Position Statement Template

Submission Date: 3/28/2005

Committee: Infectious Diseases
05-ID-08

Title: Proposal to adopt serotype specific national reporting for Shigellosis

Statement of the Problem:
Shigellosis constitutes a major public health burden, with an estimated 448,000 cases occurring each year in the United States (1). Currently, shigellosis 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. Shigella "O" antigen serotyping has been used as an international standard for subtyping, and can be performed by most state public health laboratories in the United States. Serotyping of Shigella isolates is important for detecting outbreaks, evaluating intervention strategies and guiding vaccine development strategies.

A laboratory based national surveillance system, the Public Health Laboratory Information System (PHLIS), has been used to capture the *Shigella* 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 *Shigella* 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 shigellosis. This module is planned to collect information for the National Notifiable Diseases Surveillance System and for PHLIS. Information about specific *Shigella* serotypes may be collected in NEDSS to allow more complete analysis of shigellosis surveillance among all serotypes.

Statement of the desired action(s) to be taken:
Adopt serotype specific reporting of laboratory confirmed shigellosis cases.

Public Health Impact:
Reporting *Shigella* 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 *Shigella* serotypes will allow enhanced estimates of the burden of diseases, outbreak detection, and evaluation of *Shigella* 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.

Shigellosis- Proposed Revised Case Definition

Clinical description

An illness of variable severity characterized by diarrhea, fever, nausea, cramps, and tenesmus. Asymptomatic infections may occur.

Laboratory criteria for diagnosis

Isolation and “O” antigen serotype characterization of *Shigella* 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.

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

Coordination:

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