Ohio Department of Health

Ohio Oral Health Surveillance Plan, 2014-2018

Oral Health Section
2/1/2014

Table of Contents

Appendices

I. Historical Perspective

The Oral Health Section (OHS), Ohio Department of Health (ODH) has a rich history in data collection and analysis to support its core public health functions of assessment, assurance and policy development. For example, in the mid-1980's, the OHS conducted a comprehensive needs assessment on the use of dental sealants in the state in order to develop a plan for increasing the number of children in the state with dental sealants. In 1988, OHS staff conducted its first statewide open-mouth screening survey of students in elementary schools to measure the extent of untreated tooth decay, the prevalence of dental sealants and the need for dental care. During the years since, the OHS has conducted five additional open-mouth screening surveys (including the survey currently being conducted during the 2013-14 and 2014-15 school years), as well as surveys of specials populations (e.g., children of migrant farmworkers, adults who are homeless and preschool-aged children).

The OHS has served as a national leader in the development of needs assessment methods and tools for use by other state dental programs. In 1994, the OHS received funding from the Association of State and Territorial Dental Directors (ASTDD) to develop a comprehensive model for conducting state and local oral health needs assessments.[1] The model included methodology for conducting open mouth oral health screening surveys, which served as the basis for the subsequent development in 1999 of the Basic Screening Survey (BSS) methodology.[2] The BSS methodology is considered the "gold standard" in conducting open mouth surveys by state dental programs, and has been employed by the OHS in its surveys.

Dissemination of results of OHS needs assessments has involved several approaches over the years, including publishing manuscripts in peer-reviewed journals, printing topic-specific reports for distribution to interested parties, and more recently, using the OHS Web site to share information. This latter approach took on more significance in 2004 when the OHS began the process of developing a Web-based system whereby an oral health profile of each Ohio county and the state would be available. This system became operational in 2007. The profiles were collectively named the "Ohio Oral Health Surveillance System (OOHSS)" and its attributes correspond to many of the characteristics of a surveillance system as described by the Association of State and Territorial Dental Directors (ASTDD): an "ongoing, systematic collection, analysis and interpretation of health data" to include "a variety of conditions, risk

[1] Seven –Step Model for Needs Assessment. Association of State and Territorial Dental Directors, 1996. http://www.astdd.org/oral-health-assessment-7-step-model/
[2] Basic Screening Surveys, Association of State and Territorial Dental Directors, 2003, Revised 2008. http://www.astdd.org/basic-screening-survey-tool/

factors and external influences; to "employ a variety of methods and data sources"; and to "go beyond basic disease reporting."[3]

While the OOHSS is the cornerstone of the OHS' surveillance data, the OHS uses other approaches to gather, analyze and disseminate oral health data. The purpose of this document is to describe in detail the OOHSS and other components of the OHS's surveillance efforts and lay out a timetable for surveillance activities during the next five years.

II. Mission and Goals of the Oral Health Section

The mission of the OHS is to promote and improve the oral health of all Ohioans. The OHS has four goals that support its mission:

Goal 1: Ohio communities will have access to community oral disease prevention.
Goal 2: Ohioans will have access to dental care.
Goal 3: Ohioans, local programs, policymakers and advocates will have access to high-quality population-based and community oral health information.
Goal 4: Public policy in Ohio will include oral health as an essential component of health.

III. Objectives of the Ohio Oral Health Surveillance System

The ability to make progress toward reaching OHS goals is heavily dependent on the availability of quality oral health data and its careful analysis. The objectives of the OOHSS are:

- to monitor the oral health of Ohio's residents;
- to provide data for program planning by the OHS;
- to provide data to state and local oral health advocates for driving oral health policy; and
- to evaluate the impact of oral health programs on the oral health of Ohioans.

IV. Indicators Included in the Ohio Oral Health Surveillance System

From its inception, the OOHSS was designed to provide a core set of county-level indicators of oral health status, access to dental care, the dental workforce, other local resources for dental care and the availability of public health dental disease prevention programs. Many local agencies and organizations in Ohio don't have the resources to conduct comprehensive oral

[3] State-Based Oral Health Surveillance Systems: Conceptual Framework and Operational Definition. Prepared by the Association of State and Territorial Dental Directors. October 2013.

health needs assessments, but need data for planning and securing funding for oral health programs. The data contained in the OOHSS allow local health officials, advocates and the public to understand the oral health of residents in their county in the context of available local oral health resources; to compare oral health status and resources to that seen at the state level; and to monitor changes over time.

The OOHSS was also designed to include indicators that align with the Centers for Disease Control and Prevention (CDC) National Oral Health Surveillance System (NOHSS)[4] oral health indicators and with the national Healthy People oral health objectives.[5] The indicators in the NOHSS were initially developed and approved by the Council of State and Territorial Epidemiologists (CSTE) in 1998-1999, and were revised in 2012 to include several additional indicators. The NOHSS indicators are intended to reflect state-level surveillance, i.e., data that can be collected at the state-level. The Healthy People objectives are a set of national objectives that were first established in 1979 and have been revise every 10 years since. Their purpose is to establish national benchmarks that help to establish priorities and drive action at the state and local levels.

The lists of NOHSS indicators and the Healthy People 2020 Oral Health Objectives can be found in Appendices 1 and 2. While not identical, the NOHSS and the Healthy People 2020 are similar in the components of oral health to be measured. For example, the NOHSS includes an indicator that measures the percent of 3rd graders or Medicaid-enrolled children ages 6-9 or 10-14 with dental sealants on one or more permanent teeth. Healthy People 2020 includes a similar outcome measure, however, it is to be reported for "children and adolescents" without ages or grade levels specified.

In addition, two indicators in the OOHSS enable the OHS to report on the oral health-related state performance measures in Ohio's federal Maternal and Child Health Block Grant, which is the primary source of funding for the OHS. These indicators are the percent of third grade children who have received protective sealants on at least one permanent molar tooth and the percentage of third grade children with untreated caries.

A screen shot of a typical county profile is presented below that displays all the indictors and sources of the data. A state-level profile with the same indicators can be accessed via a link on each county profile.

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[4] National Oral Health Surveillance System. Centers for Disease Control and Prevention. http://www.cdc.gov/nohss/. Accessed 1/30/14.
[5] Healthy People 2020. US Department of Health and Human Services. http://healthypeople.gov/2020/about/default.aspx. Accessed 1/30/14.

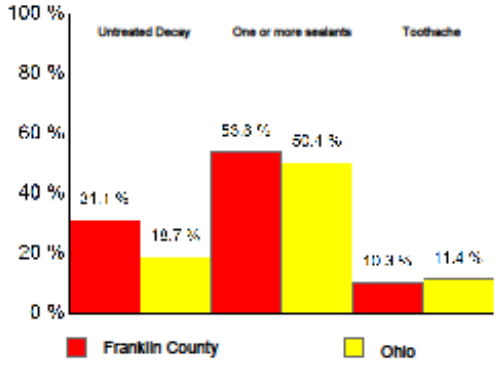
Franklin County

Ohio Oral Health Surveillance System, 2011 Description of Data Sources State Profile

Demographics	<18 Years	18-64 Years	65+ Years	Totals
Population by age (1)	278,542	769,166	115,706	1,163,414
Percent of population <100% of poverty level (2)	24.1%	16.4%	9.8%	17.6% (Rank: 69)
Percent of population <200% of poverty level (2)	44.1%	31.7%	29.2%	34.5% (Rank: 45)
Percent (#) of schools with 50% or more of students eligible for the Free and Reduced Price Meal Program (3)				57.6% (Schools: 215)

Medicaid (4)	0-2 Years	3-18 Years	19-64 Years	65+ Years
Percent of total county population eligible for Medicaid	63.7%	47.5%	13.1%	13.2%
Percentage of Medicaid-eligible population with a dental visit	7.7%	45.8%	31.7%	22.0%

Indicators of Oral Health, 3rd Grade Students (5)



County data marked with an asterisk are unreliable. See the Description of Data Sources for more detail.

