Eating Disorders

Eating disorders are serious and sometimes fatal illnesses that cause severe disturbances to a person's eating behaviors. Obsessions with food, body weight, and shape may also signal an eating disorder. Common eating disorders include binge eating disorder, bulimia nervosa, and, less common but very serious, anorexia nervosa.

Additional information about eating disorders can be found on the NIMH Health Topics page on Eating Disorders.

Definitions

Binge Eating Disorder

- **Binge eating disorder** is characterized by recurrent binge eating episodes during which a person feels a loss of control and marked distress over his or her eating. Unlike bulimia nervosa, binge eating episodes are not followed by purging, excessive exercise or fasting. As a result, people with binge eating disorder often are overweight or obese.

Bulimia Nervosa

- **Bulimia nervosa** is characterized by binge eating (eating large amounts of food in a short time, along with the sense of a loss of control) followed by a type of behavior that compensates for the binge, such as purging (e.g., vomiting, excessive use of laxatives, or diuretics), fasting, and/or excessive exercise. Unlike anorexia nervosa, people with bulimia can fall within the normal range for their weight. But like people with anorexia, they often fear gaining weight, want desperately to lose weight, and are intensely unhappy with their body size and shape.

Anorexia Nervosa

- **Anorexia nervosa** is characterized by a significant and persistent reduction in food intake leading to extremely low body weight in the context of age, sex, and physical health; a relentless pursuit of thinness; a distortion of body image and intense fear of gaining weight; and extremely disturbed eating behavior. Many people with anorexia see themselves as overweight, even when they are starved or severely malnourished.

Age of Onset

Based on diagnostic interview data from the National Comorbidity Survey Replication (NCS-R), median age of onset was 21 years-old for binge eating disorder and 18 years-old for both bulimia nervosa and anorexia nervosa.[1]

Prevalence of Eating Disorders in Adults

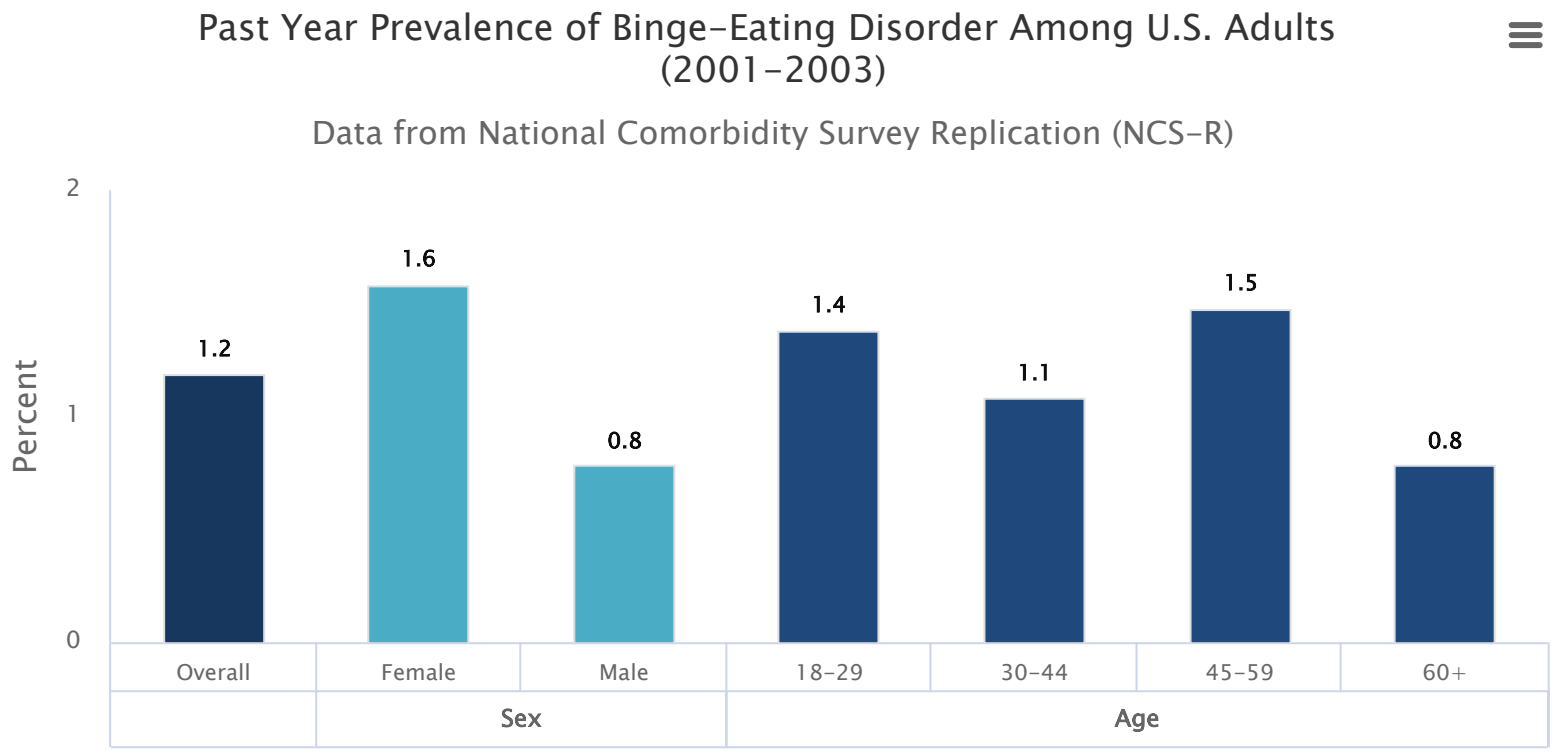
Based on diagnostic interview data from the NCS-R, the data below indicate the past year prevalence of each type of eating disorder among U.S. adults aged 18 and older. [1]

