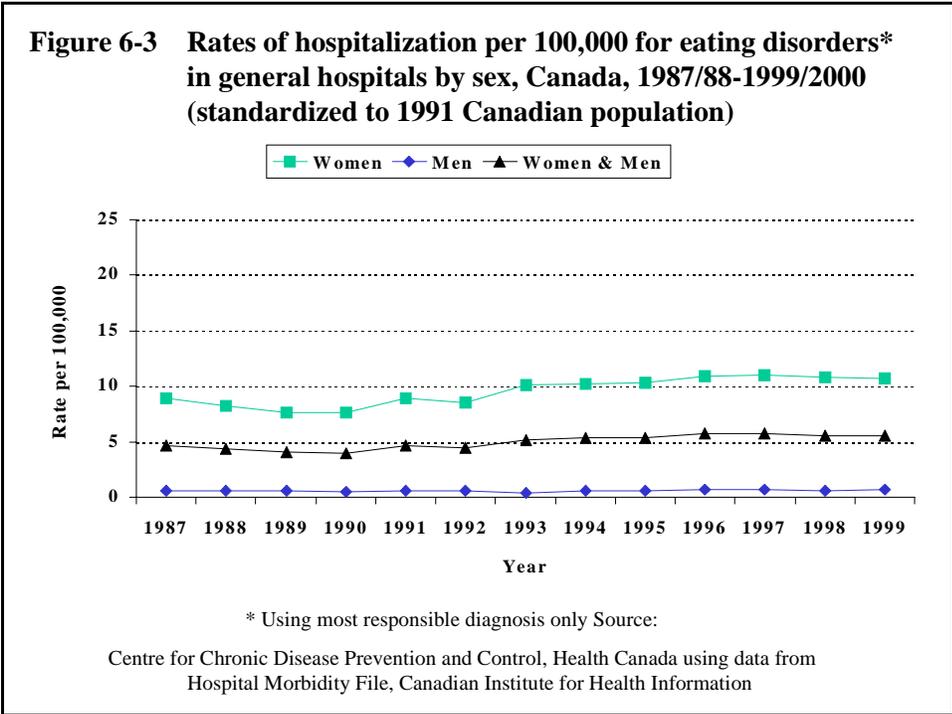
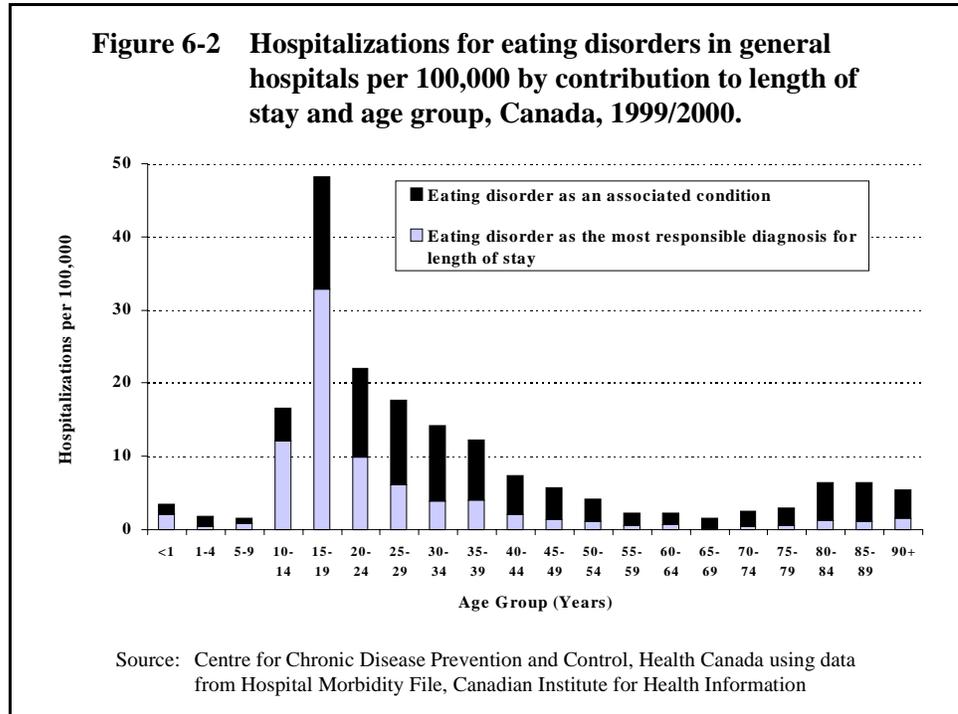
According to a recent review of the pharmacological treatment of eating disorders, numerous studies have shown that anti-depressants are useful in the treatment of bulimia nervosa.³ Some medications are also useful in treating BED. Unfortunately, studies have not identified any effective drugs in treating anorexia nervosa.