Oral Health Care Access of Children and Adults (6)

	< 18 Years	18-64 Years	65+ Years
Percent with a dental visit in the last year	77.5%	60.9%	56.7%
Percent who have never visited a dentist	12.4%	N/A	N/A
Percent uninsured for dental care	15.4%	34.6%	58.0%
Percent who could not receive needed dental care	4.7%	16.9%	8.0%

Community Dental Disease Prevention (7)

Percent of population served by optimally fluoridated water (*)	99.2%
Number of schools eligible for school-based sealant programs	183
Number of schools participating in school-based sealant programs	107

(*) Fluoride levels of public water systems

Dental Care Resources

Number of licensed dentists (8)	899
Number of primary care dentists (general and pediatric) (8)	728
Ratio of population per dentist (8)	1,279:1
Number of dentists who treated Medicaid patients (4)	209
1-50 dental patients	77
51-249 dental patients	39
250+ dental patients	93
Ratio of Medicaid population per dentist who treats Medicaid patients (4)	1,255:1
Number of OPTIONS dentists (7)	181
Ratio of low-income patients per OPTIONS dentist (7)	2,156:1
Number of safety net dental clinics (7)	14
Number of Dental Health Professional Shortage Areas (HPSA) (7)	2

Data Sources:

(1) 2010 U.S. Census
(2) See "Description of Data Sources"
(3) 2010-11 School Year, Ohio Department of Education
(4) State Fiscal Year 2010, Ohio Department of Job and Family Services
(5) 2009-10 Oral Health and BMI Survey, Ohio Department of Health
(6) 2008, Ohio Family Health Survey
(7) 2011, Ohio Department of Health
(8) 2010, Ohio State Dental Board

The following chart lists the indicators by category, source of data and timeframe for collection.[6] Those indicators that are also included in the 2012 version of the NOHSS and the national Healthy People 2020 Oral Health Objectives are noted (acknowledging that there are differences in the way in which the indicator is to be measured and reported):

Data Included in County-Level Profiles

Category	Source of Data	Timeframe
Demographic		
Population by Age	US Census	Annual post-censal estimates
Percent of population <100% of the federal poverty level, by age	US Census	5-year averages from the American Communities Survey
Percent of population <200% of the federal poverty level, by age	US Census	5-year averages from the American Communities Survey
Percent (and number) of schools in county with 50% or more of students eligible for the Free and Reduced Price Meal Program	Ohio Department of Education (ODE)	Annually
Medicaid		
Percent of total county population eligible for Medicaid, by age *	Ohio Department of Medicaid (ODM)	Annually
Percent of Medicaid-eligible population in county with a dental visit, by age	ODM	Annually
Indicators of Oral Health, 3rd Grade Students		
Percent of 3rd graders with one or more untreated cavities, compared to state *‡¥	2009-10 Statewide "Make Your Smile Count" Screening Survey (BSS)	Every 5 years
Percent of 3rd graders with dental sealants on one or more permanent teeth, compared to state * ‡ ¥	2009-10 Statewide "Make Your Smile Count" Screening Survey (BSS)	Every 5 years
Percent of 3rd graders reporting a toothache, compared to state	2009-10 Statewide "Make Your Smile Count" Screening Survey (BSS)	Every 5 years

[6] The Ohio Oral Health Surveillance System can be accessed via the ODH Oral Health Section Web site at: http://publicapps.odh.ohio.gov/oralhealth/

*** 2012 NOHSS indicator; ‡ Healthy People 2020 indicator; ¥ MCH Block Grant State Performance Measure**

Oral Health Care Access of Children and Adults		
Percent with a dental visit in the last year, by age * ‡	2008 Ohio Family Health Survey[7]	County-level data collected about every 4 years
Percent who have never visited a dentist, by age	2008 Ohio Family Health Survey	County-level data collected about every 4 years
Percent uninsured for dental care	2008 Ohio Family Health Survey	County-level data collected about every 4 years
Percent who could not receive needed dental care	2008 Ohio Family Health Survey	County-level data collected about every 4 years
Community Dental Disease Prevention		
Percent of county population served by optimally-fluoridated water (includes a link to a table that lists the fluoride levels of all the community water systems in the county) ‡	Ohio Environmental Protection Agency (OEPA)	Annually
Number of schools eligible for school-based sealant programs	ODE	Annually
Number of schools participating in school-based sealant programs	Oral Health Section Program Data	Annually
Dental Care Resources		
Number of licensed dentists	2010 Ohio State Dental Board licensure data	Every 2 years
Number of primary care dentists (general and pediatric)	2010 Ohio State Dental Board licensure data	Every 2 years
Ratio of county population per dentist	2010 Ohio State Dental Board licensure data	Every 2 years
Number of dentists who treat Medicaid patients *	ODM	Annually

*** 2012 NOHSS indicator; ‡ Healthy People 2020 indicator; ¥ MCH Block Grant State Performance Measure**

[7] The Ohio Family Health Survey is now known as the Ohio Medicaid Assessment Survey. Details about this survey can be found on page 10.

Ratio of Medicaid population per dentist who treats Medicaid patients	ODM	Annually
Number of OPTIONS dentists[8] in county	Oral Health Section Program Data	Annually
Ratio of low-income patients per OPTIONS dentist	Oral Health Section Program Data	Annually
Number of safety net dental clinics (links to an interactive map showing the location of clinics)	Oral Health Section Program Data	On-going
Number of Dental Health Professional Shortage Areas (HPSAs) (links to an interactive map showing location of HPSAs)	Oral Health Section Program Data	On-going

The data are collected from a variety of sources; some are collected directly by the OHS such as via the BSS of 3rd grade students, but most are collected from secondary data sources at the state and national level. The OOHSS is updated approximately once a year. Each profile contains a link, "Description of Data Sources"[9] that provides an overview of each data item, such as its source, how recently it was collected and when new data for that indicator will be available. (This document can be found in Appendix 3.) Users of the data are encouraged to supplement the data in the OOHSS with more recent local data, if available.

V. Details about Indicators

Demographics

Population data is gathered from the National Center for Health Statistics (NCHS), National Vital Statistics System (NVSS) U.S. Census Population estimates for post-censual years by county[10]. The raw population estimates by age are then aggregated into age categories by county for easier use. Population under 18 years of age, age 19 through 64, and 65 and older are then reported through the OOHSS. Other age categories are also aggregated for use as denominators for other indicators (see Medicaid details below).

