Foodborne Illness Surveillance System in Los Angeles County (1996-97)

Background

The safety of the nation's food and water supply has become a top public health priority in recent years. At least 5.5 million foodborne illnesses are estimated to occur annually in the US. In the Los Angeles County Department of Health Services, there are two mechanisms to report foodborne illnesses: a pathogen-specific reporting system based on laboratory tests, and an informal, nonspecific foodborne illness reporting system without laboratory confirmation. We evaluated the informal reporting system for foodborne illnesses and its role in disease control.

Methods

We interviewed key informants involved in the surveillance system, observed the functioning of the system at various levels, and reviewed previous studies and data collected for Acute Communicable Disease Control in the department. A brief telephone survey among primary care and emergency physicians was conducted, and a database for foodborne illness reports was created from written reports collected and maintained by the Morbidity Unit.

Results

The pathogen-specific foodborne illness reporting system is more specific and accurate than the informal foodborne illness reporting system since illnesses are laboratory confirmed and reported by the health care professionals. This system suffers from lack of timeliness due to delays in diagnosis, as well as incompleteness, since not all foodborne illnesses are laboratory confirmed. In contrast, the informal system is extremely timely, allows the reporting of nonspecific, unconfirmed gastrointestinal illnesses, and can be used by the public and the medical community alike to report suspected foodborne problems. The system also provides the basis for the Environmental Health Food and Milk Program to inspect food providers and facilities that may pose a threat to the public's health. However, maintenance of this non-computerized system is relatively costly, and the system as a whole has low sensitivity, estimated to be about 1 percent.

Comments

The current informal foodborne illness reporting system is a simple mechanism for reporting and subsequent identification of outbreaks of foodborne illnesses. Its value could be strengthened both by increased reporting of foodborne illnesses by health care providers irrespective of laboratory confirmation as well as computerization of incoming reports for further analysis.