The treatment of coexisting mental illnesses, such as depression, anxiety and alcoholism, is essential.

For people who have been ill for many years with anorexia nervosa, brief time-limited admissions to hospital to stabilize weight loss and treat metabolic complications, combined with supportive psychotherapy, are more effective than coercive hospital treatment with overly ambitious goals.

Most treatment of eating disorders takes place in the community, but hospitalization data give some indication of serious disease in the population.

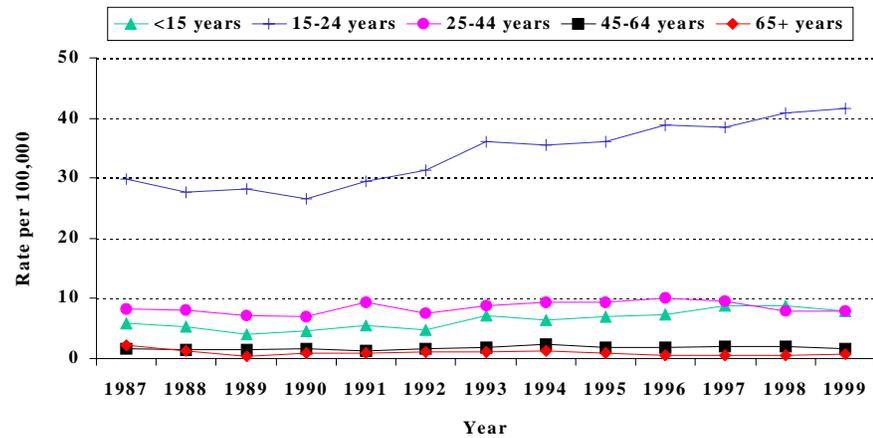
In 1999, among teenagers, an eating disorder was the diagnosis most responsible for determining the length of stay in hospital, likely associated with the life threatening biochemical changes in the body (Figure 6-2). Among older individuals, eating disorders were more likely to be an associated condition.



Rates of hospitalization for eating disorders among women increased by 20% between 1987 and 1999 (Figure 6-3). Rates among men remained stable.

From 1987 to 1999, women aged <15 years and 15-24 years increased (34% and 39%, respectively) (Figure 6-4). Rates in all other age groups remained stable.

Figure 6-4 Rates of hospitalization per 100,000 for eating disorders* in general hospitals among women by age, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)

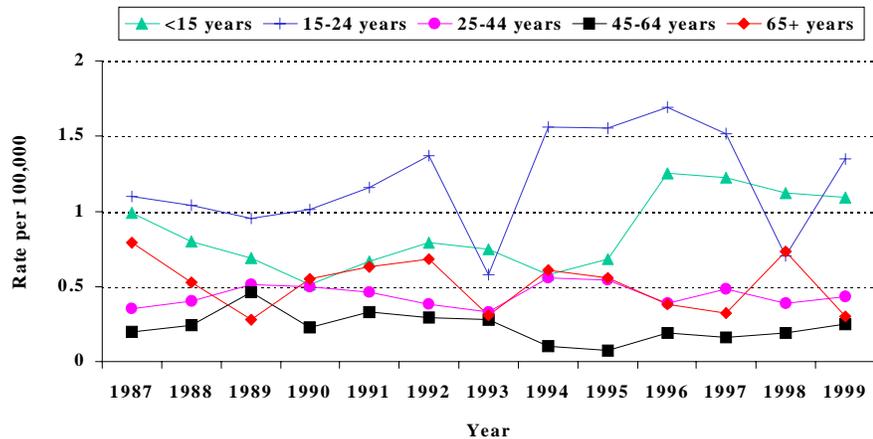


* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

Rates of hospitalization for eating disorders among men between 1987 and 1999 were very unstable because of small numbers (Figure 6-5).

