

# Basic CFS Overview

## CHRONIC FATIGUE SYNDROME

### Who is at risk?

- Chronic fatigue syndrome (CFS) affects more than 1 million adults in the United States, and an unknown number of children.
- People of every age, gender, ethnicity and socioeconomic group can have CFS.
- CFS affects women at 4 times the rate of men.
- Research indicates that prevalence is highest in people aged 40-59.
- Although CFS is significantly less common in children than in adults, children can develop the illness, particularly in adolescence.

### What are the symptoms of CFS?

- CFS is characterized by medically or psychiatrically unexplained fatigue that lasts at least 6 months, that is not the result of ongoing exertion, that is not substantially relieved by rest and that causes a substantial reduction in daily activities.
- In addition to fatigue, CFS includes 4 or more characteristic symptoms: postexertional malaise (relapse of symptoms after physical or mental exertion); unrefreshing sleep; substantial impairment in memory/concentration; muscle pain; pain in multiple joints; headaches of a new type, pattern or severity; sore throat; and tender neck or armpit lymph nodes.
- Symptoms and their consequences can be severe. CFS can be as disabling as multiple sclerosis, lupus, rheumatoid arthritis, congestive heart failure and similar chronic conditions. Symptom severity varies from patient to patient.

### How is CFS diagnosed?

- There are no physical signs that identify CFS.
- There are no diagnostic laboratory tests for CFS, so it is a diagnosis of exclusion.
- People who suffer the symptoms of CFS must be carefully evaluated by a physician because many treatable medical and psychiatric conditions are difficult to distinguish (for instance, mononucleosis, multiple sclerosis, various cancers, depression, bipolar disorder).
- Research conducted by the Centers for Disease Control and Prevention (CDC) indicates that less than 20% of CFS patients in this country have been diagnosed.

### How is it treated?

- Since there is no known cure for CFS, treatment is aimed at symptom relief and improved function. A combination of drug and non-drug therapies are usually prescribed.
- No single therapy exists that helps all CFS patients.

- Lifestyle changes, including prevention of overexertion, reduced stress, dietary restrictions, gentle stretching and nutritional supplementation, are frequently recommended.
- Carefully supervised physical therapy may also be part of treatment for CFS. However, CFS can be exacerbated by physical activity. A different approach to exercise and activity management is recommended to avoid overactivity and to prevent deconditioning.
- Although health professionals may hesitate to give patients a diagnosis of CFS for various reasons, it is important to receive an appropriate and accurate diagnosis to guide treatment and evaluation.
- Delays in diagnosis and treatment may be associated with poorer long-term outcomes. For example, the CDC's research has shown that those who have CFS for two years or less are more likely to improve. It is not known if early intervention is responsible for this more favorable outcome; however, the longer a person is ill before diagnosis, the more complicated the course of the illness appears to be.

### Do CFS patients recover?

- CFS affects each individual differently. Some people with CFS remain homebound and others improve to the point that they can resume work and other activities, even though they continue to experience symptoms.
- Recovery rates for CFS are unclear. Improvement rates varied from 8% to 63% in a 2005 review of published studies, with a median of 40% of patients improving during follow-up. However, full recovery from CFS may be rare, with an average of only 5% to 10% sustaining total remission.

### What causes CFS?

- Despite an intensive, nearly 20-year search, the cause of CFS remains unknown. Many different infectious agents, physiologic causes and psychological factors have been considered, and the search continues.
- CFS is not caused by depression, although the two illnesses often coexist. Many patients with CFS do not have any psychiatric disorder.
- Much of the ongoing research into a cause has centered on the roles the immune, endocrine, and nervous systems may play in CFS. More recently, interactions among these factors are under evaluation.
- Genetic and environmental factors may play a role in developing and/or prolonging the illness, although more research is needed to confirm this. Researchers are applying cutting-edge genomic and proteomic tools to understand the origins and pathogenesis of CFS.