

CHRONIC FATIGUE SYNDROME

WHAT IS THE PUBLIC HEALTH ISSUE?

- Chronic fatigue syndrome (CFS) affects about 800,000 Americans, mostly women.
- CFS is a long-lasting, debilitating disorder, yet fewer than 20% of those affected receive medical care.
- CFS appears to disproportionately affect racial/ethnic minorities, socially disadvantaged persons, and rural populations, but knowledge in these areas is incomplete.
- Despite more than a decade of research, the cause and pathophysiology of CFS remain unknown and no diagnostic tests have been developed, so control and treatment strategies have yet to be developed.

WHAT HAS CDC ACCOMPLISHED?

CDC's CFS program aims to develop control and prevention measures for CFS by

1. Estimating the magnitude of CFS as a public health problem.
2. Determining if CFS represents a single illness or a common response to a variety of physiologic and psychologic insults.
3. Defining the natural history, clinical parameters, and pathophysiology of CFS.
4. Identifying etiologic agents, risk factors, and diagnostic markers associated with CFS.
5. Providing current and appropriate technical information on CFS to various audiences.

An integrated approach (i.e., applying cutting-edge epidemiologic, clinical, and laboratory methods to studies of representative US populations) is used to achieve this goal.

Example of Program in Action

CDC has published studies on the burden of disease and its occurrence in the United States, the natural history and clinical parameters of CFS in persons identified with the illness, and the use of healthcare and medications by these persons. In 2003, CDC conducted a clinical evaluation study of 227 subjects with CFS and other fatiguing illnesses identified from the general population of Wichita, Kansas. No integrated study of this magnitude to elucidate the pathophysiology of CFS had been conducted before. CDC has developed a state-of-the-art molecular epidemiology laboratory program including the use of gene chip microarray assays.

WHAT ARE THE NEXT STEPS?

CDC is beginning a major surveillance study of CFS in various racial/ethnic groups of defined metropolitan, urban, and rural populations to identify the causes, risk factors, diagnostic markers, natural history, and economic impact of CFS. CDC will continue to lead international efforts to derive and evaluate an empiric case definition for CFS by analyzing data from 31,000 patients in 15 countries. CDC will complete analysis of data from the Wichita clinical study, which was designed to evaluate neuroendocrine and immune function, sleep characteristics, cognitive function, and psychiatric co-morbidity of persons identified from the community with CFS. CDC will also continue to develop plans for a national registry of CFS patients and to support and expand national efforts to train primary healthcare providers in the diagnosis and management of CFS.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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