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Office of Epidemiology and Disease Control

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Epi Monthly Report

2005 Surveillance Summary of Foodborne Illness Data Miami-Dade County

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Introduction

The Office of Epidemiology and Disease Control (OEDC) of the Miami-Dade County Health Department (MDCHD) collaborates with the Bureau of Community Environmental Health's Food and Waterborne Disease Program to conduct surveillance and investigation of reports and complaints of illness due to the consumption of food or water. The team works with multiple partners at the county, state and federal levels, as well as many food industry representatives to detect and reduce the number of food-related illnesses.

Some of our partners in this process include the following state regulatory agencies:

- The Department of Agriculture and Consumer Services (DOACS)—*regulates grocery stores, gas stations, bakeries, and supermarkets*

- The Department of Business and Professional Regulation (DBPR)—*regulates hotels and restaurants*

The Department of Health (DOH) Division of Environmental Health's Facilities Program—*regulates schools, hospitals, nursing homes, and other health care facilities*

These agencies perform inspection of facilities and provide education and guidance in the production and preparation of safer foods.

Methods

This report is a summary of foodborne illness data received from a variety of sources. Surveillance partners include Miami-Dade County hospitals and their infection control practitioners, emergency room staff, physicians, and laboratories; The Florida Poison Information Centers Network (FPICN); the Miami-Dade County Public Schools (MDCPS); and the DOH Bureau of Epidemiology.

Additionally, federal agencies like the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA) play an important role in surveillance and regulatory activities in support of our investigation activities. Another important source of information includes the complaints received in our office from consumers who become ill from eating food products. The OEDC also monitors web-based databases like RUSick2 for reports of foodborne illness in our county.

All complaints of illness are reviewed to determine if they are associated with outbreaks, as defined by the Bureau of Community Environmental Health, Florida Department of Health.

Foodborne Illness Case Definitions

Foodborne illness outbreak: An outbreak is an incident in which two or more people consume the same food, have the same disease, have similar symptoms, or excrete the same pathogens; and there is a time, place, and/or person association between these peo-

Inside this issue:

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ple. A single case of suspected botulism, mushroom poisoning, ciguatera or paralytic shellfish poisoning, other rare disease, or a case of a disease that can be definitely related to ingestion of a food, is considered as an incident of foodborne illness and warrants further investigation.

Confirmed outbreak: A confirmed foodborne outbreak is an outbreak that has been thoroughly investigated and the results include strong epidemiological association of a food item or meal with illness.

Suspected outbreak: A suspected foodborne outbreak is one for which the sum of the epidemiological evidence is not strong enough to consider it a confirmed outbreak.

Undetermined outbreak: A reported foodborne outbreak where there was not enough information to initiate an investigation (e.g. ill persons could not be contacted)

Results

During 2005, a total of 188 foodborne illness complaints were received by the OEDC. One hundred fifteen of these complaints (61%) were reported through FPICN (Chart 1). Chart 2 shows the number of complaints by regulatory agency of the facility

Chart 1. Reporting Source of Foodborne Illness Complaints, Miami-Dade County, 2005

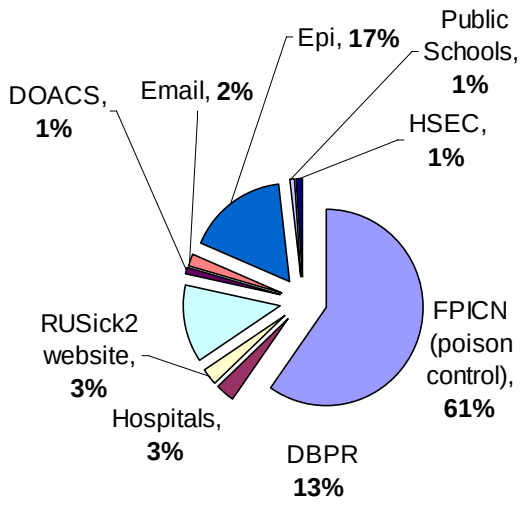
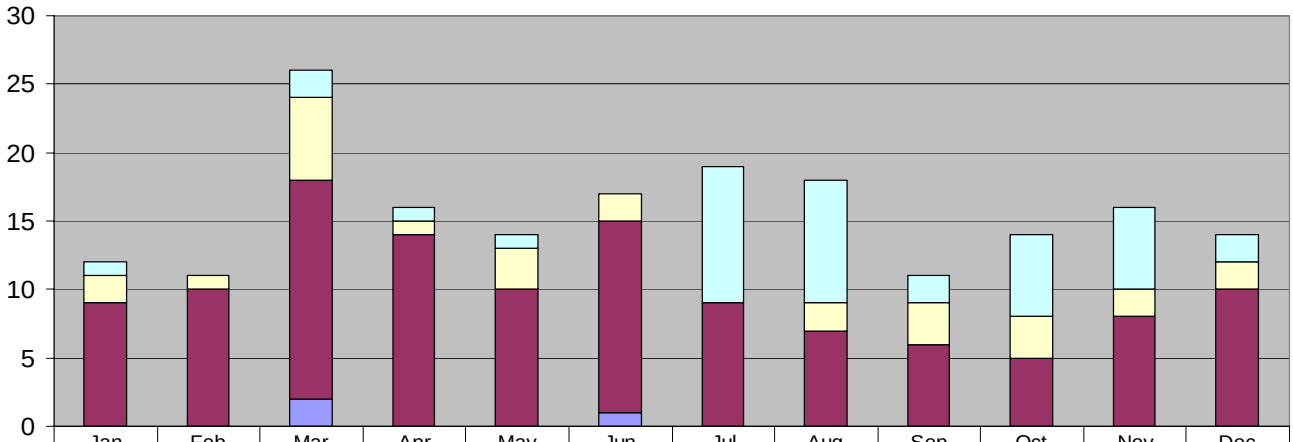