Poverty data is gathered from the American Communities Survey (ACS) using the 5-year estimates in order to obtain county-level estimates for all 88 of Ohio's counties. The raw ratio

[8] OPTIONS (**O**hio **P**artnership **T**o **I**mprove **O**ral health through access to **N**eeded **S**ervices) is a case-management program administered by the Oral Health Section in partnership with the Ohio Dental Association that links eligible patients with dentists who have volunteered to donate care or provide care for reduced fees.

[9] http://publicapps.odh.ohio.gov/oralhealth/bohsdocs/2012/datasources.pdf. Accessed 1/31/14.
[10] http://www.cdc.gov/nchs/nvss/bridged_race.htm Accessed 2/19/14.

of income level by age data is obtained through the American Fact Finder Web site[11]. The data is then aggregated by the OHS to age and poverty level groups of interest. The percentage of individuals under 18 years of age, age 19 through 64, and 65 and older under both 100% of the federal poverty level (FPL) and 200% FPL by county are aggregated and reported through the OOHSS.

Data on low-income children and schools is obtained through the ODE. The percentage of schools with 50 percent or more students enrolled in the free/reduced price meal program is obtained through data released in the Interactive Learning Report Card (iLRC) power user reports Web site maintained through the ODE[12]. Enrollment by economic disadvantage and school building data is downloaded from the site. The OHS analyzes this data and aggregates by county the number of total schools and the number of schools with 50 percent or more students indicated as economically disadvantaged to calculate this indicator reported through the OOHSS.

Medicaid

Medicaid claims data is made available to the OHS through a Memorandum of Understanding (MOU) between the ODH and the ODM. This MOU provides access to Medicaid claims data to an epidemiologist working in the ODH. The OHS makes a formal request to this epidemiologist each spring for data through the last state fiscal year. The request includes a variety of information, such as the number of individuals enrolled in Medicaid by age, county and census tract, the number of individuals enrolled in Medicaid with a claim for dental services by age and county, and the number of dental providers with a Medicaid claim by county and the number of claims submitted. Once that data has been processed and released to the OHS, it is then cleaned and analyzed to provide percentages of the population enrolled in Medicaid and the percentage of people enrolled in Medicaid with a dental claim by age group (0-2 years of age, 3-18 years of age, 19-64 years of age, and 65 years and older) to be reported through the OOHSS.

Indicators of Oral Health, 3rd Grade Students

The *Make Your Smile Count!* Basic Screening Survey (BSS) is the primary means by which the OHS monitors the oral health of Ohio's children. It is conducted approximately every five years. A stratified cluster sample of public elementary schools is drawn, where schools are chosen within each county by probability proportional to size sampling. During the most recent BSS being conducted during the 2013-14 and 2014-15 school years, students at approximately 433 schools will be screened.

[11] http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml Accessed 2/19/14.
[12] http://reportcard.education.ohio.gov/Pages/Power-User-Reports.aspx Accessed 2/19/14.

With parental consent, third-grade students are screened for dental caries, sealants, caries experience and the need for dental care. Parents complete a questionnaire on the consent form that asks about their family's access to dental care, how dental care is paid for and the ingestion of sugary drinks. (The consent form can be found in Appendix 4.) The screening is conducted by trained, licensed dentists and dental hygienists using a mouth mirror and light source. Sample weights are calculated to adjust responses to be representative of the underlying population.

Data collected through the BSS are analyzed using SAS 9.3 software[13] and complex survey procedures designed to account for the stratified, clustered sample used in the BSS. Most data released through the OOHSS and various reports include weighted prevalence estimates and 95% confidence intervals.

Oral Health Care Access of Children and Adults

The data for these indictors come from the Ohio Medicaid Assessment Survey (OMAS).[14] The OMAS (formerly known as the Ohio Family Health Survey) consists of data gathered from stratified random digital-dial telephone surveys of households in Ohio. The survey is managed by the ODM with assistance of the Ohio Colleges of Medicine, Government Resource Center. The survey examines access to the health system, health status and health determinant characteristics of Ohio's Medicaid, Medicaid eligible and non-Medicaid populations. The OMAS is an important tool to help the ODM and other state agencies identify gaps in needed health services, develop strategies to increase service capacity and monitor Ohioans' health status and health risk. Respondents are non-institutionalized adults and children living in residential households.

The last county-level survey was conducted in 2008; these data are currently reported on the OOHSS county profiles. Since then, two state-level surveys were conducted in 2010 and 2012. These data are in the public domain and are directly accessed and analyzed by OHS staff. The 2008 data were extensively reported in ***O**ral **H**ealth **I**sn't **O**ptional! A Report on the Oral Health of Ohioans and Their Access to Dental Care, 2011*[15] (aka the "OHIO Report"), serving as the basis for several county-level maps displaying the geographic variation among children and adults in unmet dental needs, dental insurance and ability to access dental care. State-level data collected in 2010 were reported in a data brief produced by the OHS. The 2012 statewide

[13] http://support.sas.com/software/93/ Accessed 2/19/14.
[14] Ohio Medicaid Assessment Survey. Ohio Colleges of Medicine, Government Resource Center. http://grc.osu.edu/omas/
[15] **O**ral **H**ealth **I**sn't **O**ptional! A Report on the Oral Health of Ohioans and Their Access to Dental Care, 2011. Ohio Department of Health. http://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/ohs/oral%20health/ohioreport8_9.ashx

data have been analyzed and will be reported in an upcoming data brief. It is hoped that the next OMAS will collect county-level data that can be used to update the OOHSS county profiles.

Community Dental Disease Prevention

Data is obtained on fluoridated water systems annually through the OEPA Division of Drinking and Ground Water. Each community water system, regardless of fluoridation status, is required to test fluoride levels once every 3 years. These tests are done on a rolling basis, in which about one-third of community water systems submit a test each year to OEPA. The OHS submits a request for the systems that have tested in the prior calendar year each spring. That data is then combined with the previous two years of data to create a comprehensive list of all community water systems and their most recent fluoride level test. This data is then cleaned and aggregated to a percentage of the population served by a community water system with adequate fluoride levels to be reported through the OOHSS. A county-level report that includes each water system, the number of people served, the water's fluoride status (natural, adjusted, deficient) and the natural fluoride level (for non-fluoridated systems) is posted to the OHS Web site and linked through the OOHSS.

For the school-based sealant program indicators, data on eligible low-income schools is gathered from the ODE in the same manner as described above in the Demographics section. The OHS analyzes the school-level data and aggregates by county the number of schools with students enrolled in second, third, sixth or 7th grade with 40 percent or more students indicated as economically disadvantaged to determine the list of eligible schools. Through reports from both ODH- and non ODH-funded programs, the number of schools served is aggregated by county and reported through the OOHSS.

Dental Care Resources

Indicators on the number of licensed dentists are obtained through the Ohio Department of Administrative Services (DAS) based upon licensure information provided by the Ohio State Dental Board (OSDB) every two years. The OHS cleans and analyzes the data once provided and determines missing specialty codes through searches of practice and healthcare Web sites. Licensed dentists are then determined to be in-state or out-of-state and primary care (general and pediatric) versus non-primary care (all other specialties). This data is aggregated to the county and state level and reported through the OOHSS. The ratio of providers to the population is also calculated utilizing the NCHS NVISS population estimates (see Demographics under Section V above) and also reported through the OOHSS.