Binge Eating Disorder

- Figure 1 shows the past year prevalence of binge eating disorder in adults.
  - The overall prevalence of binge eating disorder was 1.2%.
  - Prevalence of binge eating disorder was twice as high among females (1.6%) than males (0.8%).

- Based on Sheehan Disability Scale associated with past year behavior, 62.6% of people with binge eating disorder had any impairment and 18.5% had severe impairment.
- The lifetime prevalence of binge eating disorder was 2.8%.

Figure 1

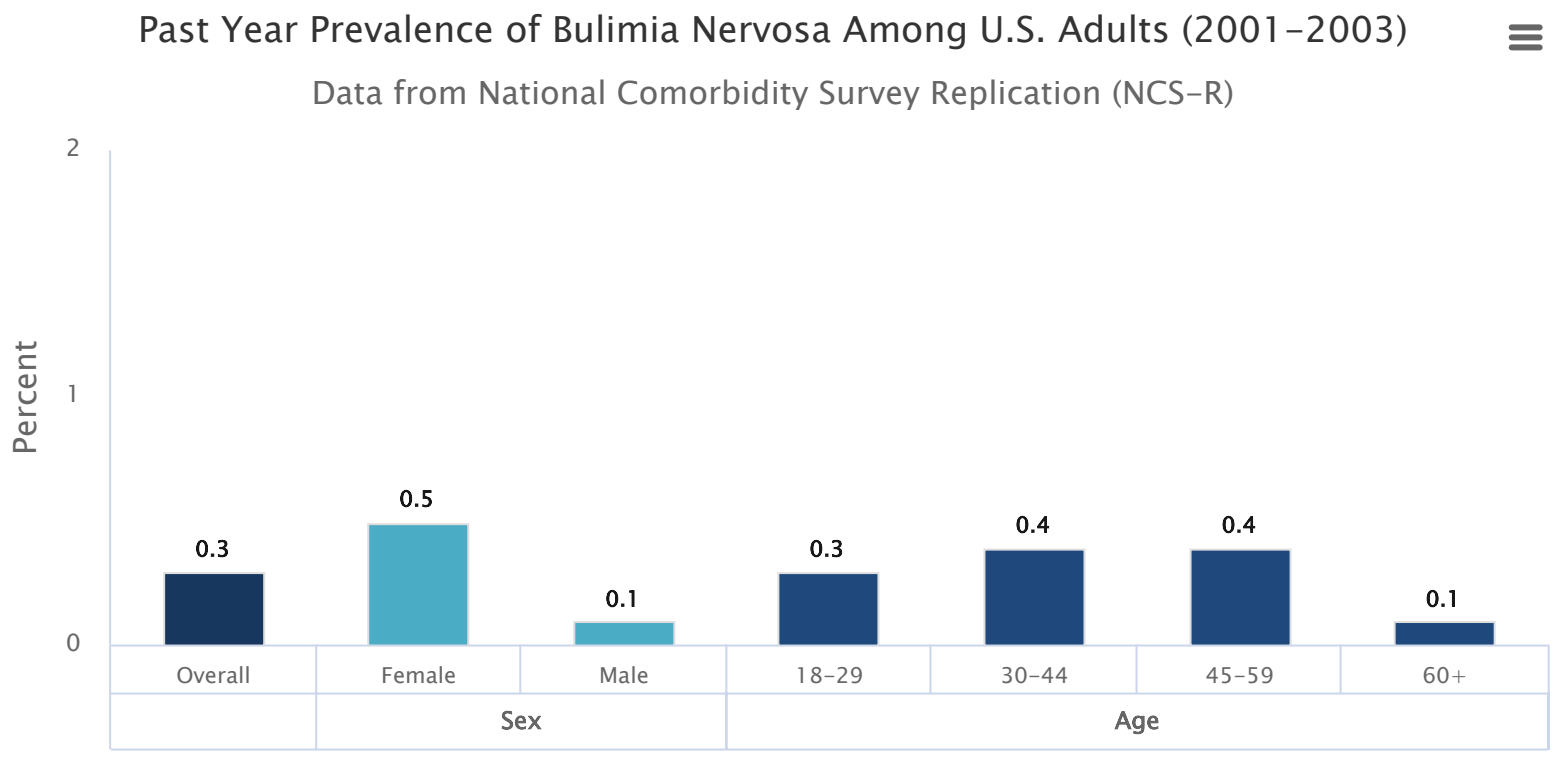


Bulimia Nervosa

- Figure 2 shows the past year prevalence of bulimia nervosa in adults.
  - The overall prevalence of bulimia nervosa was 0.3%.
  - Prevalence of bulimia nervosa was five times higher among females (0.5%) than males (0.1%).
- Based on Sheehan Disability Scale* associated with past year behavior, 78.0% of people with bulimia nervosa had any impairment and 43.9% had severe impairment.
- The lifetime prevalence of bulimia nervosa was 1.0%.

Menu

FIgure 2



Anorexia Nervosa

- The lifetime prevalence of anorexia nervosa in adults was 0.6%.
- Lifetime prevalence of anorexia nervosa was three times higher among females (0.9%) than males (0.3%).
- A past year prevalence estimate for anorexia nervosa was not generated in the NCS-R sample of respondents.[1]

Co-morbidity with Other Mental Disorders in Adults

- Based on diagnostic interview data from the NCS-R, Table 1 shows the lifetime co-morbidity of eating disorders with core mental disorders in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).
