

North Carolina Oral Health Section North Carolina Oral Health Surveillance Plan 2016-2020

EXECUTIVE SUMMARY

Introduction

Since 1918, through the work of the North Carolina Dental Society, the first dental public health program in the nation, the Oral Health Section of the N.C. Division of Public Health, was established. For a majority of those years, dentists, along with staff of the State Oral Health Section, have been conducting oral epidemiological surveys to investigate and understand the oral health burden of disease of North Carolina citizens.

The Oral Health Section promotes oral health for all North Carolinians as part of overall health, and aims to eliminate disparities through prevention and education by focusing on the *three core public health functions* – **assessment, policy development** and **assurance**.

With educational programs such as the famous Little Jack Puppet Show and the nation's first training program for public health dentists, North Carolina is a national leader in dental public health – a role which has been maintained and strengthened throughout the years. In order to remain a leader, the Oral Health Section looks to the guidance and expertise housed within national organizations.

The Oral Health Section is committed to carrying out best-practice evidence-based programs. their recently developed NC Oral Health Surveillance Plan meets recommendations outlined by the Association of State and Territorial Dental Directors, the Centers for Disease Control and Prevention, and the Council of State and Territorial Epidemiologists.^{1,2} This plan now allows our state's data to be included in the National Oral Health Surveillance System and assist our state in meeting Oral Health Objectives in both Healthy People 2020 and Healthy North Carolina 2020.^{3,4} With this plan, the Oral Health Section can contribute to the pool of knowledge regarding the oral health needs of North Carolina citizens and more appropriately see how North Carolina stands when compared to the rest of the nation. North Carolina will continue adapting programs to improve the oral health of North Carolinians.

Purpose and Objectives

The purpose of the North Carolina Oral Health Surveillance Program is to provide a consistent source of updated, reliable and valid information for developing, implementing and evaluating programs to improve the oral health of all North Carolinians. The N.C. Oral Health Surveillance Program has historically been viewed as one of the more comprehensive in the nation and continues to be a leader in surveillance.⁵ The N.C. Oral Health Surveillance Plan is a broadly based document that provides the framework to guide the Oral Health Section in surveillance areas and programmatic activities by collecting oral health data in multiple vulnerable populations in a timely manner. The goal of improving oral health takes a structured plan to keep all components of surveillance in various population groups working together as a syncytium.

The objectives of the oral health surveillance system are to:

1. Estimate the magnitude of oral disease in North Carolina
2. Monitor trends in oral health indicators
3. Monitor preventive services
4. Measure changes in oral health capacity
5. Evaluate the effectiveness of implemented programs and policy changes
6. Identify vulnerable population groups
7. Communicate and provide information for decision-making

Oral Health Indicators

The plan defines and prioritizes specific oral health-related indicators that have been deemed meaningful to monitor, analyze and evaluate regularly. The Oral Health Section has constructed a list of more than 75 indicators organized into four main groups:

1. Access to Care
2. Oral Health Outcomes
3. Community Intervention
4. Infrastructure

The plan provides descriptions of data sources and timeframes of data collection. The Oral Health Section is the primary data source; however, most indicators rely on additional sources. The plan also provides brief descriptions of quality measure sources and conveys the interaction of indicators and their related measures and objectives.

Timeline and Plan of Activities

The plan offers a timeline for the Oral Health Section. This includes tasks related to reporting, analysis and evaluation. The comprehensive plan also addresses privacy and confidentiality concerns related to oral health surveillance activities. The plan favors dissemination of findings to stakeholders, public health officials, local and regional leaders, and community representatives.

For a public health surveillance plan to be effective it should be responsive and react to new dental health challenges, adapting to constantly changing data sources. As a result, the oral health indicators as well as the plan of activities and reports may be modified during the five year timeframe outlined within.