The number of providers with at least one Medicaid claim is gathered each state fiscal year through the annual data request the OHS submits through the MOU that exists between the ODH and ODM (see Medicaid under Section V above). The number of providers is broken into

categories by the number of unduplicated patients for which there was a claim submitted in the previous state fiscal year (1-50, 51-249 and 250+) then aggregated to the county and state level to be reported through the OOHSS. A ratio of providers with at least one Medicaid claim to the number of people enrolled in Medicaid is also reported through the OOHSS ("Ratio of Medicaid population per dentist who treats Medicaid patients") and calculated from the data gathered in the Medicaid claims data request as outlined above.

The number of dentists who participate in the OPTIONS program is gathered through reports submitted by the program coordinators to the OHS on a monthly basis. This number is aggregated to the county and state level by the OHS and reported through the OOHSS. A ratio of OPTIONS providers to the population living below 200 percent of the FPL (see Demographics in Section V above for a detailed description) is calculated at the county and state level and reported through the OOHSS as well.

The data on safety-net dental clinics and dental Health Professional Shortage Area (HPSA) designations is obtained through program information maintained by the OHS. The comprehensive list of safety-net dental clinics is updated routinely and provided on the OhioDentalClinics.com Web site[16]. This list is aggregated to the county and state level by the OHS and reported through the OOHSS. Dental HPSAs are designated by the Health Resources and Services Administration (HRSA)[17] upon review of applications submitted by the OHS. The OHS then aggregates the designations to the state and county level and it is reported through OOHSS. Clinics and dental HPSA designations are also geocoded by the OHS, utilizing geocoding services made available by Texas A&M Geoservices[18]. These data are then mapped through ArcGIS online mapping services[19] and linked through the OOHSS profiles as well.

VI. Other Oral Health Data

In addition to the indicators included in the OOHSS, other oral-health related data items are collected as well. While these are not included in the county-level profiles, the information is included in various reports about the oral health of Ohioans produced by the OHS.

Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is a nationwide random-digit dial telephone survey sponsored by the CDC that tracks health practices, health conditions and risk behaviors of adults 18 years and older in the United States. The BRFSS monitors the behaviors associated with major causes of preventable

[16] http://www.ohiodentalclinics.com/ Accessed 2/20/14.
[17] http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/dentalhpsaoverview.html Accessed 2/20/14.
[18] http://geoservices.tamu.edu/About/ Accessed 2/20/14.
[19] http://www.arcgis.com/ Accessed 2/20/14.

morbidity and mortality in the adult population of Ohio, e.g., cardiovascular disease, cancer, diabetes, and injuries.

The BRFSS is the only source of data available on the oral health of Ohio adults. While the BRFSS is conducted annually, questions related to oral health are only asked every two years. Oral health questions were most recently asked in 2012, and relate to two indicators:

- Length of time since the last visit to a dental office
- Permanent teeth removed because of tooth decay or gum disease

These indicators are analyzed by age, race, ethnicity, income, health insurance and geographic region of the state. The OHS acquires the oral health data, upon request, from the ODH Chronic Disease & Behavioral Epidemiology section. Data collected during the 2010 BRFSS were presented in the 2011 OHIO Report. The OHS is in the process of acquiring the 2012 oral health data, including data on the oral health of people with diabetes.

Ohio Youth Tobacco Survey (OYTS)[20]

The OYTS is a self-administered, school-based survey conducted by the ODH to gather information about tobacco use prevalence, exposure to secondhand smoke, exposure to pro- and anti-tobacco media messages, knowledge and beliefs about tobacco use and future intent to use tobacco products. The survey is conducted every two years. Data from the 2008 survey were reported in the OHIO report; data from the 2010 survey are the most recent available.

Ohio Cancer Incidence Surveillance System (OCISS)[21]

The OCISS is the central cancer registry for the State of Ohio and is managed through a partnership between the ODH and The Ohio State University Comprehensive Cancer Center--James Cancer Center and Solove Research Institute. The OCISS collects and analyzes cancer incidence data for all Ohio residents. All Ohio providers of medical care are charged, by law, with reporting to the OCISS all cancers diagnosed and/or treated in Ohio. The most recent county-level oral and pharyngeal cancer incidence data are for the years 2003-2007.

The OHS has considered adding this data to the county profiles; however, due to small numbers of oral and pharyngeal cancer in some counties, reporting annual data on a county-level is not appropriate. Age-adjusted incidence rates, averaged over five years, were reported for each county in the report, *Hills and Valleys: The Challenge of Improving Oral Health in Appalachian*

[20] Ohio Youth Tobacco Survey. Ohio Department of Health. http://www.healthy.ohio.gov/healthylife/tobc2/~/media/1BB272513904458EB8C9F99354C5C21F.ashx
[21] Ohio Cancer Incidence Surveillance System. Ohio Department of Health. http://www.healthy.ohio.gov/cancer/ocisshs/ci_surv1.aspx

Ohio, 2012.[22] The OHS plans to acquire incidence and mortality data during CY2014 and generate a report that presents trends in the incidence of oral and pharyngeal cancer by various demographic characteristics.

Other Ohio Medicaid Data

In addition to Medicaid data that is included on the OOHSS (See Medicaid under section V), additional data is provided to OHS through the Medicaid claims data MOU between ODH and ODM. The OHS is provided with annual data on the percentage of Medicaid-eligible women who had a dental visit while pregnant. Data from 2010 were included in the OHIO report. The OHS is also provided with annual data on the number of people enrolled in Medicaid with an emergency room claim for a primary, non-traumatic dental diagnosis. This data was included in the Utilization of Ohio Emergency Departments to Treat Dental Problems, 2010-2011 Data Brief in 2013. Finally, the OHS is provided with annual data on the number of eligible children less than 36 months of age for whom a dental claim was submitted for the application of fluoride varnish by a non-dental provider. These data are used for program planning purposes and are also part of the Smiles for Ohio Fluoride Varnish (S4O-FV) Program Brochure.

VII. Dissemination of Data

While the online OOHSS is the primary vehicle for disseminating oral health data, the OHS also uses the following other mechanisms for sharing oral health information:

- Periodic, comprehensive reports on the oral health of Ohioans (e.g., the OHIO report)
- Comprehensive reports on a specific oral health topic (e.g., Hills and Valleys: The Challenge of Improving Oral Health in Appalachian Ohio, 2012)
- Data briefs: two-page summaries on a variety of oral health topics (e.g., Oral Health Findings of the 2011 Ohio Employer Health Survey, Utilization of Ohio Emergency Departments to Treat Dental Problems, 2010-2011)
- Presentations and exhibits at state and national conferences (e.g., Ohio Rural Health Conference, National Maternal and Child Health Epidemiology Conference, National Oral Health Conference)
- The ODH and OHS Web sites

In recent years, the OHS has reduced the number of hard copies of reports and data briefs that are printed and instead primarily relies upon electronic media to disseminate data.

[22] Hills and Valleys: The Challenge of Improving Oral Health in Appalachian Ohio, 2012. Ohio Department of Health.