Chart 2. Monthly Number of Foodborne Illness Complaints by Regulatory Agency, Miami-Dade County, 2005



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Other	1	0	2	1	1	0	10	9	2	6	6	2
DOACS	2	1	6	1	3	2	0	2	3	3	2	2
DBPR	9	10	16	14	10	14	9	7	6	5	8	10
DOH	0	0	2	0	0	1	0	0	0	0	0	0

reported. The bulk of foodborne illness complaints were from meals eaten at facilities regulated by DBPR, indicating the involvement of hotels and restaurants. Forty two of 188 (22%) foodborne illness complaints were from meals prepared at home.

Seventeen of 188 (9%)foodborne illness complaints were either confirmed or suspected outbreaks. Seventy-three percent were single person reports of foodborne illness. Eighteen percent were of undetermined.

There were a median of 1.5 outbreaks per month. No outbreaks were reported in July or October 2005 (Chart 4). The largest outbreak occurred in May and included 526 ill persons (Chart 4).

Finally, *Chart 5* presents the food vehicles implicated or suspected in the 2005 foodborne outbreaks.

Chicken was the most common food vehicle (and the vehicle implicated in the largest outbreak). Pizza, shellfish, and beef were implicated in 2 outbreaks each.

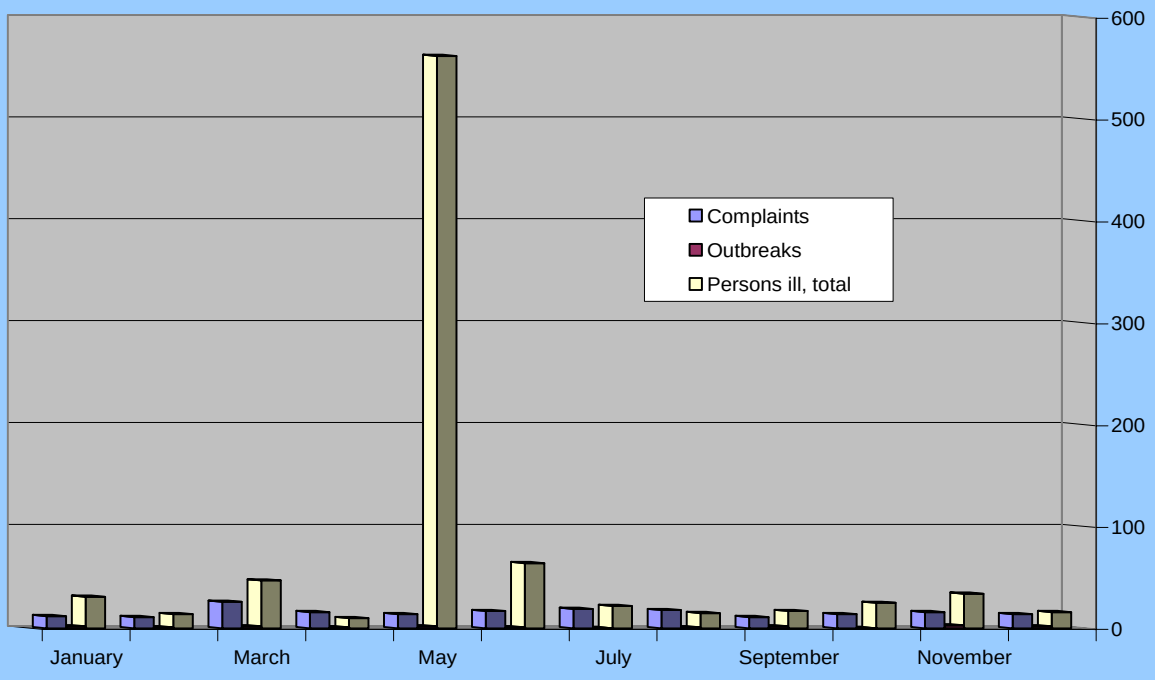
TO REPORT ANY DISEASE AND FOR INFORMATION CALL:

