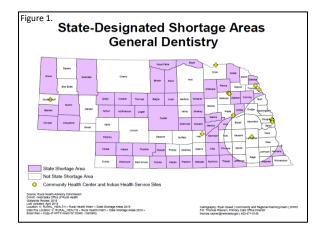
Access to Preventive Oral Health Care Services for Nebraska Children

Oral Health is essential to general health and well-being. The American Academy of Pediatric Dentistry (AAPD) has reported that *tooth decay is now the most common chronic childhood disease found in the United States.*¹ Children with poor oral health may experience low school attendance and difficulties with learning and socializing. Equal access to preventive oral health care decreases the likelihood that oral disease will become a chronic disabling health condition associated with malnutrition, diabetes, heart disease, stroke and oral cancer.¹

The Nebraska Department of Health and Human Services' Office of Oral Health and Dentistry (OOHD) has released three key reports highlighting critical oral health issues.^{1, 2, 3} Notably, in 2015-2016, 63.9% of 3rd grade children had decay experience, 32% of 3rd grade children had untreated caries, and 15% of children age 1-17 reported active oral health problems; all of these rates are higher than the U.S. averages.³ Further, hospital emergency room dental visits have doubled over 10 years, with 16% being for children ages 0-17.

Criterion 1: Disparities Exist Related to Health Outcomes

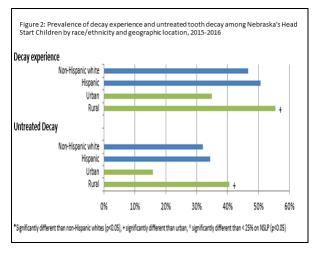
In 2017, 43% of Nebraska's population lived in rural locations, including approximately 125,000 children age 1-9.¹ More than half of Nebraska is considered a state designated general dentist shortage area (Figure 1).

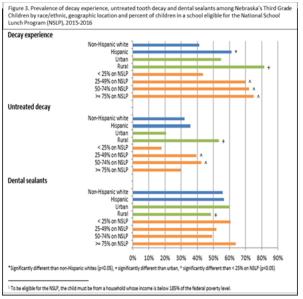


The Behavioral Risk Factor Surveillance Survey (BRFSS) found that, from 2012 to 2014, rural residents had higher oral disease rates and less access to dental care.⁴ Rural children in Nebraska (81%) also have higher rates than urban children(55%), and lower rates of dental sealants (49% to 60%).³ Third grade children living in rural counties have a significantly higher prevalence of both decay experience and untreated decay, and a significantly lower prevalence of protective dental sealant services (Figure 3).³

In 2018, only half (50.9%) of low-income children and youth eligible for Medicaid benefits received mandated preventive dental services during the past year.⁵ Further, only 22% of 6 to 9 year old Medicaid-eligible children received dental sealants.

Income inequality combines with rural disadvantage to compound the problem: Head Start children living in rural counties had significantly higher prevalence of decay experience and untreated decay than those living in urban counties (Figure 2).³ Compared to non-Hispanic White children, Hispanic children experience a significantly higher prevalence of decay among Nebraska children (Figure 3).³





Criterion 2: Data Exists to Document the Problem

The Office of Oral Health and Dentistry (OOHD) monitors children's oral health status through existing sources and through primary data collection.² Major external data sources include the National Survey of Children's Health and Nebraska Medicaid's EPSDT program. The OOHD also conducts statewide basic screening surveys. Two key population groups – children enrolled in Head Start and third grade children attending Nebraska's public and private schools, were screened in 2015-2016³. The Head Start survey involved 748 children between 3-5 years of age at 21 sites across the state. The Third Grade Survey screened 3,087 third grade children from 58 schools, with an oversampling of schools with high minority enrollment.

The results are a critical part of Nebraska's dental disease surveillance system. The OOHD plans to follow national guidelines that oral health surveys be conducted every five years to monitor changes and trends.

Criterion 3: Alignment, use the priority to maximum advantage

The Title V MCH Block Grant guidance includes 15 National Performance Measures (NPM) from five MCH population domains. NPM #13 directly addresses oral health, with subsection 13.2 aimed at preventive dental visits for children and adolescents ages 1-17.

The national Healthy People program listed Oral Health as one of its 12 national health priority issues for the first time in 2020.⁶ The oral health section includes 17 objectives to monitor oral health, with indicators for rates of dental decay and tooth loss, and children's use of preventive care services.

Nebraska's Healthy People 2020 selected nine of these OH objectives and set target improvement goals. The 2017-2021 Nebraska State Health Improvement Plan (SHIP) lists five priorities, two of which (Healthcare Access and Health Equity) align with improving children's dental health.

The 2016 Nebraska State Oral Health Assessment Report identified five strategic focus areas to prioritize for future activities of the OOHD, and recommended that the OOHD partner with existing Local Public Health Departments (many of whom list oral health need in their Community Health Improvement Plans) to form and train dental disease prevention teams to provide preventive services across the lifespan.

The OOHD currently partners with the University of Nebraska College Of Dentistry, the Creighton University School of Dentistry, the University of Nebraska College Of Public Health, the Nebraska Dental and Hygiene Associations, the Nebraska Association of Local Health Directors and the Health Center Association of Nebraska to increasing access to preventive care services.

