

Reporting, Surveillance and Investigation of Foodborne Illness in Florida

It is widely recognized both nationally and globally, that foodborne illnesses are underreported. Current estimates show approximately 76 million illnesses, 325,000 hospitalizations and 5,000 deaths nationwide.¹ Groups at high risk for food and waterborne illness include the very young, the very old, people with some underlying medical conditions, and people who are immunosuppressed. People in these groups are more likely to become ill from food or waterborne illness and are more likely to have a more severe illness than the rest of the population. In particular, physicians should be very aware of foodborne illnesses that can be very severe, result in severe sequelae, or that can cause death in some cases. These include *E. coli* O157:H7, listeriosis, *Vibrio vulnificus*, foodborne botulism and saxitoxin poisoning, among others.

For surveillance purposes, it is important for physicians to report notifiable diseases to their local county health department. Section 64D-3.002, Florida Administrative Code, lists Florida's notifiable diseases and physician reporting requirements. A list of Florida's notifiable diseases, many of which can be food or waterborne, can be found at the end of this article. In order to assist physicians with diagnosis and treatment of foodborne illnesses, *Diagnosis and Management of Foodborne Illnesses: A Primer for Physicians*, was developed in 2001 (Morbidity and Mortality Weekly Report, (50) RR-2, January 26, 2001; <http://www.cdc.gov/mmwr/PDF/rr/rr5002.pdf>).

Changing patterns of individual and global economic behavior have complicated the public health control of food and waterborne diseases in recent years and have accentuated the need for an improved public health infrastructure to detect illness. The Florida Department of Health continues its ongoing responsibility and authority for epidemiological investigation in all public food service establishments including those inspected by the Department of Business and Professional Regulation (DBPR) and to the Department of Agriculture and Consumer Services (DACS).

Since its inception in 1994 through 2002, the Florida Department of Health Food and Waterborne Disease Program has investigated 2,733 food and waterborne outbreaks with 20,064 associated cases. An average of 300+ food and waterborne disease outbreaks are reported and investigated each year. Food and waterborne illness complaint investigation also plays a major role in the program's surveillance system. Over 3,000 food and waterborne illness complaints are reported and investigated each year in addition to the outbreak investigations.

In addition to surveillance and investigation, the Food and Waterborne Disease Program provides training to both county health department staff as well as to groups outside the department. From 1997-2002, over 255 training sessions were offered to county health department staff across the state. Health professionals, community groups, professional associations and university classes were offered 300 training sessions during this time period. An annual report is produced each year, summarizing food and waterborne disease outbreak activity. The report includes data on causative agents, vehicles of transmission and contributing factors to illness, along with narratives of selected outbreaks.

¹ Mead, Paul S. et al., Food-Related Illness and Death in the United States, *Emerging Infectious Diseases*, September-October, 1999, (5)5:607-625; <http://www.cdc.gov/ncidod/eid/vol5no5/mead.htm>.

There is a number of special food and waterborne illness prevention and research projects that are underway, including the *Vibrio vulnificus* Education Project, a public education campaign regarding saxitoxin in pufferfish and a recently initiated CDC ciguatera study.

CDC Ciguatera Study

CDC initiated a study, the Ciguatera Diagnostic Method Study, in spring 2003 to develop a ciguatera diagnostic test that is simple, sensitive, and specific. CDC is working with the Food and Drug Administration and the United States Army Medical Research Institute of Infectious Diseases to assess analytic and other test methods for diagnosing human ciguatera poisoning. Adult-aged patient are being recruited who meet the study criteria for ciguatera poisoning. Each study participant is required to provide clinical specimens (urine and blood), information on history of present illness, and remains of the implicated fish. For more information about this study, go to <http://www.cdc.gov/nceh/ciguatera>. Ciguatera is thought to be an underreported illness, globally, nationally and in the State of Florida. Any cases of ciguatera, including those participating in this study, should be reported to the local county health department by the attending physician.

The most recent annual reports for Florida can be accessed at the Florida Department of Health website: <http://www.doh.state.fl.us/>. On the pop-down menu in the upper right-hand corner, click on food and waterborne disease. Additional links with information on food and waterborne illness are also listed at the end of this article.

List of Reportable Diseases in Florida: <http://www.doh.state.fl.us/>. Click on Epidemiology, scroll down to Surveillance, click on the .pdf file Reportable Diseases.

Food and Waterborne Illness Resource Link Webliography

FDA BadBug Book: <http://vm.cfsan.fda.gov/~mow/intro.html>

CDC Health Topics A-Z: <http://www.cdc.gov/health/default.htm>

Gateway to Government Food Safety Information: <http://www.foodsafety.gov/>

Drinking Water Illness: <http://www.cdc.gov/ncidod/dpd/parasiticpathways/drinkingwater.htm>

Recreational Waterborne Illness: <http://www.cdc.gov/healthyswimming/>