



# Dental Public Health Project/Activity Descriptive Report Form

Please provide a detailed description of your **successful dental public health project/activity** by fully completing this form. Expand the submission form as needed but within any limitations noted. Please return completed form to: [lofano@astdd.org](mailto:lofano@astdd.org)

**NOTE:** Please use Arial 10 pt. font.

**CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS**

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**PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM**

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**SECTION I: ACTIVITY OVERVIEW**

**Title of the dental public health activity:**

**Oral Health Data Dissemination**

**Public Health Functions\* and the 10 Essential Public Health Services to Promote Oral Health:**

Check one or more categories related to the activity.

"X"	<b>Assessment</b>
X	1. Assess oral health status and implement an oral health surveillance system.
X	2. Analyze determinants of oral health and respond to health hazards in the community
	3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health
	<b>Policy Development</b>
X	4. Mobilize community partners to leverage resources and advocate for/act on oral health issues
X	5. Develop and implement policies and systematic plans that support state and community oral health efforts
	<b>Assurance</b>
	6. Review, educate about and enforce laws and regulations that promote oral health and ensure safe oral health practices
X	7. Reduce barriers to care and assure utilization of personal and population-based oral health services
	8. Assure an adequate and competent public and private oral health workforce
	9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services
	10. Conduct and review research for new insights and innovative solutions to oral health problems

**[\\*ASTDD Guidelines for State and Territorial Oral Health Programs that includes 10 Essential Public Health Services to Promote Oral Health](#)**

**Healthy People 2030 Objectives:** Please list HP 2030 objectives related to the activity described in this submission. If there are any state-level objectives the activity addresses please include those as well.

- Increase the proportion of people whose water systems have the recommended amount of fluoride — OH-11
- Increase the health literacy of the population — HC/HIT-R01
- Reduce current e-cigarette use in adolescents — TU-05
- Increase abstinence from cigarette smoking among pregnant women — MICH-10
- Increase the number of community organizations that provide prevention services — ECBP-D07
- Increase use of the oral health care system — OH-08

**Provide 3-5 Key Words (e.g. fluoride, sealants, access to care, coalitions, policy, Medicaid, etc.) These will assist those looking for information on this topic:**

Acquiring oral health data, Use of oral health data, Surveillance, Social Determinants of Health, Data Sharing

**Executive Summary: Complete after Section II: Detailed Activity Description. Please limit to 300 words in one or two paragraphs.**

Provide a brief description of the dental public health activity. Include information on: (1) what is being done; (2) who is doing it and why; (3) associated costs; (4) outcomes achieved (5) lessons learned, both positive and negative.

The North Carolina Oral Health Section, as the state dental office, is charged with dental public health surveillance and shares its oral health data for program planning. The NC Oral Health Section (OHS) created data visualization tools, **Oral Health Snapshots** which are one-pagers listing oral health variables that support comparison between 10 regions of the state and against the state overall. 13 measures were chosen to compare region-to-region and combined to offer a state value. In some instances, North Carolina can be compared against other states.

The [NC Oral Health Regional Snapshots](#) and the [NC Social Determinants of Health by Regions](#) offer an accurate yet speedy community oral health needs assessment. All three overlaying domains of a community needs assessment (described in the 2013 CDC [Community Needs Assessment Participant Workbook](#)) are found in the combination of the tools:

- a selected community, such as our regions
- a focus, such as oral health, within that region
- components that impact oral health

Using these one-pagers, community stakeholders developed a plan of action to improve oral health in their regions of the state. When stacked and bookended, these regional plans formed the 2020-2025 NC Oral Health Improvement Plan. As the regional oral health improvement plans are implemented, data points in the **Oral Health Snapshots** should show improved outcomes. In this manner, the snapshots can be used as an evaluation tool.

The OHS incurred no additional costs since existing staff led this data dissemination project.

OHS project outcomes on data sharing are the 11 **Oral Health Snapshots** (10 Regional and one Statewide) developed by our epidemiologist and then further, the improvement plans developed via their use.

