State of Alaska Epidemiology **Bulletin**

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HEPATITIS A ASSOCIATED WITH CHILD CARE, JUNEAU

Between February and May 1984, eight Juneau residents were ill with symptomatic hepatitis A - all eight were related through child care activities. The first patient to become ill was a 5-year-old girl whose symptoms began February 15. The diagnosis of hepatitis A was confirmed by the presence of hepatitis A-immunoglobulin M antibody (HAV-IgM). Her 13-year-old sibling had onset of similar illness, with malaise, clay-colored stools, dark urine, and yellow sclera, on March 13.

April 4, a 30-year-old woman who operates a daycare within her own home developed anicteric illness, confirmed as hepatitis A. At the time of her illness, she was looking after three children, among them the 5-year-old index case. The babysitter's own 5-year-old developed symptomatic hepatitis April 20.

Around May 20 three members of another Juneau family had onset of confirmed hepatitis A. The three included a mother and her 9-year and 4-year-old children. The 4-year-old had been an attendee of the previously mentioned at home daycare. This child, along with his 1-year-old sibling was moved to a second at home daycare when his mother became aware that a hepatitis A outbreak was occurring in the home of the original daycare provider. In mid May, coincident with the onset of illness of the mother and her two children, a male live in partner of the new daycare provider also had onset of confirmed symptomatic hepatitis A.

Hepatitis A has been well documented in association with daycare centers, particularly in those which care for diapered infants. Infants infected with, and shedding virus in their stools, commonly have minimal or no symptoms. In the series presented above, it appears likely that infants and toddlers without symptoms, but infected with hepatitis A, played a role in the transmission of illness. Among such possible transmitters of hepatitis A were the 1-year-old child of the first daycare provider, and the 1-year-old member of the family where three confirmed cases occurred in May. The second child, who had no symptoms and was not tested for hepatitis A antibody, attended first one and then the other daycare, possibly acting as the means by which hepatitis A spread between them. None of the eight patients symptomatic with hepatitis A reported in this series received immune globulin (IG).

Daycare outbreaks of hepatitis A sometimes become evident only when adults directly or indirectly associated with the daycare develop icteric illness. Because illness in small children is so frequently subclinical and not recognized as hepatitis A, it is important to look for a daycare connection when an adult presents with clinical disease. When an outbreak (defined as two associated cases) related to a daycare is diagnosed, we urge that children attending the daycare, their siblings, their parents,

and the daycare providers who have not yet developed hepatitis A and who are not known to be immune, receive immune globulin (IG). Family members in contact with acute cases of hepatitis A should also be offered immune globulin.

(Researched by Kari Merkel, PHN, Juneau Health Center; reported by Dennis Batey, M.D., William Cole, M.D., Juneau)

Hepatitis A in Juneau Day-Cares: Possible Mode of Transmission