  - More than half (56.2%) of respondents with anorexia nervosa, 94.5% with bulimia nervosa, and 78.9% with binge eating disorder met criteria for at least one of the core DSM-IV disorders assessed in the NCS-R.
  - All three eating disorders had the highest comorbidity with any anxiety disorder.

Table 1

Lifetime Co-morbidity of Eating Disorders with Other Core Disorders Among U.S. Adults
Data from National Comorbidity Survey Replication (NCS-R)

	Anorexia Nervosa (%)	Bulimia Nervosa (%)	Binge-Eating Disorder (%)
Any Anxiety Disorder	47.9	80.6	65.1
Any Mood Disorder	42.1	70.7	46.4
Any Impulse Control Disorder	30.8	63.8	43.3
Any Substance Use Disorder	27.0	36.8	23.3
Any Disorder	56.2	94.5	78.9

Treatment of Eating Disorders in Adults

- Based on diagnostic interview data from the NCS-R, Table 2 shows the lifetime treatment of eating disorders among U.S. adults 18 and older.
  - Approximately one-third (33.8%) of respondents with anorexia nervosa, 43.2% with bulimia nervosa, and 43.6% with binge eating disorder sought treatment specifically for their eating disorder.
  - Females with bulimia nervosa and binge eating disorder sought treatment more than males. However, males with anorexia nervosa sought treatment more often than females.
  - A majority of respondents with anorexia nervosa, bulimia nervosa, and binge eating disorder (50.0%–63.2%) received treatment for emotional problems at some time in their lives (data not shown).