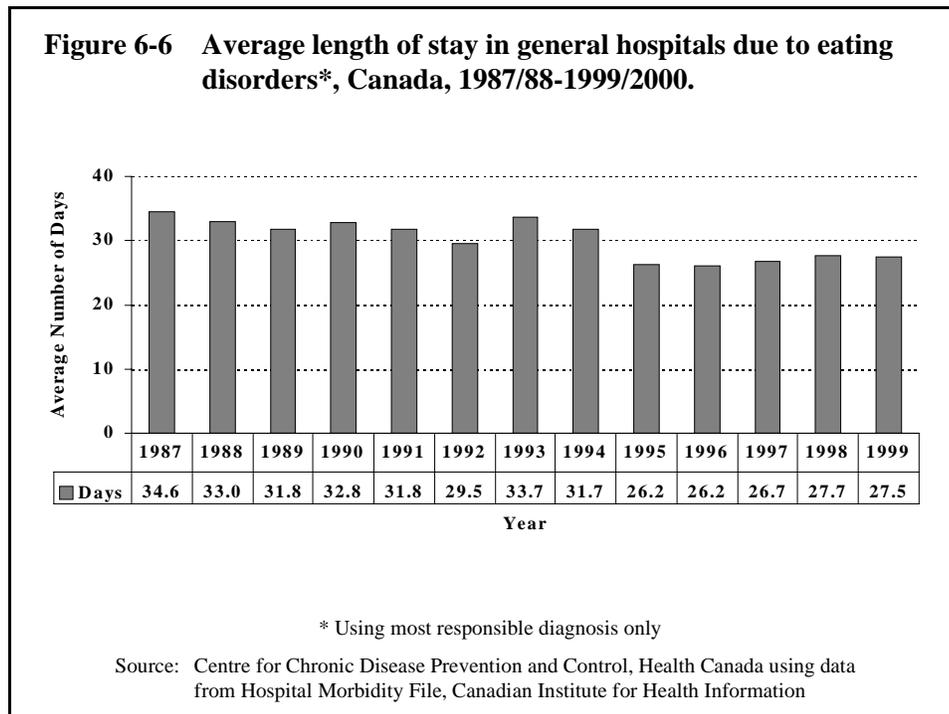
Figure 6-5 Rates of hospitalization per 100,000 for eating disorders* in general hospitals among men by age, Canada, 1987/88-1999/2000 (standardized to 1991 Canadian population)



* Using most responsible diagnosis only

Source: Centre for Chronic Disease Prevention and Control, Health Canada using data from Hospital Morbidity File, Canadian Institute for Health Information

The average length of stay in general hospitals due to eating disorders decreased in the mid-1990s and in 1999 was 27.5 days (Figure 6-6).



Discussion of Hospitalization Data

The hospitalization data support clinical findings that more women than men are affected by eating disorders. In general hospitals, 93% of individuals hospitalized for eating disorders are women. Hospitalization rates are very high among adolescents, consistent with the onset of eating disorders in this age group.

Among older individuals, eating disorders are more likely to be an associated, rather than primary, condition as the reason for the

length of stay in hospital. This may reflect the more severe complications associated with the condition that appear once the disease has been present for a period of time.

Rates of hospitalization for eating disorders in general hospital are increasing among young women. Whether this signals an increase in the disorder or rather an increase in the use of hospitalization in treating the disorder requires further research.

Future Surveillance Needs

Eating disorders are common among young women and they can lead to death. They are difficult to treat, but early diagnosis results in improved outcomes.

Existing data provide a very limited profile of eating disorders in Canada. The available hospitalization data needs to be complemented with additional data to fully monitor these disorders in Canada. Priority data needs include:

- Incidence and prevalence of each of the eating disorders by age, sex and other key variables (for example, socio-economic status, education and ethnicity).
- Impact of eating disorders on the quality of life of the individual and family.
- Access to and use of primary and specialist health care services and community programs.
- Stigma associated with eating disorders.
- Attitude toward body image in the general population.
- Access and use of public and private mental health services.
- Access and use of mental health services in other systems, such as schools.
- Treatment outcomes.
- Exposure to known or suspected risk and protective factors.

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