The Nebraska Teeth Forever (NTF) Program was created in 2016 to address the oral health disparity between urban and high risk rural children and remove barriers that limit access to preventive care. Grant funding initially purchased hygiene equipment, instruments and supplies for seven rural local public health departments (LPHD) in dental shortage areas. Training was provided for local program staff. These community dental disease prevention teams then go out to public health settings to provide lifespan educational, preventive and referral services in children's centers, schools and elder facilities. NTF services need to be implemented, sustained and expanded across Nebraska to include all 16 rural LPHD.

The Office of Oral Health also coordinates the Oral Health Access for Young Children (OHAYC) Program that provides dental screenings, education and fluoride varnish to young children age 0-5. The OOHD currently supports three OHAYC programs through LPHD.

Criterion 4: Strategies Exist to Address the Problem/An Effective Intervention is Available

Dental disease is the most prevalent illness on the planet and there is no vaccine. However, there are safe and effective, evidence-based, prevention and education services that can greatly reduce dental health disparities and improve oral health outcomes, especially for high risk children age 1-9.

Fluoride varnish applications are an effective low cost approach to reducing cavities on both primary and permanent teeth and can reduce decay by more than 25%.¹ Fluoride varnish can be applied as soon as teeth begin to appear.

Preventive sealants are protective plastic coatings that are bonded to the biting surfaces of posterior teeth in a process that takes only minutes to apply. They are an effective low cost approach to reducing cavities on both permanent and primary teeth (for high risk children) and can reduce decay by more than 60%.¹

Oral Health Education is especially important for parents of newborns who might not understand the value of early oral hygiene and access to dental care to prevent dental decay. The American Academy of Pediatric Dentistry now recommends that children visit their dentist no later than their first birthday.

The OOHD partners with Nebraska Public Health Hygienists and Community Health Workers to promote use of the Early Dental Health Starter Kit program, which provides age-specific and culturally-appropriate information on the fundamentals of proper dental health and the consequences of oral disease. Dental screenings are another important community service provided by public health hygienists, alerting patients to dental problems and providing referrals that help avoid subsequent use of hospital emergency rooms.

Criterion 5: Severity of Consequences

In 2000, the U.S. Surgeon General released the first Report on Oral Health in America. The major message was that oral health is essential to the general health and well-being of all Americans. However, many Americans still experience needless pain, suffering, financial and social costs that diminish their quality of life and burden society. What amounts to "a silent epidemic" of oral disease is affecting our most vulnerable citizens, poor, children, rural residents, older adults and many members of racial and ethnic minority groups.

New research is pointing to associations between chronic oral infections and diabetes, heart and lung disease, stroke, and premature births. Receiving early preventive oral health care reduces health disparities and decreases the likelihood that oral disease will become a lifelong disabling chronic health condition.

Healthy People 2020 reports that nationally 75% of adults over age 45 have lost one tooth due to disease, while 25% of adults over age 65 have lost all of their teeth.⁶ Early prevention is critical to stopping a lifetime of somatic and oral disease, especially for children in rural areas and from low income families.

If this issue is selected as one of the Title V MCH priority needs in 2020, what do you expect this issue to look like five years from now and what progress do you anticipate?

With MCH support, the five year goal of the OOHD would be to sustain the current nine NTF sites and expand into more rural LPHD. Annual dental screenings should reflect an increase in permanent dental homes and a reduction in urgent dental referrals. The new statewide oral health survey should be conducted in 2022-2023; the OOHD anticipates a 5% decrease in third grade dental disease rates. The disparity between urban and rural children for dental disease and preventive services should be reduced by 10%.

¹ Nebraska Department of Health and Human Services, Office of Oral Health and Dentistry. Nebraska State Oral Health Assessment & Dental Disease Burden Report, 2016 <u>http://dhhs.ne.gov/Reports/Oral%20Health%20Assessment</u> <u>%20Report%20-%202016.pdf</u>

² Nebraska Department of Health and Human Services, Office of Oral Health and Dentistry. Nebraska State Oral Health Surveillance Plan, 2018.

http://dhhs.ne.gov/Dental%20Health%20Documents/NE-Oral-Health-Surveillance-Plan-2018.pdf

³ Nebraska Department of Health and Human Services, Office of Oral Health and Dentistry. Nebraska Oral Health Survey of Young Children, 2015-2016.

http://dhhs.ne.gov/Reports/Oral%20Health%20Survey%20 of%20Young%20Children%20-%202015-2016.pdf ⁴ Nebraska Department of Health and Human Services, Behavioral Risk Factor Surveillance System Reports, 2011-2018. <u>http://dhhs.ne.gov/Pages/BRFSS-Reports.aspx</u> ⁵ Annual Early and Periodic Screening, Diagnostic, and Treatment Report Form CMS-416. FY 2018 Data, 11/13/2019. Pages 82-84. <u>https://www.medicaid.gov/medicaid/benefits/early-andperiodic-screening-diagnostic-and-treatment/index.html</u>. ⁶ Healthy People 2020. <u>https://www.healthypeople.gov/2020/leading-healthindicators/2020-lhi-topics/Oral-Health</u>