VIII. Privacy and Confidentiality Practices

The OHS is required to follow the ODH Directive on Data Stewardship that defines the procedures that must be followed in the collection, viewing, storing, exchanging, aggregating, analyzing and use of data. The directive has particular relevance to the statewide BSS of 3rd graders that the OHS conducts approximately every five years. The protocol for this survey is submitted to the ODH Internal Review Board for approval. All persons who have access to the data either by conducting the screenings or reviewing and analyzing the data are required to sign an ODH Data Users Confidentiality Agreement that outlines their responsibilities in safeguarding access to, and sharing of, the personally-identifying data on each child being screened. (ODH collects the name, age, birthdate, gender, ethnicity and race of each child being screened.) These agreements are kept on file at the OHS.

Consent forms for the BSS dental screening are required for students to participate. These forms are returned to schools in sealed envelopes that school staff are instructed to leave sealed. OHS staff or an OHS designee unseal the envelopes and assign matching code numbers to both the top portion of the consent forms (containing the consent/personal information for each child) and the bottom portion (containing the questionnaire, demographic information and screening results.)

Data from the bottom portion of the consent form are scanned into a database. No personal information is entered into the computer database (other than date of birth/age, race, ethnicity and gender.) The top and bottom portions of the consent forms for each school are stored separately at the OHS Central Office in locked file cabinets. The top portion of the consent form is disposed of after the survey is completed, in accordance with ODH policy. The bottom portion is disposed of after the completion of data verification and analysis. The data files are kept for an indefinite period of time.

All survey personnel comply with Ohio H.B. 648, which became law in 2009. This bill increases restrictions on access to confidential personal information. Staff are required to document the children screened and/or data accessed, as applicable.

When analyzing data by demographics, cell sizes containing less than 10 individuals are not reported. Data are only analyzed in the aggregate, i.e., data from all surveyed elementary schools are analyzed together.

As noted before, the OHS and the ODM have an agreement that enables the OHS to acquire Medicaid data on the number and types of claims submitted for dental services, the number of persons eligible for Ohio Medicaid and the number of dental and medical providers who have submitted claims for providing oral health services. The ODH enters into a signed agreement

every year that identifies the OHS staff with access to these data and explicitly prohibits staff from sharing the data, in any form, without consent from ODM.

IX. Operating Resources

Personnel

OHS staff dedicated to the support of the OOHSS and its related components include:

- Researcher: responsible for acquiring, analyzing and formatting all data included in the OOHSS county profiles and forwarding the data to the ODH Office of Management Information Systems (OMIS) for loading into the system; developing and maintaining ArcGIS maps of Ohio's safety net dental clinics and Dental Health Professional Shortage Areas; significantly contributing to the planning of the BSS of 3rd grade schoolchildren; tracking the progress of the BSS; scanning, cleaning and analyzing the data obtained in the BSS; writing reports, manuscripts and data briefs and participating in other means of disseminating data to stakeholders.
- Oral Health Information Specialist: responsible for overseeing the planning of the BSS of 3rd grade schoolchildren; overseeing the updating and maintenance of the OOHSS; writing comprehensive reports, news features and data briefs that highlight the oral health status of Ohioans and their access to dental care; and overseeing the OHS Web site where data reports are housed.
- OHS regional field staff: assisting in the planning of the BSS of 3rd grade students and of other populations; conducting dental screenings in assigned schools; tracking progress of BSS in assigned schools; assisting in training for BSS; assisting in forms and procedures development; assisting in ordering supplies and inventory control
- Oral Disease Prevention Specialist: responsible for acquiring data from the Ohio Environmental Protection Agency (which regulates water systems in the state) to determine the percentage of the population in each county served by optimally-fluoridated water.

The OHS also makes requests to other ODH programs to acquire data (e.g., BRFSS, Ohio Medicaid data) in the desired format.

Other costs:

- BSS: The budget for the 2013-15 survey is $68,750, which includes travel, printing, supplies/equipment, postage/shipping and contracts with screeners who are not ODH employees. In addition, the ODH contracts with an epidemiologist at case Western Reserve University to provide statistical expertise and data analysis.

Personnel and the costs of the BSS are primarily supported by the federal Maternal and Child Health Block Grant. There are no direct costs in maintaining the OOHSS or obtaining and analyzing data from secondary sources (e.g., ODM, the Ohio Medicaid Assessment Survey, Ohio State Dental Board licensure data, and census data).

X. Surveillance Activities, 2014-2018

The following table lists the requirements of state oral health surveillance activities, as revised in 2012 by the CSTE. Shaded areas indicate those indicators that have not been part of the OHS' surveillance activities, or those for which data were not available for a given year.

Required Components of State Oral Health Surveillance Systems, Council of State and Territorial Epidemiologists, 2012

Requirements	Data Source	Most Recent Data Available	Update Requirement
1. Oral health surveillance plan written or updated	Association of State and Territorial Dental Directors (ASTDD) State Synopsis	No current report	5 years
2. Oral health status of third grade children	BSS	2009-10	5 years
3. Permanent tooth loss for adults	BRFSS	2010	2 years
4. Oral and pharyngeal cancer incidence and mortality	National Program of Cancer Registries	2009	Annual
5. Medicaid/CHIP children with dental visit in the previous year	Centers for Medicare and Medicaid Services 416 report	2010 (OH did not report 2011 data)	Annual
6. Percent of children 1-17 years with a dental visit in the previous year	National Survey of Children's Health	2011-12	4 years
7. Percent of adults (and adults with diabetes) who had a dental visit in the previous year	BRFSS	2010 (for dental visit only, data for adults with diabetes not yet requested)	2 years
8. Fluoridation status of public water systems	Water Fluoridation Reporting System	2012	2 years
9. Annual workforce/infrastructure data	ASTDD State Synopsis	2012	Annual
10. Publically available, actionable data disseminated in a timely manner	ASTDD State Synopsis	2012	5 years

The following table lists surveillance activities that will be conducted by the OHS to meet the 2012 CSTE requirements:

Components of Five Year Surveillance Plan					
Required Components	**CY 2014**	**CY2015**	**CY2016**	**CY2017**	**CY2018**
Written oral health surveillance plan	Finalized and published on OHS Web site by 2/28/14	Revise plan as needed	Revise plan as needed	Revise plan as needed	Revise plan as needed
Third grade oral health status	Complete first year of statewide, county-level BSS data collection and begin second year of data collection in remaining 223 schools	Complete data collection in 223 schools and initiate data analysis	Complete data analysis, write report and prepare manuscript for publication	Begin planning for next statewide, county-level BSS of third grade students	Continue planning for next statewide, county-level BSS of third grade students
Permanent tooth loss for adults	Acquire 2012 BRFSS data from ODH program and analyze		Acquire 2014 BRFSS data from ODH program and analyze		Acquire 2016 BRFSS data from ODH program and analyze
Oral and pharyngeal cancer incidence and mortality	Investigate acquiring most recent county-level incidence and mortality data	If available, generate current 5-year, county-level rates and produce a report. If county-level data can't be reported, generate a report that presents state-level data.	Acquire county-level/state level data	Acquire county-level/state level data	Acquire county-level/state level data

