Alaska participates in the national survey of HIV prevalence in childbearing women along with 44 other states, the District of Columbia, and Puerto Rico. The survey, designed and funded by the U.S. Centers for Disease Control and Prevention (CDC), measures the prevalence of HIV infection among women giving birth to live infants. The presence of antibodies to HIV in the newborn does not necessarily indicate the child is infected since maternal antibodies cross the placenta. With no intervention, approximately 25% of infants born to HIV-infected mothers are infected.

According to the national survey protocol, blood samples taken shortly after birth are first used for routine testing to detect metabolic disorders, so that appropriate follow-up can occur. The remaining blood sample is stripped of all identifiers and anonymously tested for HIV antibodies.

A total of 48,980 infants have been included in the Alaska survey from February 1990 through June 1994. Of these, 10 (0.02%) have had positive HIV antibody tests (indicating maternal infection). An additional 1,829 newborns had samples which were of insufficient quantity to allow HIV testing.

<table>
<thead>
<tr>
<th>Year</th>
<th># Tested</th>
<th># Positive</th>
<th>% Positive</th>
<th>QNS**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>10,199</td>
<td>2</td>
<td>0.02</td>
<td>485</td>
</tr>
<tr>
<td>1991</td>
<td>11,668</td>
<td>4</td>
<td>0.03</td>
<td>560</td>
</tr>
<tr>
<td>1992</td>
<td>11,466</td>
<td>3</td>
<td>0.03</td>
<td>359</td>
</tr>
<tr>
<td>1993</td>
<td>10,505</td>
<td>0</td>
<td>0.00</td>
<td>319</td>
</tr>
<tr>
<td>1994*</td>
<td>5,142</td>
<td>1</td>
<td>0.02</td>
<td>106</td>
</tr>
<tr>
<td>Total</td>
<td>48,980</td>
<td>10</td>
<td>0.02</td>
<td>1,829</td>
</tr>
</tbody>
</table>

* 1994 data is for the period 1/1/94 through 6/30/94
** QNS denotes quantity of sample insufficient for testing

Additionally, of 35,679 women voluntarily undergoing HIV testing at facilities which use the State Laboratory, 62 (0.2%) were HIV positive through June 30, 1994. Prevalence of HIV infection among women in Alaska is relatively low, as indicated by the data above. Of the 226 Alaska AIDS cases reported through June 30, 1994, 27 (12%) were female. The youngest woman with AIDS in Alaska was 20 years old at the time of diagnosis, the oldest was 75 years old. Twenty-three of the 27 women were in the childbearing years (15-50 years).

Women at risk of HIV infection should know and consider their HIV status in making decisions about childbearing. Because knowledge of serostatus is important in clinical management of mother and infant, health care providers routinely should offer HIV counseling and testing to all women who are pregnant or considering pregnancy, especially if these women are at increased risk of exposure to HIV.

USE OF ZIDOVUDINE (ZDV OR AZT) TO REDUCE PERINATAL TRANSMISSION OF HIV

Interim results of a randomized, multicenter, double-blind, placebo-controlled clinical trial suggest that Zidovudine can reduce the risk of perinatal HIV transmission. Women who were studied met the following eligibility criteria:

- HIV infected
- Pregnant at 14-35 weeks of gestation
- No antiretroviral therapy during the current pregnancy
- No clinical indications for antenatal antiretroviral therapy
- CD4+ T-lymphocyte counts ≥ 200/µL at entry to the study.

At the time of the interim analysis, 477 women had been enrolled and 421 infants born. The HIV status at 18 months of age was known for 364 children. The estimated transmission rate was 25.5% among the 184 children in the placebo group compared with 8.3% among the 180 children in the ZDV group. HIV-infected women should be informed of the substantial benefit and short-term safety of ZDV administered during pregnancy and the neonatal period observed in this study. However, they also must be informed that the long-term risks of ZDV therapy to themselves and their children are unknown. A woman's decision to use ZDV to reduce the risk for HIV transmission to her infant should be based on a balance of the benefits and potential risks of the regimen to herself and to her child.

Each pregnant woman and her health care provider must consider the potential benefits, unknown long-term effects, and gaps in knowledge relating to her clinical situation. Discussion of treatment options should be noncoercive and the final decision to accept or reject ZDV treatment recommended for herself and her child is the right and responsibility of the woman. A decision not to accept treatment should not result in punitive action or denial of care, nor should ZDV be denied to a woman who decides to receive the regimen.
Reference:


(Contributed by Karen Martinek, RN, MPH and Wendy Craytor, MBA, MPH, Section of Epidemiology)