The purpose of this regional summary is to provide Northern Health Authority Dental Evaluation Subcommittee members with updated regional and provincial data from the 2006/07 Kindergarten Dental Survey along with socioeconomic, demographic and early childhood development information. These summaries supplement and update the regional data that were provided in the provincial report, Dental Health of BC Children in Relation to Social Determinants and Early Child Development: Analysis & Mapping of the 2006/07 Kindergarten Dental Survey. Specifically, this summary provides:

- additional results by Health Service Delivery Area (HSDA);
- updated socioeconomic data from the 2006 Statistics Canada Census and 2004 Taxfiler data;
- selected results from the neighbourhood-level analyses; and
- selected findings from the Dental Focus Groups conducted in the summer of 2009.

Please see the provincial report if you require additional details about the evaluation questions, dental survey codes used, and sources for the socioeconomic and early development data.

Survey Coverage
Dental health staff of Northern surveyed 94 schools and an estimated 2,769 out of 3,316 kindergarten students (83.5%) in the region during the 2006/07 school year (note: Quesnel and Prince George surveyed 259 and 728 students respectively at community events). 7 of the 94 schools surveyed (7.4%) had suppressed values on Code 01 (“No Visible Decay”) due to small sample sizes and were not included in the analysis. Survey coverage ranged from a low of 71.9% in the Northwest to a high of 94.4% in the Northeast.

Dental Outcomes
Overall, 58.6% of students surveyed in Northern had no visible dental decay (Code 01), 18.1% had no decay, but previous treatment (Code 02), 19.8% had visible decay (Code 03), and 3.5% had urgent treatment needs (Code 04). Northern Interior had the most favorable dental outcomes within the Health Authority, with only 36.8% of students having experienced early childhood caries—3.2% below the provincial target of 40%.

Socioeconomic Status
Compared to BC, Northern has higher rates of union and professional membership (35.3 vs. 33.9% of tax filers), no high school completion (22.8 vs. 16.2% of adults age 25-64) and lone parenthood (16.4 vs. 15.0% of families), but lower rates of low-income families (8.4 vs. 10.4%) and non-fluency in English or French (0.4 vs. 1.0%).

Early Child Development
Northern is higher than the provincial average in terms of EDI vulnerability on one or more scales (31.9 vs. 29.5%). Students from Northern show the highest vulnerability on the Language and Cognitive Development scale (15.9%) and the lowest vulnerability in terms of Emotional Maturity (11.3%).

Percent of kindergarten children vulnerable on each scale of the Early Development Instrument (Wave Two) as well as vulnerability on multiple scales.
Neighborhood Off-Diagonals

A provincial-wide analysis was conducted to identify unexpected or “off-diagonal” results for neighborhoods that have...

(A) a low rate of ECC despite having high rates of vulnerability on the EDI and low SES (resilient); or
(B) a high rate of ECC despite low rates of EDI vulnerability and high SES (at-risk).

Four (4) of these “off-diagonals” were found in Northern, all under group (A) (see Table 1). Prince Rupert-Cow Bay, a neighborhood in the Northwest, provides an example of a neighborhood that is doing better than expected given its developmental and socioeconomic circumstances. Despite having high EDI vulnerability (42.1%) and low SES (22nd percentile), only 25.0% of kindergarten students in this neighborhood have ever experienced dental caries.

Table 1. Neighborhood Of-Diagonals in NHA

<table>
<thead>
<tr>
<th>Neighborhood(s)</th>
<th>ECC %</th>
<th>EDI % Vol.</th>
<th>SES pctile.</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Fort George</td>
<td>32.1</td>
<td>46.1</td>
<td>2nd</td>
</tr>
<tr>
<td>Prince Rupert-Cow Bay</td>
<td>25.0</td>
<td>42.1</td>
<td>22nd</td>
</tr>
<tr>
<td>Ospika South</td>
<td>32.1</td>
<td>39.1</td>
<td>20th</td>
</tr>
<tr>
<td>Ospike North</td>
<td>32.1</td>
<td>36.2</td>
<td>24th</td>
</tr>
<tr>
<td>BC</td>
<td>39.1</td>
<td>28.6</td>
<td>--</td>
</tr>
</tbody>
</table>

ECC = Early Childhood Caries estimate (Codes 02 and 03 + 04’s).
EDI = % vulnerable on one or more scales. SES percentile rankings are based on 460 neighborhoods: ‘100th percentile’ = highest SES.

Dental Staff Focus Group Highlights

Focus groups were conducted with public health dental staff across the province in 2009 in order to identify the range of Health Authority dental health risk assessment strategies. Selected themes and quotes that emerged from each region’s focus groups are provided below. For a summary of the focus group project and provincial findings, please see the Dental Health Risk Assessment Focus Groups Provincial Analysis Report.

Northern Health: Going Above and Beyond to Overcome Barriers to Access

In the focus groups, NHA dental staff reported several ways in which they worked to support and advocate for caregivers who were struggling with transportation and financial barriers to accessing dental care. For example, some staff assisted families in applying for dental coverage through the Healthy Kids program or First Nations Non-Insured Health Benefit. Other staff compiled information on dentist service accessibility as a way to overcome barriers to access. As one experienced dental hygienist recounted:

“We do have such a serious access issue, so we have a list of all of the dentists and all of those things: [accepts] new patients, wheelchair accessible, accept First Nations Non-insured Health benefits, accepts Healthy Kids, what’s their fee schedule, balanced billing…Because a big part of our job is people [asking], ‘Okay, he’s got cavities, he’s 3, he can’t sleep at night--what do I do? Nobody will see him.'”