Required Components	CY 2014	CY2015	CY2016	CY2017	CY2018
Medicaid/CHIP children with a dental visit in the previous year	Acquire CMS 416 report and analyze data. Will also compare these data to the data received via the Medicaid MOU with ODM to assess level of comparability.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.
Percent of children 1-17 years with a dental visit in the previous year	Acquire and analyze data from the 2011 - 12 National Survey of Children's Health (NSCH)			Acquire data, when available, from 2015-16 NSCH	
Percent of adults (and those with diabetes) with a dental visit in the previous year	Acquire 2012 BRFSS data from ODH program and analyze		Acquire 2014 BRFSS data from ODH program and analyze		Acquire 2016 BRFSS data from ODH program and analyze
Fluoridation status of public water systems	Acquire and analyze data from OEPA	Acquire and analyze data from OEPA	Acquire and analyze data from OEPA	Acquire and analyze data from OEPA	Acquire and analyze data from OEPA

Required Components	CY 2014	CY2015	CY2016	CY2017	CY2018
Annual workforce/infrastructure data	Complete and submit ASTDD State Synopsis by 2/28/14	Complete and submit ASTDD State Synopsis by due date	Complete and submit ASTDD State Synopsis by due date	Complete and submit ASTDD State Synopsis by due date	Complete and submit ASTDD State Synopsis by due date
Publically available, actionable data disseminated in a timely manner	Acquire all available data and update county profiles in the OOHSS	Acquire all available data and update county profiles in the OOHSS	Acquire all available data and update county profiles in the OOHSS	Acquire all available data and update county profiles in the OOHSS	Acquire all available data and update county profiles in the OOHSS
Elective Components					
Oral health status of preschool-aged children		Initiate planning for BSS of children in Ohio Head Start programs and begin data collection	Complete data collection, data analysis and prepare manuscript for publication		
Percent of pregnant women covered by Medicaid who have a dental visit during pregnancy	Acquire and analyze SFY2013 data via MOU with ODM	Acquire and analyze SFY2014 data via MOU with ODM	Acquire and analyze SFY2015 data via MOU with ODM and write a report that summarizes data for previous five years	Acquire and analyze SFY2016 data via MOU with ODM	Acquire and analyze SFY2017 data via MOU with ODM

Elective Components	CY 2014	CY2015	CY2016	CY2017	CY2018
Percent of children 1-20 years of age covered by Medicaid with a <u>preventive</u> dental visit the previous year	Acquire CMS 416 report and analyze data. Will also compare these data to the data received via the MOU with ODM to assess level of comparability.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.
Percent of Medicaid-eligible children who received fluoride varnish application the previous year	Acquire CMS 416 report and analyze data. Will also compare these data to the data received via the MOU with ODM to assess level of comparability.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.	Acquire CMS 416 report and analyze data.

Appendix 1: Indicators Approved by CSTE for Inclusion in NOHSS, 2012

Oral Health Outcomes

- Prevalence of caries experience (Head Start, kindergarten, 3rd grade)
- Prevalence of untreated tooth decay (Head Start, kindergarten, 3rd grade, vulnerable older adults
- Percentage of population with dental treatment needs (Head Start, kindergarten, 3rd grade, vulnerable older adults)
- Tooth loss (complete tooth loss ≥65 years, loss of 6 or more teeth ≥65 years)
- Oral and pharyngeal cancer (incidence and mortality)

Access to Care

- Dental visit in past year (1-17 years, ≥18 years, FQHC patients, adults with diabetes)
- Percentage of population with a preventive dental visit in the past year (Medicaid and CHIP enrolled children)
- Percentage of population with dental sealants (3rd grade, Medicaid-enrolled children ages 6-9 or 10-14)
- Percentage of population with a dental treatment visit in the past year (Medicaid- and CHIP-enrolled children)
- Teeth cleaning (≥18 years, pregnant women)

Intervention Strategies

- Water fluoridation
- Percentage of school-based health centers that provide sealants, dental treatment services, topical fluoride

Appendix 2: Healthy People 2020 Oral Health Objectives

OH-1: Reduce the proportion of children and adolescents with dental caries experience in their primary or permanent teeth.

OH-2: Reduce the proportion of children and adolescents with untreated dental decay.

OH-3: Reduce the proportion of adults with untreated dental decay.

OH-4: Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease.

OH-5: Reduce the proportion of adults aged 45-74 years with moderate or severe periodontitis.

OH-6: Increase the proportion of oral and pharyngeal cancers that are detected at the earliest stage.

OH-7: Increase the proportion of children, adolescents and adults who used the oral health care system in the past year.

OH-8: Increase the proportion of low income children and adolescents who received any preventive dental service during the last year.

OH-9: Increase the proportion of school-based health centers with an oral health component.

OH-10: Increase the proportion of local health departments and Federally Qualified Health Centers that have an oral health program.

OH-11: Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year

OH-12: Increase the proportion of children and adolescents who have received dental sealants on their molar teeth.

OH-13: Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water.

OH-14: (Developmental) Increase the proportion of adults who receive preventive interventions in dental offices.

OH-15: (Developmental) Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips and cleft palates to craniofacial anomaly rehabilitative teams.

OH-16: Increase the number of states and the District of Columbia that have an oral and craniofacial health surveillance system.

OH-17: Increase health agencies that have a dental public health program directed by a dental professional with public health training.

C-6: Reduce the oropharyngeal cancer death rate.

D-8: Increase the proportion of persons with diagnosed diabetes who have at least an annual dental examination.

AHS-1.2: (Developmental) Increase the proportion of persons with dental insurance.

AHS-6.3: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary dental care.

Appendix 3: OOHSS Description of Data Sources

The following information explains the data items and their sources used to generate county-specific and statewide profiles of oral health. The data are collected from a variety of sources; some are collected directly by the Ohio Department of Health (ODH), but most are collected from secondary data sources at the state and national level. The OOHSS is updated approximately once a year. Users are encouraged to supplement the data in the OOHSS with more recent local data, if available.

The abbreviation N/A for any data item is used to indicate that the data were not available.

Demographic data

Population by Age: Population figures are from the 2012 National Center for Health Statistics postcensal estimates (age distributions include those for which age was known).

Percentage of Population Below Poverty: These data are based on the 2007-2011 five year averages from the American Communities Survey conducted by the U.S. Census Bureau. Each county is ranked according to the percentage of its population under 100 percent and 200 percent of the Federal Poverty Level (FPL). **A county ranked first has the lowest percentage of its population in poverty; a county ranked 88th has the highest percentage of its population in poverty.** In 2012, 100 percent of FPL for a family of four was $23,050; 200 percent of FPL was $46,100.

Free and Reduced Price Meal Eligibility: These data are from the 2012-13 school year. The data are obtained through the Ohio Department of Education (ODE) which administers the Free and Reduced Price Meal Program in Ohio schools. Children are eligible for the program if their family's income did not exceed 185 percent of the FPL. In 2012, 185 percent of the FPL was $46,643 for a family of four.

Medicaid data

These data are obtained from the Ohio Department of Medicaid (ODM) and are for State Fiscal Year 2012. Medicaid-eligible persons are defined as those enrolled in Medicaid. Note: The percentage of the population in a county eligible for Medicaid for a certain age group may exceed 100%. This is likely because Medicaid eligibility (the numerator) is based on state fiscal year data; while the total number of persons in that age group (the denominator) is based on calendar year data. An example of this is evident for Pike County.

Indicators of Oral Health, Third Grade Students

This graph is based on BSS data collected on third grade students during the 2009-10 school year by the ODH. Data for each county are presented along with data for the state. County percentages with asterisks have a relative standard error of more than 30%. They have been deemed unreliable by the ODH and should not be cited. Also, the ODH does not advise comparing any data across counties because the precision of the rates in each county cannot be reliably determined.

