



Bulletin No. 19

September 9, 1988

Hepatitis A - Anchorage, Palmer, Wasilla

Investigation and Interim Recommendations

Peters Creek Outbreak

On July 7, 1988, the Section of Epidemiology was informed of four possible hepatitis A cases in Peters Creek, a suburban community approximately fifteen miles north of Anchorage. Since in the absence of an outbreak, approximately five to ten cases of hepatitis A per year might be expected in the Anchorage area, an immediate epidemiologic investigation was begun. Although two of the cases were next-door neighbors, and the two others each lived less than three miles away, no common exposure was initially identified. During the subsequent week, approximately fifteen additional cases were reported, including a resident of Iowa who had been in Peters Creek during late May and early June. Extensive interviews with all reported cases identified a single common exposure - consumption between May 25 and June 5 of an ice slush drink from a convenience store in Peters Creek. Several steps were taken to confirm this finding:

1. Detailed illness and exposure data were collected from thirty-six (90%) of forty family members of the first nine laboratory confirmed cases. Of twenty-one persons who consumed ice slush drinks, fourteen (67%) had laboratory-confirmed hepatitis A. None of fifteen persons who had not consumed ice slush drinks were symptomatic (Fisher's exact $p=0.00031$).
2. A survey of children living in Peters Creek who were players on a soccer team was conducted. Preliminary results showed that of four children who had consumed ice slush drinks between May 23 and June 10, three met a case definition for hepatitis A (fever and abdominal pain between June 22 and July 15). None of the eleven children who had not consumed ice slush drinks met this case definition.

On July 14, the Environmental Sanitation Section of the Anchorage Municipal Department of Health and Human Services inspected the store where the drinks were sold. Because water from a small bathroom sink was used to prepare the drinks, sales were stopped immediately. According to the store manager, only two persons ever prepared the drink mixture. One was tested and found to be immune to hepatitis A. The other denied illness and refused serologic testing.

Review of hepatitis A reports for Peters Creek and Anchorage during the months of May and June identified two cases from Peters Creek. The first was a 23-year-old woman with illness onset on approximately May 5. The other, her 31-year-old sibling became ill on June 1 and was diagnosed with laboratory proven hepatitis A. This person, an intimate associate of the drink preparer who refused testing, stated that they were both sick and jaundiced at the same time.

As of August 26, thirty-one confirmed hepatitis A cases have been identified in persons consuming ice slush drinks purchased from the Peters Creek market. All occurred between June 18 and July 21. Twenty-two cases resulted from secondary spread of the disease.

Anchorage, Palmer, Wasilla Outbreak

In addition to the people ill from the Peters Creek outbreak, thirty-two other laboratory confirmed hepatitis A cases in Anchorage, Palmer, and Wasilla have been investigated since mid-June. Twelve cases occurred in young adults who were either recently incarcerated or who had a history of drug use or alcoholism or were without a telephone. Twenty cases (14 primary and 6 secondary from these) had no apparent connection to either the Peters Creek or the "young adult" outbreak.

Since the background level of hepatitis A in the Anchorage area is approximately five to ten cases per year, during the past two and one-half months, Anchorage has had both a large beverage-borne outbreak of hepatitis A and also a large increase in cases unrelated to the outbreak. Hepatitis A is circulating through the drug-using, jail-prone young adult population in the city and the potential for extension beyond this group - as at Peters Creek - appears to be significant.

Interim Control Measures

1. All cases should be rapidly investigated. Persons should be quickly interviewed to identify food handlers, infants in daycare, or any other high-risk individuals. Immune globulin should be provided to household contacts as quickly as possible.
2. Restaurant and other food service establishments should increase efforts to insure proper hygiene and food handling. In addition, illness in any employee which is compatible with hepatitis should be immediately reported to the Section of Epidemiology or the Municipal Health Department.

Physicians should increase their index of suspicion for hepatitis A, **promptly report all confirmed or suspected cases**, and administer immune globulin to all appropriate household contacts. Because follow-up in the young adult population being affected by the current outbreak is often difficult, physicians are encouraged to provide immune globulin to household contacts at the earliest possible opportunity, perhaps even prior to a serologic diagnosis of hepatitis A.