Year 1: 2016

*Develop and disseminate North Carolina Oral Health Surveillance Plan

*Acquire and submit data on:

- Medicaid and CHIP^s enrollees with a dental visit
- Oral and pharyngeal cancers
- Tooth loss data for adults
- Adults with diabetes who had a dental visit
- State oral health programs
- Fluoridation

*Conduct and submit Basic Screening Survey data in pregnant women

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**Year 2: 2017**

- \*Acquire and submit data on:
  - Medicaid and CHIP<sup>§</sup> enrollees with a dental visit
  - Oral and pharyngeal cancers
  - State oral health programs
- \*Conduct and submit Basic Screening Survey data in 3<sup>rd</sup> graders

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Year 3: 2018

- *Disseminate Oral Health Burden document
 - Make publically available for public health policy
- *Acquire and submit data on:
 - Medicaid and CHIP[§] enrollees with a dental visit
 - Oral and pharyngeal cancers
 - Tooth loss data for adults
 - Adults with diabetes who had a dental visit
 - State oral health programs
 - Fluoridation
- *Conduct and submit Basic Screening Survey data in preschool children

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**Year 4: 2019**

- \*Acquire and submit data on:
  - Children aged 1-17 with a dental visit
  - Medicaid and CHIP<sup>§</sup> enrollees with a dental visit
  - Oral and pharyngeal cancers
  - State oral health programs
- \*Conduct and submit Basic Screening Survey data in high schoolers

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Year 5: 2020

- *Acquire and submit data on:
 - Medicaid and CHIP[§] enrollees with a dental visit
 - Oral and pharyngeal cancers
 - Tooth loss data for adults
 - Adults with diabetes who had a dental visit
 - State oral health programs
 - Fluoridation
- *Conduct and submit Basic Screening Survey data in frail elderly

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*§ Note: Children's Health Insurance Program (CHIP) is more commonly known as N.C. Health Choice*

### ***Analysis and Dissemination Plan***

Analysis of primary and secondary data will be conducted by the Oral Health Section by state and national partners. State analysis partners include additional departments within the N.C. Division of Public Health, the N.C. State Center for Health Statistics, the UNC-CH Gillings School of Global Public Health, and the two state dental training institutions; UNC Dental School and the ECU School of Dental Medicine. National partners offering additional support may include the Association of State and Territorial Dental Directors, the Centers for Disease Control and Prevention, and the Council of State and Territorial Epidemiologists.

Activities and reports planned for distribution in the next 5 years include:

- 2016: Tour North Carolina to gain in-depth understanding of existing dental delivery system across the state and to foster partnerships
- 2017: Develop and disseminate The North Carolina Oral Health Survey of Dental Providers
- 2018: Develop and disseminate The Burden of Oral Disease in North Carolina
  - A full report highlighting the current oral health of North Carolinians
- 2019: Develop and disseminate The North Carolina Oral Health Improvement Plan

Reports will contain surveillance results, current oral health data and any trends noted. These reports will be distributed electronically to partners across the state, shared with local health departments as well as shared with our national partners (the Association of State and Territorial Dental Directors and the Centers for Disease Control and Prevention) for comparison between states. Additionally, these oral epidemiology reports will be available electronically on the state website and submitted to the North Carolina Dental Society for dissemination.

### ***Conclusion***

Maintaining and improving the oral health of North Carolinians is a worthwhile, continuous statewide endeavor that depends on strong collaboration with stakeholders, leaders and citizens. A comprehensive oral health surveillance plan will be beneficial in providing necessary information for the decision-making process in dental public health efforts.

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## ***References***

1. Association of State and Territorial Dental Directors (ASTDD) Best Practices Committee. Best practice approach: state-based oral health surveillance system [monograph on the Internet]. Sparks, NV: ASTDD; 2011 May 17. 27 p. Available from: <http://www.astdd.org>.
2. Council of State and Territorial Epidemiologists (CSTE), prepared by Association of State and Territorial Dental Directors. State-based oral health surveillance systems: Conceptual framework and operational definition [monograph on the Internet]. Atlanta, GA: CSTE; 2013 October. 43 p. Available from: <http://www.cste.org>.
3. National Oral Health Surveillance System (NOHSS) [Internet]. Washington, DC: U.S. Department of Health and Human Services, National Center for Chronic Disease Prevention and Health Promotion, Division of Oral Health. Available from: <http://cdc.gov/oralhealth/>.
4. Healthy People 2020 [Internet]. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Available from: <http://www.healthypeople.gov>.
5. Rozier, RG, King, RS. Defining the Need for Dental Care in North Carolina: Contributions of Public Health Surveillance of Dental Diseases and Conditions. N.C. Medical Journal 2005; 66(6): 438-444.