Oral Health Care Access of Children and Adults

These data are based on the 2008 Ohio Family Health Survey (OFHS), jointly administered by The Ohio State University Government Resource Center, the Health Policy Institute of Ohio, and the ODH. This survey was a telephone survey of the Ohio population addressing health care access, health care system use, health services needs, insurance status, employment trends, health status, behavior risk participation and demographics. Data were obtained on a sample of 50,994 adults (18 years and older) and 13,604 children. (The OFHS was conducted in 2010 as well; however, data were not collected on a county level. Thus, the statewide and county level data presented are from the 2008 survey.)

Please note: Data for Ohio's uninsured population was incorrectly reported in previous versions of the OOHSS. The data have been corrected in the 2009 version of the OOHSS. Please refrain from reporting or using the percentages from the 2007 or 2008 versions.

Community Dental Disease Prevention

These data are generated by ODH.

Percent of the population served by optimally fluoridated water: These data are based on 2011 information obtained from the Ohio Environmental Protection Agency (OEPA), which regulates water systems in Ohio. The percentage is based on the number of persons served by community water systems with optimally fluoridated water and OEPA's estimation of population served.

Number of schools eligible for school-based sealant programs: In general, these data are derived using ODE data from the 2012-13 school year. Eligible schools are those in each county that have 40 percent or more of students eligible for the Free and Reduced Price Meal Program.

In counties with a school-based dental sealant program funded by ODH, additional schools may have been deemed eligible to participate based on other information demonstrating need.
Number of schools participating in the school-based sealant programs: This is the number of schools that were served by school-based sealant program during 2013. This indicator includes sealant programs funded by ODH and those locally funded. Several programs serve multiple counties:

- CincySmiles(Hamilton County) also serves Butler, Warren, Clermont, Brown, Highland and Adams counties.
- Jackson-Vinton Community Action Inc. located in Jackson also serves Vinton County.
- The Athens City-County Health Department also serves Hocking and Meigs counties.
- The Washington County Health Department also serves Noble and Monroe counties.
- The Zanesville-Muskingum County Health Department also serves Perry, Morgan and Guernsey counties.
- The Licking County Health Department also serves Morrow, Knox and Coshocton counties.
- The Warren City Health Department located in Trumbull County also serves Portage and Ashtabula counties.
- Miami Valley Hospital located in Montgomery County also serves Clark County.
- Pike County General Health District also serves Ross and Scioto counties.
- Youngstown Health Department located in Mahoning County also serves Columbiana County.
- Canton City Health Department located in Stark County also serves Carroll County.
- Summit County Health Department also serves Cuyahoga and Portage counties.
- Elyria City Health Department located in Lorain County also serves Erie and Wayne counties.
- Third Street Family Health Services located in Richland County also serves Crawford and Marion counties.
- Lucas County Regional Health District also serves Wood County.
- Health Partners of Western Ohio serves Allen, Hardin and Clark counties.

These data are updated annually.

Dental Care Resources

Number of licensed dentists (including primary care dentists): The most recent data were obtained from The Ohio State Dental Board in March 2012. The data are based on the county in which the dentist receives correspondence from the dental board, not necessarily the county(ies) in which the dentist practices. In addition, a dentist may choose to maintain his/her license and not practice. The data are updated every two years; new data will not be available until 2014 and will be reported in that year's update.

Number of dentists who treated Medicaid patients: The data were obtained from ODM for State Fiscal Year 2012. The data represent the number of dentists who have submitted at least one dental claim to Medicaid. The subcategories under this measure indicate the extent to which dentists participate in the Medicaid program. The number of dentists who treat Medicaid patients may exceed the number of licensed dentists in a county because of differences in reporting periods between ODM and The Ohio State Dental Board.

Number of OPTIONS dentists: OPTIONS (**O**hio **P**artnership **T**o **I**mprove **O**ral health through access to **N**eeded **S**ervices) is a program jointly sponsored by the ODH and the Ohio Dental Association. OPTIONS serves low-income Ohioans (family incomes at or below 200 percent of poverty) without any form of dental insurance or Medicaid. Eligible patients are linked to volunteer dentists or dental clinics where care is provided for reduced fees or free of charge. The number of OPTIONS dentists refers to the number of dentists enrolled as OPTIONS providers as of September 2013, regardless of the number of patients each dentist served. The number of low-income patients used in the ratio includes persons whose income is less than 200 percent of FPL, and includes persons who are Medicaid eligible. These data are generated by the ODH.

Number of safety net dental clinics: These clinics provide diagnostic, preventive and treatment services primarily for people who can't or won't access the private system, usually for reasons relating to payment for care. The capacity of these clinics, in terms of the services they provide and the populations they serve, varies widely. Many of these clinics operate with very limited resources, and others are professional training programs for which the care they provide is a secondary objective. Data are current as of July 2013 but are subject to frequent changes as new clinics start up or cease to operate. (Please contact the OHS for information about safety net programs that were operating in 2012.)

Mobile dental programs are considered safety net dental programs for purposes of the surveillance system, as are programs that may serve a very limited population such as school-

based programs. Dental hygiene school clinics that offer limited preventive dental services are not included in the surveillance system number, but are located on the map for your convenience. The user is advised to contact the safety net dental program to learn details about services provided. Clicking on the link for this indicator will take the user to a map that shows the location of the safety net dental clinic(s) in the state. Directions for using this map can be found below.

Number of Dental Health Professional Shortage Areas (Dental HPSAs): Dental HPSAs are areas that have been designated by the federal government via an application process as having an inadequate number of dentists to serve the population, or having financial, geographic, cultural or language barriers to receiving care. An entire county may be designated as a HPSA; but in some cases, only certain neighborhoods or census tracts in a city, or a facility (such as a prison or community health center), are designated. Designations are current as of October 2013, but are subject to frequent changes. (Please contact the OHS for information on dental HPSA designations in 2012.)

There are five multi-county HPSA designations: Clinton-Highland, Coshocton-Holmes, Muskingum-Perry, Meigs-Gallia and Noble-Guernsey. Please note that correctional facilities and community health centers without dental clinics can be designated as a dental HPSA. These facilities and centers are included on the map, but are not calculated in the surveillance system profile. Clicking on the link for this indicator will take the user to a map that shows the location of dental HPSAs in the state. Directions for using this map can be found below.