Office of Epidemiology and Disease Control

Childhood Lead Poisoning Prevention Program	(305) 470-6877
Hepatitis	(305) 470-5536
Other diseases and outbreaks	(305) 470-5660
HIV/AIDS Program	(305) 470-6999
STD Program	*(305) 325-3242*
Tuberculosis Program	*(305) 324-2470*
Special Immunization Program	(786) 845-0550

Chart 3.

Reported Complaints, Outbreaks and Total Persons Ill from Food in Miami-Dade County 2005



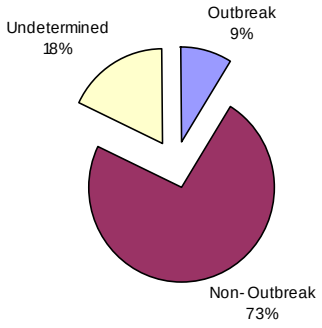
	January	February	March	April	May	June	July	August	September	October	November	December
Complaints	12	11	26	16	14	17	19	18	11	14	16	14
Outbreaks	2	1	2	1	2	1	0	1	2	0	3	2
Persons ill, total	31	14	47	10	562	64	22	15	17	25	34	16

Discussion

Foodborne illness reporting evolved significantly in 2005. FPICN data was introduced as a surveillance tool in the second half of 2005. Prior to this, most complaints were reported to either OEDC or DBPR. There are probably several reasons for this shift. Firstly, FPICN functions as the after hours telephone reporting system for the Miami-Dade County Health Department; thus, all complaints received during evenings and weekends are first handled by the poison control center. Secondly, FPICN provides toll-free access to trained toxicologists and other health professionals 24 hours a day.

Ten of the 17 confirmed and suspected foodborne outbreaks reported in 2005 were attributed to meat products (e.g. beef, shellfish, and chicken). This underscores the need for further community education on meat product storage, cooking, handling, and consumption.

Chart 3. Foodborne Illness Complaints by Type, Miami-Dade County, 2005



About the Epi Monthly Report

The Epi Monthly Report is a publication of the Miami-Dade County Health Department, Office of Epidemiology and Disease Control, The publication serves a primary audience of physicians, nurses, and public health professionals. Articles published in the Epi Monthly Report may focus on quantitative research and analysis, program updates, field investigations, or provider education. For more information or to submit an article, contact Rodlescia Sneed, Managing Editor, at 305-470-5660.

AVIAN FLU WATCH

Unless indicated, information is current as of June 20, 2006

- **Since 2003, 228 human cases of avian influenza (H5N1) have been confirmed** by the World Health Organization (WHO). Of these, 130 have been fatal.
- **Countries with confirmed *human* cases** include Cambodia, China, Djibouti, Indonesia, Thailand, Vietnam, Iraq, Azerbaijan, Egypt and Turkey.
- **No human cases of avian influenza (H5N1) have been reported in the United States.**
- **The most recently confirmed human H5N1 case occurred in Indonesia.** The case, which was fatal, occurred in a 13-year-old boy. He developed symptoms on June 9 one week after helping his grandfather slaughter diseased chickens at the family home. The boy was hospitalized on June 13 and died on June 14. The grandfather remains healthy. Contact tracing and monitoring are under way to ensure no further cases arise from this exposure setting.
- **H5N1 has been confirmed in *birds* in several other countries since 2003.** H5N1 has been documented in birds in more than 30 countries in Europe & Eurasia, South Asia, Africa, East Asia and the Pacific, and the Near East. For a list of these countries, visit the World Organisation for Animal Health Web Site at http://www.oie.int/downld/AVIAN%20INFLUENZA/A_AI-Asia.htm (Updated 06/26/06).
- **No restrictions on travel to affected countries have been imposed.** Travelers should avoid contact with live poultry and monitor their health for ten days after returning from an affected country.

SOURCES: World Health Organization; World Organisation for Animal Health; Centers for Disease Control and Prevention