Overarching lessons learned are that stakeholders need clarity and streamlined support. Compiling multiple compounding drivers of oral health into one easily accessible document was good for our team and our partners because it provided clear oral health data in an easily understandable resource. Snapshots can be updated as data points change. Our recently updated Oral Health Snapshots have social determinants of health noted. This, too, has been beneficial as our staff and partners are able to incorporate this “hot topic” in understanding obstacles and barriers to oral health that our state’s most vulnerable populations struggle to overcome.

## **SECTION II: DETAILED ACTIVITY DESCRIPTION**

Provide detailed narrative about the dental public health activity using the headings provided and answering the questions. Include specifics to help readers understand what you are doing and how it’s being done. References and links to information may be included.

**\*\*Complete using Arial 10 pt.**

### **Rationale and History of the Activity:**

1. What were the key issues that led to the initiation of this activity?

The Oral Health Section was restructured in 2015 in response to compounding budget and staffing cuts. Based on the recommendations of the *2014 NC Oral Health Plan*, the Oral Health Section reorganized into a regional service model with each region consisting of about 10 counties served by at least two public health dental hygienists. Regional Oral Health Alliances (ROHA) were convened to engage oral health stakeholders in partnering to address needs in their community. ROHA were also invaluable in updating the NC State Oral Health Plan. Since a community needs assessment provides the foundation

for public health planning, the OHS surveillance team developed state and regional **Oral Health Snapshots**, which included key health outcome measures that impact oral health. Data points include measures for both children and adults. Measures for social determinants of oral health are also noted on the **Oral Health Snapshots**.

2. What rationale/evidence (may be anecdotal) did you use to support the implementation of this activity?

A state plan enables a state to create comprehensive goals to improve oral health of its citizens. Because both its planning and success need the support of those who must make it happen, a collaborative process would ideally be used. That is why North Carolina's newest Oral Health Plan was written in partnership with the safety net dental providers and oral health stakeholders, the Regional Oral Health Alliances, who will be engaged in its implementation. And we knew our ROHA membership needed easily accessible oral health data.

3. What month and year did the activity begin and what milestones have occurred along the way? (May include a timeline.)

**IMPROVEMENT PLAN TIMELINE**

- 2015-2016** Answering the call in North Carolina's Oral Health Plan of 2014, *Revised Statewide Oral Health Strategic Plan: Collaboration for Integrated and Comprehensive Oral Health*, the Section restructured from having frontline staff work independently on the county-level to working in teams (at least a pair of Public Health Dental Hygienists) serving Regions of about ten counties each.
- 2016-2017** OHS Public Health Dental Hygienists convened **Regional Oral Health Alliances** (ROHAs), 10 oral health stakeholder groups that address oral health in their regions.
- 2017-2018** The Section created [NC Oral Health Regional Snapshots](#) (Snapshots) or "community assessments" for each Region and for the state overall. Each Snapshot provided information on oral health measures and helped to identify areas for improvement.
- 2018-2019** **ROHAs** used their Snapshot to address and prioritize one area for intervention and identify evidenced-based strategies for intervention to make sustainable changes.
- 2019-2020** Each **ROHA** acted as a forum for the state's dental safety net to give input as the Section considered designing North Carolina's new Oral Health Plan.
- 2020-2021** The [NC Oral Health Regional Snapshots](#) were updated to reflect current programs and to now highlight social determinants of health. All Regional Oral Health Improvement Plans were finalized and bookended, with additional updated materials to create [2020-2025 North Carolina Oral Health Improvement Plan](#).

The sections below follow a logic model format. For more information on logic models go to: [W.K. Kellogg Foundation: Logic Model Development Guide](#)

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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What resources were needed to carry out the activity? (e.g., staffing, volunteers, funding, partnerships, collaborations with various organizations, etc.)

**Public Health Epidemiologist:** An expert who understood the value of data points on drivers of oral health and who could identify what data resources our state had. This staff member created oral health snapshots.

