

Position Statement Template

Submission Date: 3/28/2005

Committee: Infectious Diseases
05-ID-09

Title: Proposal to adopt serotype specific national reporting for salmonellosis

Statement of the Problem:

Salmonellosis constitutes a major foodborne disease, with an estimated 1.4 million cases occurring each year in the United States (1). Currently, salmonellosis is listed among the nationally notifiable diseases to be reported through the National Notifiable Diseases Surveillance System (NNDSS). However, the case definition and reporting through NNDSS does not include serotype characterization. *Salmonella* "O" and "H" antigen serotyping has been used as an international standard for subtyping since the 1950s, and has been consistently performed by most state public health laboratories in the United States for decades. The epidemiology of *Salmonella* infections is based on serotype characterization; serotypes have biologic relevance which determines pathogenesis, natural reservoirs, and natural history. Thus public health interventions and control of salmonellosis depends on serotype characterization.

A laboratory based national surveillance system, the Public Health Laboratory Information System (PHLIS), has been used to capture the *Salmonella* serotype of a subset of cases for which isolates are reported through the public health laboratories. Specific isolate serotype information is captured in this system and has been used to report the numbers of reported *Salmonella* isolates among serotypes.

With the advent of the National Electronic Diseases Surveillance System (NEDSS), there is an opportunity to integrate and enhance surveillance activities. A foodborne and diarrheal diseases program area module has been developed for NEDSS which includes salmonellosis. This module is planned to collect information for the National Notifiable Diseases Surveillance System and for PHLIS. Information about specific *Salmonella* serotypes may be collected in NEDSS to allow more complete analysis of salmonellosis surveillance among all serotypes.

Statement of the desired action(s) to be taken:

Adopt serotype specific reporting of laboratory confirmed salmonellosis cases.

Public Health Impact:

Reporting *Salmonella* serotypes through NEDSS or compatible systems will enhance surveillance integration and efficiency, taking the place of both NNDSS and the Public Health Laboratory Information System. Complete, accurate and timely data from surveillance of *Salmonella* serotypes will allow enhanced estimates of the burden of diseases, outbreak detection, and evaluation of *Salmonella* control programs.

1. Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. *Emerg Infect Dis* 1999;5:607-25.

Salmonellosis

2005 Proposed Case Definition

Clinical description

An illness of variable severity commonly manifested by diarrhea, abdominal pain, nausea, and sometimes vomiting. Asymptomatic infections may occur, and the organism may cause extraintestinal infections.

Laboratory criteria for diagnosis

Isolation and “O” and “H” antigen serotype characterization of *Salmonella* from a clinical specimen.*

Case classification

Probable: a clinically compatible case that is epidemiologically linked to a confirmed case.

Confirmed: a case that is laboratory confirmed.

Comment

For users of the legacy National Notifiable Diseases Surveillance System, laboratory-confirmed isolates are also reported via the Public Health Laboratory Information System (PHLIS), which is managed by the Foodborne and Diarrheal Diseases Branch, Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC.

Both asymptomatic infections and infections at sites other than the gastrointestinal tract, if laboratory confirmed, are considered confirmed cases that should be reported.

* *Salmonella* isolates with incomplete serotype determination should be reported with the extent of information available.

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