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## Hepatitis A Outbreak Strikes Old Believers

A hepatitis A (HAV) outbreak recently occurred in four Russian Old Believer Villages on the Kenai Peninsula--Nikolaevsk, Razdolna, Voznesenka, and Kachemak Selo. Our investigation identified a total of 66 cases: 27 had been reported to the Section of Epidemiology between September 1990 and February 1991, the remaining 39 were identified as a result of blood testing we conducted in the villages.

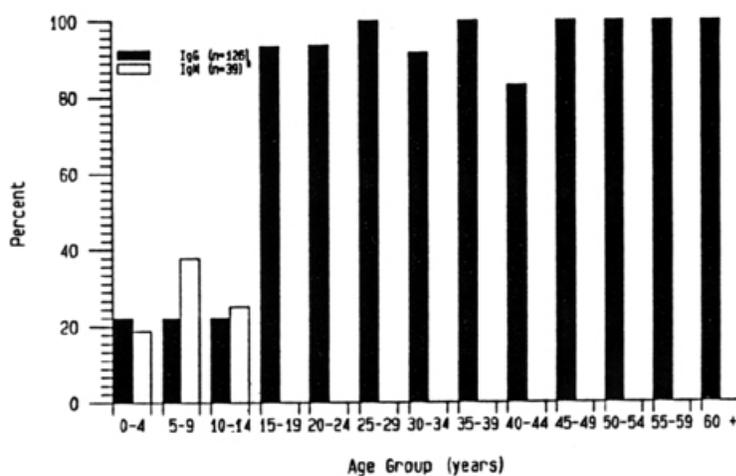
Among the estimated 1200 residents, blood samples were collected from a broad cross-section of each village between February 26 and March 8. Specimens were tested for IgG and IgM anti-HAV antibody by the State Public Health Laboratory, Fairbanks. The presence of IgG indicates HAV infection **in the past** (>6 months ago and immunity). The presence of IgM indicates recent HAV infection (during the previous six months).

### Results

Among 303 persons tested (268 village residents and 35 others), 129 (42.6%) were determined to be immune to HAV (IgG positive, IgM negative). Of the 268 village residents tested, 126 (47.0%) were IgG positive--**more than 90% of village residents  $\geq$ 15 years of age were immune** (Figure 1).

Of the remaining 174 persons tested, 39 (22.4%) were HAV cases (IgM positive). All 39 IgM positive persons were 14 years of age (Figure 1). Among the 27 previously reported cases, all but two were 15 years of age.

Figure 1. Percentage of 268 village residents who were IgM or IgG anti-HAV positive, by age; Old Believer Villages, 1991.



\* The percent shown refers to the number of people who were IgM anti-HAV positive (39) divided by the number susceptible to hepatitis A (142: 268 minus 126 IgG anti-HAV positive).

Clinical histories were obtained for 29 of the 39 cases--eight (27.6%) had no symptoms, and only four (13.8%) had become jaundiced. Twenty-eight (71.8%) of these 39 cases were accounted for by nine households each with two or more cases.

No cases were identified among the 35 non-residents tested who either worked or attended school in one of the villages. All 17 school children tested at Nikolaevsk who lived outside the village were IgM anti-HAV negative. In addition, **testing disproved rumors that three schoolteachers had contracted hepatitis A at school.**

### Recommendations

1. This outbreak is similar to the hepatitis A outbreak which occurred in rural Alaska in 1987 and 1988. During that outbreak, administration of immune globulin failed to stop the outbreak.
2. Hepatitis A is being spread among young children, many of whom have no symptoms, in family groups and households. Transmission to adults occurs infrequently because nearly all adult village residents are immune to hepatitis A. There is no evidence that persons in Homer or other towns on the Kenai Peninsula are at any increased risk of contracting hepatitis A.
3. **The most effective way to prevent the spread of hepatitis A is through careful and frequent handwashing and meticulous personal hygiene.** Handwashing is especially critical before food preparation and meals.
4. Since there are still children in the villages who are susceptible to hepatitis A, **cases may continue for some time.** Nearly all adult village residents have had hepatitis A in the past and are immune -these individuals cannot transmit infection and do not need immune globulin shots if a household member develops hepatitis A.
5. **All cases of hepatitis should be reported to the Section of Epidemiology (561-4406).**

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