

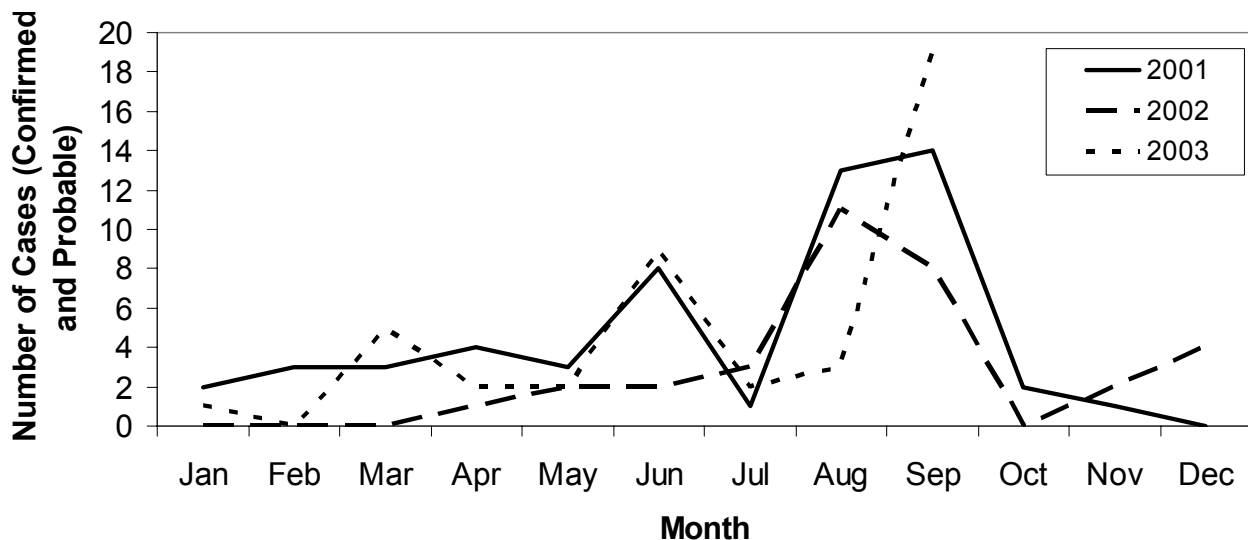
Date: October 20, 2003
To: Health Care Providers
From: Katie Daley, BS, Epidemiologist/Surveillance Coordinator
Subject: Report for period ending October 11, 2003 (week forty-one).

The Clark County Health District (CCHD) Gastroenteritis Surveillance Program (GE) is open to new participants. Health care providers wishing to participate as sentinel sites for the program should contact Katie Daley, Surveillance Coordinator, at (702) 383-1378. The case criteria for reportable persons include those who are experiencing diarrhea or vomiting that is not explained by a chronic condition.

An average of seventeen sentinel sites reported during weeks twenty-seven through forty-one (June 29 through October 11), with a range of 5 to 43 sites per week. The number of sites reporting increased after week 35, as newly recruited school sites, clinics and physician’s offices began reporting at this time. During this fifteen week period, the weighted average of patients that met the case criteria for gastroenteritis ranged from 1.04% to 1.99%, with an average of 1.52%, which is within the expected range.

In addition to conducting sentinel site gastroenteritis surveillance, the Office of Epidemiology (OOE) also investigates reports of laboratory-confirmed enteric illnesses. During September, there was an increase in the number of shigellosis cases that were reported to OOE. Figure 1 illustrates the trend of reported shigellosis cases in Clark County from January 2001 through September 2003. In all three years, there were increases in reported cases of shigellosis during August and September, though no explanation is available to account for this observation.

**Figure 1. Shigellosis 2001-2003
 Clark County**



Shigella has an incubation period of 12 to 96 hours and may cause symptoms such as diarrhea (sometimes bloody or mucous), fever, nausea, abdominal cramping, vomiting and tenesmus. It is transmitted by the fecal-oral route, and is more commonly spread from person-to-person than through contaminated food or water. The infectious dose is extremely low (10 to 100 organisms), and attack rates among household contacts of a confirmed case can be as high as 40%¹. Nine of the 19 cases reported to Centers for Disease Control and Prevention by OOE in September were culture-confirmed (47%), while ten were close contacts that had symptoms consistent with shigellosis (53%).

Although shigellosis is a self-limiting illness that generally does not require treatment with antibiotics, its low infectious dose and ease of transmission may be incentive to take measures to reduce the risk of secondary transmission. Diligent hand washing after using the restroom and before preparing meals is essential for prevention of secondary transmission. Additionally, since an individual infected with *Shigella* can excrete the bacteria in his or her feces for up to four weeks after onset of illness¹, there may be incentive to prescribe appropriate antibiotic therapy to reduce the period of communicability. Isolates from several unrelated cases recently investigated by OOE demonstrated some antibiotic resistance, emphasizing the importance of examining sensitivity panels when prescribing antibiotic therapy to an individual with shigellosis. There is no recommended prophylaxis for asymptomatic contacts of *Shigella* cases.

Due to the high secondary attack rate, it is also important to obtain information on contacts of those individuals suspected to have shigellosis. Household contacts that are found to be symptomatic can be treated or educated to reduce the risk of further transmission. Likewise it is necessary to determine if family members work in sensitive occupations such as food handling, child care, or patient care. Per Nevada Administrative Code 441A.690, OOE routinely excludes household contacts of shigellosis cases if those contacts work in these occupations, until laboratory testing indicates that they are not carrying the organism, and do not pose a risk of spreading *Shigella* to others in the community.

The GE Newsletter is available on the web at <http://www.cchd.org/physician/gastroenteritis.htm>. The 24-hour number for the Office of Epidemiology is (702) 383-1378.

Resource: ¹Chin, James, ed. Control of Communicable Diseases Manual. Washington D.C.: American Public Health Association, 2000.