BACKGROUND AND JUSTIFICATION: Cryptosporidium parvum, which can cause severe diarrheal illness, is an increasingly recognized cause of food and of waterborne disease outbreaks. In 1994, CSTE recommended that Cryptosporidiosis be made a nationally notifiable disease for a period of three years, i.e., 1995 through 1997. In 1995, states began reporting infection with Cryptosporidium parvum to the CDC. Currently, at least 41 states have made Cryptosporidiosis reportable. Monitoring of national surveillance data following CSTE’s recommendation has been very useful in delineating the epidemiology of cryptosporidiosis at the national level. For example, surveillance information from 1995 through 1997 indicate that cryptosporidiosis is widespread throughout the United States. During the three years of initial surveillance, a seasonal trend of increased notification of confirmed cases was observed in late summer and early fall. This trend was observed in various states. Furthermore, a change in the age distribution of confirmed cases was associated with the increase in reporting in the late summer and fall, i.e., an increase in the proportion of cases among persons <16 years of age. This information is useful in designing further studies to assess risk factors that might be associated with this seasonal change in transmission.

POSITION TO BE ADOPTED:

CSTE recommends:

1) Cryptosporidium infection should continue to be on the list of conditions under national surveillance as part of the National Public Health Surveillance System.

GOALS FOR SURVEILLANCE: Cryptosporidium parvum is an important emerging pathogen in the United States. It is an increasingly recognized cause of water and of foodborne disease outbreaks. Infection in HIV(+) individuals may cause severe diarrheal illness with a protracted course; there is no readily available effective treatment. Currently, the major public health concern revolves around the risk of acquiring cryptosporidiosis by consuming drinking water. Surveillance for Cryptosporidiosis infection can help define the epidemiologic features of the disease through case identification and follow up epidemiologic investigation (e.g., retrospective cohort and case control studies).

Continued surveillance and reporting of cryptosporidiosis should be helpful to state and local health departments who will be called upon to weigh the public health risks associated with the finding of Cryptosporidiosis oocysts in source water or tap water under EPA’s “Information
Collection Rule” that requires utilities to test source water for Cryptosporidiosis oocysts. This program began in July of 1997 and will continue for 18 months. In addition, the development of sensitive and specific diagnostic tools for testing environmental samples (e.g., water and food) may lead to the detection of Cryptosporidiosis in water and in food items. 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.

METHODS FOR SURVEILLANCE: Clinician and laboratory reporting.

CASE DEFINITION:

Cryptosporidiosis

Clinical description

An illness caused by the protozoan Cryptosporidium parvum and characterized by diarrhea, abdominal cramps, loss of appetite, low-grade fever, nausea and vomiting. Infected persons may be asymptomatic. The disease can be prolonged and life-threatening in severely immunocompromised persons.

Laboratory criteria for diagnosis

Laboratory-confirmed cryptosporidiosis shall be defined as the detection -- in symptomatic or asymptomatic persons -- of Cryptosporidiosis

1) oocysts in stool by microscopic examination, or

2) in intestinal fluid or small bowel biopsy specimens, or

3) oocyst or sporozoite antigens by immunodiagnostic methods, e.g., ELISA, or

4) by PCR techniques when routinely available, or

5) demonstration of reproductive stages in tissue preparations.

Case Classification:

Confirmed, symptomatic: a laboratory-confirmed case associated with one of the symptoms described above

Confirmed, asymptomatic: a laboratory-confirmed case associated with none of the above symptoms
DATA TO BE COLLECTED: NETSS Core Data

COORDINATION WITH OTHER ORGANIZATIONS:

Agency for Response: Centers for Disease Control and Prevention (CDC)

Agencies for Information: Food and Drug Administration (FDA)
Association of Public Health Laboratories (APHL)
Association of State and Territorial Health Officials (ASTHO)
National Association of State Public Health Veterinarians (NASPHV)

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