Menu

Table 2

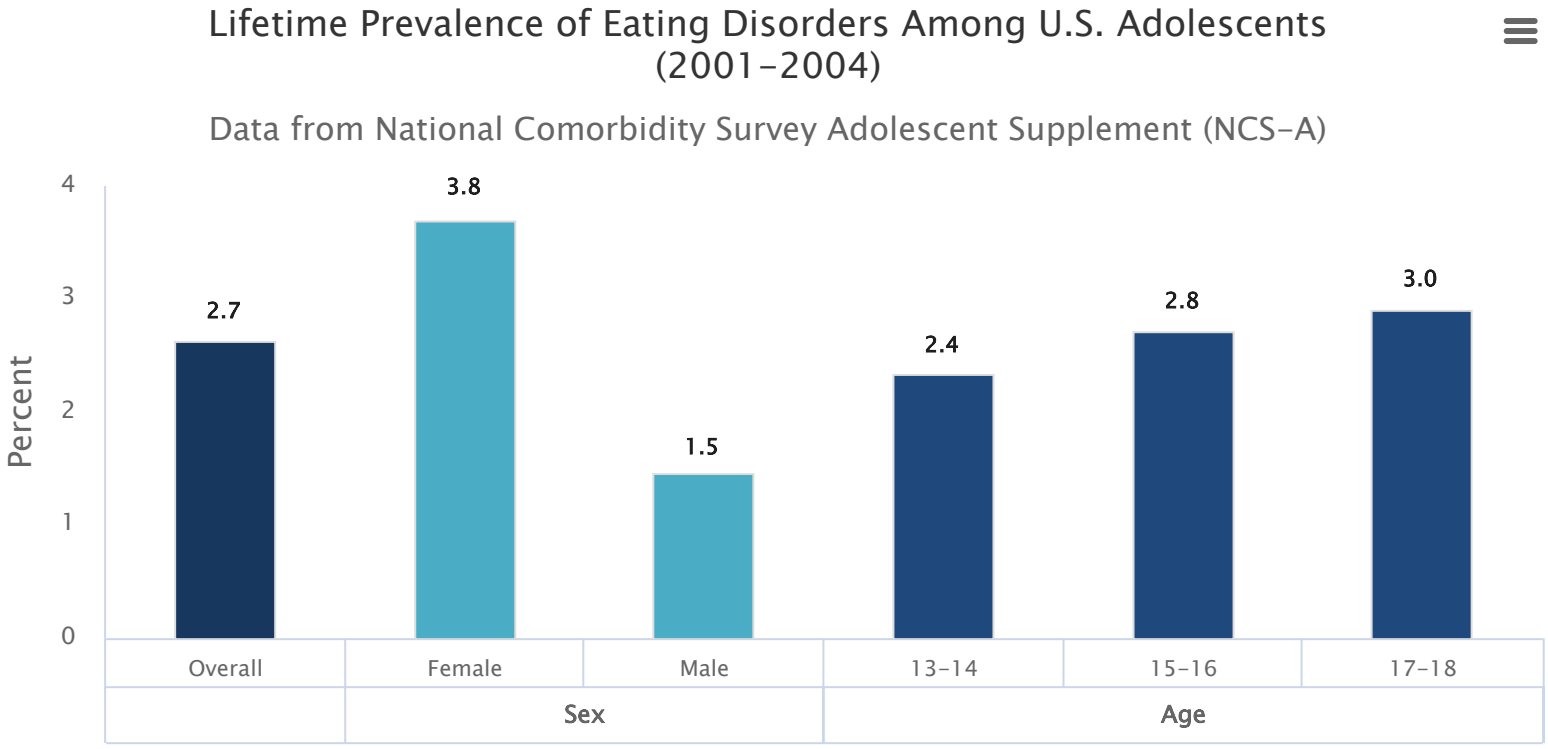
Lifetime Treatment of Eating Disorders Among U.S. Adults Data from National Comorbidity Survey Replication (NCS-R)

