Controlling Tickborne Fever

Tickborne relapsing fever (TBRF), which is endemic in the western United States, typically causes mild symptoms, and many people who get sick don’t seek medical attention. But TBRF can cause serious complications—acute respiratory distress syndrome, spontaneous abortion or preterm delivery in pregnant women, or death.

During 1990 to 2011, 12 western states reported 504 TBRF cases to the Centers for Disease Control and Prevention. About 70% of the cases originated in California, Washington, and Colorado. Most occurred during the summer, and two-thirds of the infections were in people visiting the area. Cases were most common among men and children aged 10 to 14 years as well as adults aged 40 to 44 years (Forrester JD et al. MMWR Morb Mortal Wkly Rep. 2015;64[3]:58-60).

Fever typically lasts 3 to 5 days, with relapses occurring 5 to 7 days after initial recovery. Treatment with antibiotics can be effective. The illness is transmitted to humans from Ornithodoros ticks that feed on rodents infected by *Borrelia* spirochetes. Ground and tree squirrels and chipmunks that live in mountainous areas are common culprits. People often contract TBRF at vacation cabins where rodents and ticks may go unnoticed. The ticks remain infectious for life and can infest buildings for years, making it important to investigate all TBRF cases to eradicate infected rodents and ticks that can cause further illness.

Eliminating infected rodents doesn’t stem the population of infected ticks, which find other hosts. Preventing TBRF, therefore, requires rodent and tick control. People staying in vacation cabins and homeowners in these areas should avoid sleeping on the floor and near walls where they can be bitten more easily and take steps to keep rodents at bay, such as keeping food out of reach.

**Missed Fetal Alcohol Syndrome Cases**

Fetal alcohol syndrome (FAS) often goes undetected in children, either because health care professionals miss the diagnosis or medical records don’t adequately document the signs and symptoms. But if children with FAS aren’t properly diagnosed, they’re excluded from records-based surveillance estimates, which are used to plan clinical services for kids with the syndrome.

Face-to-face assessments consistently find higher FAS prevalence rates than surveillance studies, so the Fetal Alcohol Syndrome Surveillance Network II attempted to improve on the accuracy of previous records-based FAS prevalence studies. The investigators used passive reporting and active review of records from multiple sources to identify children aged 7 to 9 years with the disorder in Arizona, Colorado, and New York (Fox DJ et al. MMWR Morb Mortal Wkly Rep. 2015;64[3]:54-57).

Prevalence rates in the states ranged from 0.3 to 0.8 per 1000 children. Rates were highest among American Indian/Alaska Native individuals and lowest among Hispanic individuals. These results, however, are consistent with the equally low estimates from records-based studies. In contrast, experts report FAS estimates of 6 to 9 children per 1000 population from in-person assessments.

More accurate reporting of FAS prevalence is crucial for planning and delivering sufficient clinical, behavioral, and educational services for affected children and their families, said the investigators. To improve the recognition and documentation of FAS, the Centers for Disease Control and Prevention funded 6 Fetal Alcohol Spectrum Disorders Practice and Implementation Centers in 2014 to help clinicians better identify, treat, and prevent FAS. A survey of pediatricians in 2006 found that more than half had no training to detect and treat FAS.

**Prevalence (per 1000) of Fetal Alcohol Syndrome Among Children Aged 7-9 Years by Sex, Race/Ethnicity, and Age: Arizona, Colorado, and New York, 2010**

<table>
<thead>
<tr>
<th>Population</th>
<th>No. of Cases</th>
<th>Prevalence, per 1000 (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>271,895</td>
<td>0.3 (0.2-0.3)</td>
</tr>
<tr>
<td>Colorado</td>
<td>117,638</td>
<td>0.3 (0.2-0.4)</td>
</tr>
<tr>
<td>New York</td>
<td>82,924</td>
<td>0.8 (0.6-1.0)</td>
</tr>
<tr>
<td>Total</td>
<td>472,457</td>
<td>0.3 (0.1-0.4)</td>
</tr>
</tbody>
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