Untreated eating disorders have adverse and life-threatening consequences. Primary care providers are in a unique position to detect the onset of eating disorders and provide treatment recommendations in the early stages, increasing the patient’s chances for a full recovery.

**THIS BRIEF:**
- Reviews common eating disorder signs and symptoms
- Shares recommended examination assessments
- Identifies when to refer to the Center for the Treatment of Eating Disorders
- Provides new treatment research from the experts at Children’s
- Describes ongoing monitoring for patients with an eating disorder
EATING DISORDERS 101

Eating disorders are treatable medical illnesses that feature disturbances in eating behavior and weight regulation. The most common types of eating disorders include anorexia nervosa, bulimia nervosa, binge eating disorder, and the newly recognized avoidant restrictive food intake disorder, also known as ARFID.

Eating disorders often coexist with other conditions such as depression or anxiety disorders. Eating disorders manifest with physical, psychological, and behavioral signs and symptoms. Early detection and treatment provide the best chance at recovery.

COMMON EATING DISORDER SIGNS AND SYMPTOMS

Given that eating disorders typically increase in severity over time, early detection and diagnosis greatly improve the likelihood of full recovery. A best practice recommended by the American Academy of Pediatrics is to screen for eating disorders during annual check-ups or pre-participation sports examinations. If one or more symptoms are present, additional measures should be taken to evaluate the cause, and referral to a specialist is appropriate.

Physical Symptoms
- Unhealthy weight loss (more than 15% of body weight or moderate to significant weight loss in a short span of time)
- Failure to achieve expected height or weight
- Delayed or interrupted pubertal development
- Abnormally slow heart rate or abnormally low blood pressure
- Primary or secondary amenorrhea
- Weakness or muscle wasting
- Loss of hair from the scalp or fine, soft hair (lanugo) on the body
- Dehydration or electrolyte abnormalities (especially potassium or phosphorous)
- Decreased body temperature or cold intolerance
- Erosion of dental enamel
- Fractures, osteopenia or osteoporosis

Behavioral Symptoms
- Unusual eating habits such as eating tiny portions, eating in secret, hiding food, or excluding entire food groups
- Inability to eat certain foods based on texture or smell
- Disappearing after eating, often to the bathroom
- Vomiting, laxative or diuretic use
- Intense fear of being or becoming fat
- Depression and low self-esteem
- Over-exercising
- Withdrawing from family and friends
- Perfectionism
- Avoiding situations with food
- Inadequate food intake or refusal to eat
- Excess focus on diet and “healthy eating”

95% of patients with an eating disorder are between the ages of 12 and 25.

Source: Substance Abuse and Mental Health Services Administration, The Center for Mental Health Services, offices of the U.S. Department of Health and Human Services
RECOMMENDED EXAMINATION ASSESSMENTS

If you're concerned a patient might be showing signs or symptoms of an eating disorder, here are some recommended physical and behavioral assessments that can help establish a baseline.

**History Assessment**
- Current weight and amount of weight loss or change
- Nutritional status
- Methods of weight control
- Dietary intake and exercise
- Presence of compensatory behaviors such as vomiting, exercise, dieting, fasting, and using or misusing insulin, diet pills, laxatives, diuretics or ipecac
- Menstrual status
- Growth and development history

**Physical Assessment**
- Height, weight, BMI, and BMI percentile / comparison to growth charts
- Supine and standing blood pressures and heart rates
- Temperature (looking for hypothermia)
- Respiratory rate

**Baseline Labs Assessment**
- CBC with differential
- Comprehensive metabolic panel
- Magnesium and phosphorous levels
- TSH
- Vitamin D
- Prealbumin
- Pregnancy test (if applicable)
- ECG (looking for bradycardia, arrhythmia, or prolonged QTc)

**WHEN TO REFER TO AN EATING DISORDERS SPECIALIST**

Referrals and consults are available at Center for the Treatment of Eating Disorders. Give us a call if you have questions about a patient. Referral to an eating disorders program is appropriate if one or more of the following criteria are met.

- A family member is concerned
- You as a provider are concerned
- Unexplained weight loss with a negative medical work-up
- Marked weight fluctuations
- Selective eating resulting in malnutrition
- Evidence of purging or compulsive exercise

**HOSPITAL ADMISSION CRITERIA**

In more severe cases that meet the criteria below, immediate inpatient hospitalization is recommended. At Children's St Paul Hospital, the Goven Family Eating Disorders and Nutrition Stabilization Unit is designed to meet this need.

- Weight <75% of estimated healthy body weight or rapid weight loss even if weight is not less than 75% below the normal range
- Heart rate <50 bpm in children and adolescents or <40 bpm in adults
- Orthostatic hypotension with an increase in pulse of >20 bpm or a drop in blood pressure of >10-20 mm Hg from supine to standing
- Blood pressure <80/50 in children and adolescents or <90/60 in adults
- Hypokalemia or other electrolyte imbalances including hypophosphatemia or hypomagnesemia
- Refusal to eat
- Dehydration
- Hypothermia
- Symptomatic hypoglycemia
- Uncontrolled vomiting or hematemesis
- Cardiac arrhythmia
- Syncope
- Lack of improvement or worsening despite outpatient treatment
- Significant medical complications or co-morbidities that are complicating diagnosis or treatment (e.g. abdominal pain)

**NEW TREATMENT RESEARCH FROM THE EXPERTS AT CHILDREN’S**

We're currently working with Dr. Daniel Le Grange, a leader in eating disorder research, on our Clinical Outcomes Evaluation Project to compare the effectiveness of family-based treatment (FBT) versus cognitive behavioral therapy enhanced (CBT-E). We are also tracking treatment outcomes for all patients and hope to identify markers that could indicate which treatment would be best for each individual patient.

**EATING DISORDERS**

are brain disorders, not a choice or a sign of poor parenting

**ONE IN 10 PEOPLE**

with an eating disorder ever actually get treatment.

We’re Tracking Outcomes

The Center for the Treatment of Eating Disorders tracks FBT and CBT-E treatment response rates and has a 70-80% success rate.

Center for the Treatment of Eating Disorders

Inpatient Care
Children’s St. Paul Hospital
345 North Smith Avenue
St. Paul, MN 55102

Outpatient Clinic
910 Medical Building
910 E. 26th Street, Suite 410
Minneapolis, MN 55404

Clinic appointments:
612-813-7179

Children’s Physician Access

24/7 assistance
- referrals
- consultations
- admissions

612-343-2121
866-755-2121

Children’s Center for the Treatment of Eating Disorders

The Center for the Treatment of Eating Disorders provides evidence-based inpatient and outpatient treatment for children, adolescents and young adults with eating disorders and nutritional concerns. We are the only hospital-based program in the Twin Cities to offer immediate access to medical stabilization for patients experiencing acute problems related to eating disorders or malnutrition.

Everyone on our team, including psychiatrists, psychologists, hospitalists, registered dietitians, and social workers has special training in motivational strategies and core treatments. We prioritize outpatient treatments when appropriate to keep patients at home and in school, helping them make changes in familiar environments.

Ongoing Monitoring for Patients with an Eating Disorder

Our physicians collaborate with referring providers during a patient’s treatment in order to keep the provider updated on clinical status. When treatment is completed, we will notify the primary provider about the care plan going forward. Ongoing medical monitoring during active treatment includes:

- Regular medical assessments with physical exams, vital signs, labs to include electrolytes, magnesium, and phosphorous, and ECG if needed.

Our physicians are available by phone 24/7 for any questions about specific patients or eating disorders in general. The on-call eating disorder specialists may be reached by calling Children’s Physician Access at 612-343-2121.