The Epidemiology of Christmas Fever

Christmas Fever is a disease, though its annual appearance and widespread incidence make it seem a normal seasonal condition.

The disease appeared suddenly in the Near East about 2,000 years ago. Early outbreaks were sporadic and localized. Early spread was around the Mediterranean, becoming regular and epidemic. Later it spread into Europe, and then the rest of the world brought the disease to its present pandemic proportions.

As new populations were affected, mutations apparently occurred in the original virus. In some cases, the mutant viruses have remained relatively population specific (e.g. Pinata syndrome in sections of the Mediterranean subgroup), but in many cases the original mutant viruses have proved stronger than the original strain and have become worldwide. In this connection it should be noted that concurrent infection with more than one strain of the Christmas virus is not unusual.

Description of the Disease

**Identification:** An acute illness, usually febrile, varying in early symptomatology, but usually with compulsive buying and almost always characteristic color fixations in the red-green spectrum. Presumptive diagnosis may be made when the above are observed alone or in conjunction with sub-clinical signs such as eating large amounts of candy. If the patient is seen during the acute stage, a marked tendency to sing will be observed. A predisposition to buy trees will also be noted. Radical changes in behavior in some cases may be observed in the direction of volubility. Depression is rarely noted. Clinical cases exceed inapparent infections at least several hundred-fold.

**Etiologic Agent:** Christmas virus.

**Source and reservoir of infection:** Department stores have been implicated as possible sources. Man is the only known reservoir.

**Mode of transmission:** Unknown; presumably by contact with an infected person or with articles associated with the season, such as conifers and tinsel.

**Incubation period:** Usually short.

**Period of communicability:** Throughout infection.

**Susceptibility and resistance:** Susceptibility is general. No artificial immunization available. Naturally acquired immunity is of short duration, usually less than one year. Repeat infections are the rule.

**Occurrence:** Western world distribution, isolated cases in eastern hemisphere, annual pandemic. In the northern hemisphere, the annual epidemic occurs in winter; in the southern hemisphere, in the summer.
Control Measures:

- General: Whenever practicable, avoid crowding in shops and stores. General resistance should be conserved.
- Control of the infected individual, contacts, and environment:
  - Report to local health authority: Class 5.
  - Isolation: None. Children should not attend school during acute or convalescent stages.
  - Concurrent disinfection: None.
  - Terminal disinfection: Thorough cleaning of dwelling and proper disposal of all colorful waste and conifer remnants.
  - Quarantine: Of unproved value.
  - Immunization: None effective. Scrooge-type narratives may be tried.
  - Investigation of contacts: Unprofitable.

Laboratory Services: No practical laboratory test known. Blood alcohol determination may occasionally be helpful.

Contributed by Suzanne Dandoy, MD
Epi Source, published by The Epidemiology Monitor

Happy holidays from the CADE staff and the Iowa Department of Public Health
From all of us to all of you, we wish you and yours a safe, healthy and happy holiday season.
Center for Acute Disease Epidemiology
Iowa Department of Public Health
800-362-2736