Tooth decay (cavities) is one of the most common chronic conditions of childhood in Spokane County and Washington state, similar to trends seen nationally.

Untreated tooth decay can cause pain and infections that may lead to problems with eating, speaking, playing, and learning. The Centers for Disease Control and Prevention also reports that children who have poor oral health tend to miss more school days and receive lower grades than children who have good oral health.

Washington State Department of Health (DOH), with Washington Dental Service Foundation, conducts a statewide Smile Survey every five years to assess children’s oral health. Dental hygienists receive specific training from DOH to conduct survey screenings, which are coordinated locally. Access to Baby and Child Dentistry program at Spokane Regional Health District coordinated the 2015/2016 school year Smile Survey. The following local results include screenings for 492 preschoolers from 13 randomly selected Head Start/Early Childhood Education and Assistance Program sites; and 1,895 children, in grades kindergarten through third, from 12 randomly selected schools.

Untreated Decay & Treatment Needs

**FIGURE 1** shows decay experience observed among children in Spokane County in 2015 compared to 2010. Decay experience increased across all age groups. Decay experience includes children with a history of observed decay, treated or untreated, in their primary and permanent teeth.

**FIGURE 2** shows untreated decay increased across all age groups, with a statistically significant increase among preschoolers.

Comparison: Percent of Children with Untreated Decay, 2010-2015

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>4.3</td>
<td>11.8</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>7.3</td>
<td>11.3</td>
</tr>
<tr>
<td>Third Grade</td>
<td>8.8</td>
<td>9.6</td>
</tr>
</tbody>
</table>
FIGURE 3 shows that rampant decay increased across all age groups. Rampant decay is defined as having a history of decay on 7 or more teeth.

![Comparison: Percent of Children with Rampant Decay, 2010-2015](image)

<table>
<thead>
<tr>
<th>Assessment Group</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>14.1</td>
<td>21.6</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>15.8</td>
<td>20.4</td>
</tr>
<tr>
<td>Third Grade</td>
<td>21</td>
<td>22.7</td>
</tr>
</tbody>
</table>

FIGURE 4 shows that, based on observed decay, the need for dental care increased among Spokane County children. However, the need for urgent dental care decreased across all age groups.

![Need for Dental Care](image)

Children’s Oral Health Disparities

Poor dental health can adversely impact a child’s ability to eat, speak and learn.

In Spokane County...

- Non-Hispanic white preschoolers were significantly less likely to have decay experience, untreated decay, and rampant decay than minority children.
- Non-Hispanic black and multi-racial elementary age children were significantly more likely to have decay experience than non-Hispanic white children.
- Elementary age children from low-income families were significantly more likely to have decay experience than those from families with higher incomes.

Spokane County Smile Survey results indicate that the level of tooth decay in preschool and elementary school students is unacceptably high, and that children from certain racial and ethnic groups or from families with low levels of income are far more likely than other children to develop tooth decay.

Specific to avoiding the impacts of poor oral health and eliminating disparities, research shows that individual-level approaches alone are not sufficient to reduce rates of tooth decay and other oral diseases. Proven prevention steps include:

- Finding a regular dentist and making a first appointment by child’s first tooth or birthday.
- Utilizing resources provided by the Access to Baby and Child Dentistry (ABCD) program at Spokane Regional Health District including enrollment, education and dental resources for children, ages 0-5, who have Apple Health benefits.
- Empowering medical providers to offer education, dental referrals and fluoride varnish applications for children during medical office visits, which is the work of Mighty Mouth in Primary Care.
- Encouraging a child’s healthy diet and drinking of water instead of sugary drinks.
- Brushing, flossing and visiting the dentist regularly to keep mouths healthy.

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