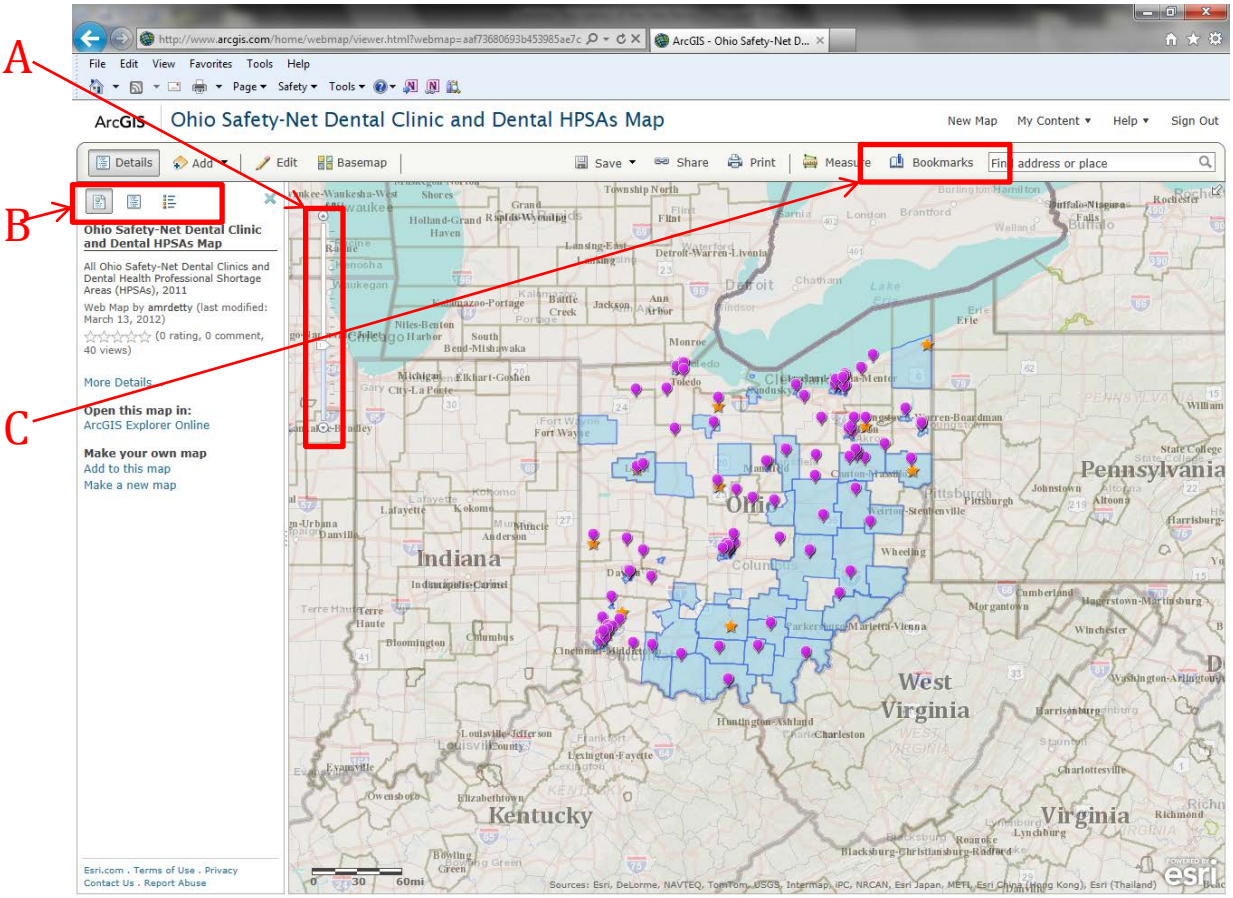
Updated 10/31/2013

Using the safety net dental clinic and dental HPSA map: This interactive, online map through ArcGIS displays all safety net dental clinics and dental HPSAs in the state. The map opens to the whole state. You can use your mouse wheel or the up/down arrows on the top left corner of the map to zoom in or out ('A' below). You can left click and drag your mouse to move around the map. The tabs on the left side of the map provide you with more information ('B' below). Clicking on this icon:  will provide you with information on the map and the data behind it. Clicking the "More Details" link will take you to the map information page that details the data used and creation of the map. Clicking on this icon:  will provide you with the different layers of the map. You may click the checkbox next to each layer to turn that layer on and off. For instance, if you are just interested in dental HPSAs, you can uncheck the box for "Safety-Net Dental Clinics" and the map will now be redrawn to include only the dental HPSAs. Clicking on

the third icon:  will open the legend for the map. This will provide you with the color and symbols of each layer (geographical HPSAs are light blue shapes, facility HPSAs are orange stars, and safety net dental clinics are purple bubbles).

Clicking the "Bookmarks" tab on the top right will also allow you to zoom in and out of particular parts of the map ('C' below). Current bookmarks have been created for all of Ohio, northeast, northwest, central, southeast and southwest.

Clicking on any symbol will open a pop-up box with information regarding that clinic or HPSA. When you click there may be more than one item in that location. An arrow button will appear at the top of the popup box and will allow you to scroll through all items in that location.



Appendix 4: Basic Screening Survey Consent Form

2013-2015 MAKE YOUR SMILE COUNT SCHOOL SURVEY
Ohio Department of Health
ID: _____ - _____ - _____

Child's Last Name:	Child's First Name:	Teacher's Name:	Room:

☐ Yes, I give permission for my child to have his/her teeth checked.
☐ No, I do not give permission for my child to have his/her teeth checked.

Signature of Parent or Guardian:	Today's Date:

Home Phone Number:	Work Phone Number:
( )	( )

Please answer the following questions. Your answers will remain private and will not be shared. If you do not wish to answer the questions, you may still give permission for your child to have his or her teeth checked. Thank you.

Please fill in circles like this: ● Not like this: ✓ ✗

Child's Age:	Child's Birthdate:	Child's Sex:
⑦ ⑧ ⑨ ⑩ ⑪	☐☐ Month ☐☐ Day ☐☐☐☐ Year	O Male O Female

Is your child Hispanic?	Child's Race: Please choose all that apply.	
O Yes	O White	O American Indian or Alaska Native
O No	O Asian	O Unknown
	O Native Hawaiian or other Pacific Islander	
	O Black or African American	O Other _____

1. Has your child had a toothache in the last six months?
O Yes O No O Don't know/don't remember

2. How long has it been since your child last visited a dentist? Include dental hygienists and all types of dentists such as orthodontists and oral surgeons.
O 1 year or less O More than 1 year but less than 3 years O Don't know/don't remember
O 3 years or more O Never has been

3. During the past 12 months, was there a time when your child needed dental care but couldn't get it at that time?
O Yes (go to question 4) O No (go to question 5)
O Don't know/don't remember (go to question 5)

4. If you could not get dental care for your child, why not?
O Couldn't afford it O No dental insurance or Medicaid
O Dentist didn't accept Medicaid or insurance O Appointment hours not convenient
O Wait for appointment too long O No way to get to dentist
O Don't know/don't remember O Other _____

5. How do you pay for your child's dental care? (Please choose the one way that most of your child's dental care is paid for)
O Family or self-pay O Medicaid or medical card, such as Caresource, Molina, and others
O Other dental insurance O Don't know/don't remember

6. Does your child get free or reduced-cost lunches at school?
O Yes O No O Don't know/don't remember

7. On an average day, about how many servings of pop, soda or other sweetened beverages does your child drink (not counting diet beverages)? This includes those with added sugar, such as Sunny Delight, Hawaiian Punch, Gatorade, and energy drinks (please choose one).
O Zero O One O Two O Three O Four O Five or more O Don't know/don't remember

Now that you have completed this form, fold it and place in the envelope provided. Seal the envelope and return it to your child's teacher tomorrow. Thank you for participating!

OHIO DEPARTMENT OF HEALTH SCREENER'S USE ONLY

Absent/UNC O No Dental Consent O
Untreated Caries O Caries Experience O Sealants O
Urgency: O Routine O Early O Urgent