

Committee: Infectious Disease

Title: Revision of Cryptosporidiosis Case Definition

I. Statement of the Problem:

The case definition of cryptosporidiosis, a disease under public health surveillance, is in need of a case classification for reporting of probable cases of cryptosporidiosis.

II. Background and Justification:

Protozoan parasites of the genus *Cryptosporidium* can cause severe diarrheal illness, and are an increasingly recognized cause of recreational water-associated outbreaks. Monitoring of surveillance data has been very useful in delineating the epidemiology of cryptosporidiosis at the state and national levels. This information is useful in designing further studies to assess risk factors that might be associated with changes in transmission patterns, as well as to assess current policies, both at the state and local levels and at the national level. These data may guide development of policy in the area of design and construction of recreational water facilities.

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

The national surveillance case definition for cryptosporidiosis should be revised. We propose to: 1) add a probable case classification; 2) delete the asymptomatic confirmed case classification; and 3) broaden the case definition beyond *C. parvum* to increase understanding of the epidemiology of other *Cryptosporidium* species.

IV. Goals of Surveillance:

The last modification to the cryptosporidiosis case definition was a response to the public health risks associated with the finding of *Cryptosporidium* oocysts in source water or tap water under EPA's "Information Collection Rule" (that requires utilities to test source water for *Cryptosporidium* oocysts) and focused on the detection of human disease associated with public water supplies. Since 1998, *Cryptosporidium* has been increasingly recognized as the etiologic agent involved in recreational water outbreaks. In addition, molecular analysis of *Cryptosporidium* has shown that the species *Cryptosporidium parvum* is actually a mixture of various species that differ in infectivity for humans. The goal of this change to the case definition would be to accurately capture not only the number of confirmed, but the number of probable cases of cryptosporidiosis caused by any species of *Cryptosporidium*. Public health officials will need to respond to these findings. Continued surveillance for cryptosporidiosis in humans can provide information that may be useful in formulating an appropriate response.

V. Methods for Surveillance:

VI. Criteria for Reporting

A. Tables:

To be developed.

B. Reporting disease-specific data elements:

To be developed.

VII. Case Definition

A. Narrative:

Clinical description

An illness characterized by watery diarrhea, abdominal cramps, loss of appetite, low-grade fever, nausea and vomiting. The disease can be prolonged and life-threatening in severely immunocompromised persons.

Laboratory evidence

Laboratory-confirmed cryptosporidiosis is defined as the detection of a member of the genus

Cryptosporidium by one of the following methods:

- 1) organisms in stool, intestinal fluid, or tissue samples or biopsy specimens
- 2) antigens in stool or intestinal fluid, or
- 3) nucleic acid by PCR in stool, intestinal fluid, or tissue samples or biopsy specimens

Case Classification:

Confirmed: a case that meets the clinical description and at least one of the criteria for laboratory-confirmation as described above. When available, species designation and molecular characterization should be reported.

Probable: a case that meets the clinical description and that is epidemiologically linked to a confirmed case.

VIII. Period of Surveillance:

Ongoing. This revision of the surveillance case definition will be effective January 1, 2009.

IX. Data sharing/release and Print criteria:

States and territories will send CDC case data for all confirmed and probable cases. Final printed counts published in MMWR by CDC will distinguish between confirmed and probable cases. Provisional case report data will not be used until verification procedures are completed.

X. References:

Position Statement 1998-ID 5. Continuation of Cryptosporidiosis Under National Surveillance.
Position Statement 1994-ID. National Surveillance for Cryptosporidiosis.

XI. Coordination:

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Table 1. Common core data elements for case reporting to a public health agency from a healthcare provider: To be included in the initial case report.

	<i>Non Condition Specific Data Elements</i>	<i>Core Data Set</i>
<i>Reporting Information</i>		
	Date of report	X
	Reporter name	X
<i>Reporter Contact Information</i>		
	Telephone	X
	Address	X
<i>Health Care Provider Information</i>		
	Health care provider name	X
	Facility Name	X
<i>Facility/Provider Contact Information</i>		
	Phone number	X
	Address	X
<i>Subject Information</i>		
	First Name	X
	Middle Name	X
	Last Name	X
	Street	X
	City	X
	State	X
	ZIP	X
	Telephone	X
	Age	X
	Date of birth	X
	Gender	X
<i>Clinical Information</i>		
	Name of Condition	X
	Date of onset	X