**NC Oral Health Regional Snapshots:** These one-pagers share the data points of the 10 regions highlighting the oral health programs or the status of populations across the lifespan. Data points on the Oral Health Snapshots include the number of children aged 6-14 who received sealants from Medicaid providers, and the percentage of:

- kindergarten children with untreated tooth decay;
- adults that have dental insurance;
- Medicaid eligible children 1-2 years getting preventive oral services;
- Medicaid eligible children 1-20 years getting preventive dental services;

- population served by public water systems with fluoridated water;
- middle and high school students currently using e-cigarettes;
- pregnant women with untreated caries;
- adults that last visited a dentist 5 or more years ago;
- adults currently smoking cigarettes;
- adults age 18 and older who have had permanent teeth extracted; and
- adults 65 years and older with all their permanent teeth extracted.

As our staff and partners first looked to plan their *activities*, these snapshots provided a quick and clean “community needs assessment.” Moving forward, as our improvement plans are implemented, these same snapshots can be used for program evaluation to measure successes. Not immediately, of course, but in time we expect to see our datapoints improve.

**Alliance membership:** Alliances are comprised of local oral health providers and stakeholders willing to partner in addressing the needs in their community. ROHA members volunteer their time.

**Funding:** *there is not funding specifically for this project, rather OHS staff have ROHA leadership activities included in their work plans.* OHS Public Health Epidemiologist position is funded through the state Preventive Health Block Grant.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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1. Please provide a detailed description the key aspects of the activity, including the following aspects: administration, operations, and services.

**Administration:**

This project has been led through our central office. We worked with the Division of Public Health to create a Preventive Health Block Grant supported Public Health Epidemiologist position. Creating the Oral Health Snapshots (or rather completing the Oral Health Snapshots that were drafted as our plan unfolded) was a work task assigned during onboarding of our new team member as soon as the epidemiologist position was filled.

**Operations:**

Our field hygienists support the ROHA by planning and facilitating meetings. Staff shared Regional Oral Health Snapshots with our ROHA members for a better understanding of not only the oral health status in their regions but also the drivers of oral health.

**Services:**

Our ROHA members have their own responsibilities with their full-time jobs. Understanding that our ROHA members are busy has informed the OHS responsibility to offer clear and concise oral health data in an easily accessible format.

Regional Oral Health Snapshots were created for our stakeholders used initially as data visualization tools for community needs assessment by each of the 10 regions of the state. In the future as our ROHA work on their plan’s dental public health programs, updated Regional Oral Health Snapshots, which are posted to our website, can be used to evaluate successes (or not) in our programs’ implementation.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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2. What outputs or direct products resulted from program activities? (e.g., number of clients served, number of services units delivered, products developed, accomplishments, etc.)
  - 10 Regional Oral Health Snapshot
  - 1 State Oral Health Snapshot
  - 10 Regional Oral Health Improvement Plans
  - 1 State Oral Health Improvement Plan
  - a tool that can be updated for program evaluation.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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3. What outcomes did the program achieve? (e.g., health statuses, knowledge, behavior, care delivery system, impact on target population, etc.) Please include the following aspects:
- a. How outcomes are measured
  - b. How often they are/were measured
  - c. Data sources used
  - d. Whether intended to be short-term (attainable within 1-3 years), intermediate (achievable within 4-6 years), or long-term (impact achieved in 7-10 years)

We do have a tracking system: each regional team has their own Oral Health Snapshot, which can be updated to track progress and measure overarching outcomes. As each region addresses their targets, we would expect the data points to eventually improve. It is not a perfect system, as our Snapshots will not track some social determinants of health such as habit changes or health literacy. However, by increasing or work in these areas, we may see improved oral health reflected in the data on the Snapshots.

Oral Health Snapshots can be updated as needed. Data is collected every year, every two years, and every five years, depending on the source's update of data. **Data points used:**

- North Carolina Calibrated Dental Assessment
- Oral Health Section Staff Weekly Service Report
- Centers for Medicare and Medicaid Services (CMS) CMS-416 Annual Early and Periodic Screening, Diagnostic and Treatment (EPSTD) Participation Report
- NC Perinatal Basic Screening Survey
- Centers for Disease Control (CDC) Water Fluoridation Reporting System
- NC Youth Tobacco Survey
- NC Behavioral Risk Factor Surveillance System (BRFSS)

This State Plan is expected to be a five-year plan. Fortunately, it can be added to or revised in the upcoming years for long-term impact

**Budgetary Information:**

NOTE: Charts and tables may be used to provide clarity.