	Anorexia Nervosa (%)	Bulimia Nervosa (%)	Binge-Eating Disorder (%)
Total	33.8	43.2	43.6
Female	29.8	47.0	50.8
Male	50.2	29.1	28.9

Prevalence of Eating Disorders in Adolescents

- Based on diagnostic interview data from National Comorbidity Survey Adolescent Supplement (NCS-A), Figure 3 shows the lifetime prevalence of eating disorders among U.S. adolescents aged 13 to 18 years.[2]
  - The lifetime prevalence of eating disorders was 2.7%.
  - Eating disorders were more than twice as prevalent among females (3.8%) than males (1.5%).
  - Prevalence increased modestly with age.
  - In the NCS-A, eating disorders included anorexia nervosa, bulimia nervosa, and binge eating disorder.

Figure 3



Data Sources

References

1. Hudson JI, Hiripi E, Pope HG Jr, Kessler RC. The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biol Psychiatry.* 2007 Feb 1;61(3):348-58. PMID: 16815322
2. Merikangas KR, He JP, Burstein M, Swanson SA, Avenevoli S, Cui L, Benjet C, Georgiades K, Swendsen J. Lifetime prevalence of mental disorders in U.S. adolescents: results from the National Comorbidity Survey Replication--Adolescent Supplement (NCS-A). *J Am Acad Child Adolesc Psychiatry.* 2010 Oct;49(10):980-9. PMID: 20855043

Statistical Methods and Measurement Caveats

This webpage presents data from the following sources.

National Comorbidity Survey Replication (NCS-R)

Diagnostic Assessment and Population:

- The NCS-R is a nationally representative, face-to-face, household survey conducted between February 2001 and April 2003 with a response rate of 70.9%. DSM-IV mental disorders were assessed using a modified version of the fully structured World Health Organization Composite International Diagnostic Interview (WMH-CIDI), a fully structured lay-administered diagnostic interview that generates both International Classification of Diseases, 10th Revision, and DSM-IV diagnoses. The DSM-IV criteria were used here. Participants for the main interview totaled 9,282 English-speaking, non-institutionalized, civilian respondents. Eating disorders were assessed in a subsample of 2,980 respondents. The Sheehan Disability Scales (SDS) assessed disability in work role performance, household maintenance, social life, and intimate relationships on 0–10 scales. The NCS-R was led by Harvard University.

Survey Non-response:

- In 2001-2002, non-response was 29.1% of primary respondents and 19.6% of secondary respondents. Reasons for non-response to interviewing include: refusal to participate (7.3% of primary, 6.3% of secondary); respondent was reluctant- too busy but did not refuse (17.7% of primary, 11.6% of secondary); circumstantial, such as intellectual developmental disability or overseas work assignment (2.0% of primary, 1.7% of secondary); and household units that were never contacted (2.0%).
- For more information, see PMID: 15297905.

National Comorbidity Survey Adolescent Supplement (NCS-A)

Diagnostic Assessment and Population:

- The NCS-A was carried out under a cooperative agreement sponsored by NIMH to meet a request from Congress to provide national data on the prevalence and correlates of mental disorders among U.S. youth. The NCS-A was a nationally representative, face-to-face survey of 10,123 adolescents aged 13 to 18 years in the continental United States. The survey was based on a dual-frame design that included 904 adolescent residents of the households that participated in the adult U.S. National Comorbidity Survey Replication and 9,244 adolescent students selected from a nationally representative sample of 320 schools. The survey was

fielded between February 2001 and January 2004. DSM-IV mental disorders were assessed using a modified version of the fully structured World Health Organization Composite International Diagnostic Interview.

Survey Non-response:

- The overall adolescent non-response rate was 24.4%. This is made up of non-response rates of 14.1% in the household sample, 18.2% in the un-blinded school sample, and 77.7% in the blinded school sample. Non-response was largely due to refusal (21.3%), which in the household and un-blinded school samples came largely from parents rather than adolescents (72.3% and 81.0%, respectively). The refusals in the blinded school sample, in comparison, came almost entirely (98.1%) from parents failing to return the signed consent postcard.
- For more information, see PMID: 19507169.

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