1. What is the annual budget for this activity?

No budget was created for the activity to create the Oral Health Snapshots. However, the Oral Health Section worked collaboratively with the NC Division of Public Health's Executive Leadership Team and their Budget Office to make legislative changes necessary in budgeting our state's Preventive Health Block Grant to support a Public Health Epidemiologist.

2. What are the costs associated with the activity? (Including staffing, materials, equipment, etc.)

There were no associated costs with creating the **Snapshots** since the OHS worked with our new epidemiologist position and the graphic designers in the Department of Health and Human Services Communications Team to make our oral health data one-pagers clear, concise, and visually appealing. The activities of facilitating and supporting the Regional Oral Health Alliances has been incorporated into the workplans of the existing field staff of the Oral Health Section which added no costs. Finally, there were no costs associated with ROHA membership using their **Snapshots** to plan dental public health activities for their region.

3. How is the activity funded?

The Oral Epidemiologist is funded through a state grant. We are working to transition this position from a grant to a state-supported position by reclassifying an existing position in the OHS to a Public Health Epidemiologist.

#### 4. What is the plan for sustainability?

Transitioning the epidemiologist position from grant support to state funding will assure the OHS ability to share oral health data with our partners. Our ROHA membership seem to appreciate the **Snapshots** and are likely to continue to value this data visualization tool as the programs move forward. In fact, data is becoming more important to our public health colleagues overall as healthcare transformation is colliding with digital transformation, we're seeing data and its application has become more important to our public health colleagues.

#### **Lessons Learned and/or Plans for Addressing Challenges:**

1. What important lessons were learned that would be useful for others looking to implement a similar activity? Was there anything you would do differently?

**Environmental Scan:** many states likely have similar if not the exact same oral health data resources. States limited by FTE and fewer resources than NC may be able to create their own one-pagers. Many data points used in the OHS Oral Health Snapshots are not generated by our team.

**Time management** has been very important in this endeavor. Understanding that our ROHA members are busy with their full-time jobs, Oral Health Snapshots were valuable on several fronts:

visually appealing and easily accessible, used as oral health needs assessment, will be used for program evaluation.

2. What challenges did the activity encounter and how were those addressed?

We have had challenges, including updating the Oral Health Snapshots.

- (1) Although it is important to respond to feedback our partners give, when conflicting requests come into play, navigating the response can be tricky. Academics, clinicians, and policy makers all come to oral health from different backgrounds and have different ways of reviewing and using data. What might be important to a university scholar might be slightly different from what a provider might find useful in clinical practice, for instance.
- (2) The OHS wants our data visualization tool to be as useful as possible. Early on our Snapshots focused on the work of the OHS. They have since been updated (once) to include broader stakeholder involvement. (The earlier version showed how many dental sealants our staff placed but the updated version shows the number of dental sealants placed on children enrolled in Medicaid in that Region. This updated version also now highlights which drivers of oral health are "social determinants of health.")
- (3) Also, after the OHS and our ROHA began to use the Snapshot data for program planning, national initiatives were updated. HP 2020 is very different from HP 2030. We may find it necessary when update our Snapshots in five years, that we will need to include different measures.

#### **Available Information Resources:**

Share any models, tools, and/or guidelines developed by the program specifically for this activity that may be useful to others seeking additional information. Hyperlink resources if possible.

- North Carolina Oral Health Snapshot and 10 Regional Oral Health Snapshots  
<https://publichealth.nc.gov/oralhealth/stats/index.htm>
- [2020-2025 North Carolina Oral Health Improvement Plan](#) (this plan was developed using the Oral Health Snapshots.)

<b>TO BE COMPLETED BY ASTDD</b>	
Descriptive Report Number:	36013
Associated BPAR:	Dissemination of Data from State-Based Surveillance Systems
Submitted by:	NC Department of Health and Human Services, Division of Public Health, Oral Health Section
Submission filename:	DES36013NC-oh-data-dissemination-2021
Submission date:	August 2021
Last reviewed:	August 2021
Last updated:	August 2021