



Iowa Oral Health Surveillance Plan 2016



**Iowa Department of Public Health • Bureau of Oral and Health Delivery Systems
Centers for Disease Control and Prevention Grant Project**

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Introduction

Data is fundamental to understanding, planning and evaluating public health programs. The Oral Health Center within the Iowa Department of Public Health (IDPH) has created this surveillance system plan to provide information about all data available on the oral health of Iowans and how it is disseminated and used to improve oral health.

This report is broken into three sections: the first section describes **Oral Health Indicators** that are used to measure progress towards a healthier Iowa. The second section gives a brief summary of all available **Data Sources**, including **Data Dissemination and Use**. The third section includes a table with **Data Source Details**. Finally, an **Acronym List** is included as Appendix A.

Oral Health Indicators

Healthy Iowans: Iowa's Health Improvement Plan 2012-2016 and *Healthy People 2020* are blueprints for addressing state and national health issues. IDPH coordinates the development of the Healthy Iowans plan with input from multiple organizations and individuals who identify issues and compile objectives to help ensure that Iowans have longer, healthier, and more productive lives. The current version of the plan includes five oral health objectives within the Healthy Living topic area.

Healthy People 2020 is an initiative created by the federal Department of Health and Human Services. This plan is the third version of achievable 10-year agenda items that identify health improvement priorities and provide measurable objectives that are applicable to national, state and local levels. These objectives are designed to increase collaboration between communities and state and local health agencies. Oral health is one of the topic areas, with a goal to prevent and control oral and craniofacial diseases, conditions, and improve access to preventive services and dental care.

Healthy Iowans: Iowa's Health Improvement Plan 2012-2016

Healthy Iowans Indicator	Iowa Data Source
6-1.21: By 2020, launch a major fluoridation effort so that every child in Iowa through age 12 who lives in households with incomes below 300% of poverty level will be cavity-free.	CDC: Water Fluoridation Reporting System (WFRS) Basic Screening Survey
6-1.22: Increase the proportion of Iowans who receive fluoridated water from water systems that meet the proposed national standard of 0.7 parts per million of water fluoridation from 91% to 94%.	WFRS
6-1.23: Increase the number of counties with school-based oral health preventive services.	Iowa Department of Public Health: School-based Sealant Program Data Report
6-1.24: Provide leadership and support for state and local oral health coalition development to strengthen existing coalitions and to develop new coalitions and/or workgroups that will pool expertise and resources to improve oral health.	Iowa Department of Public Health coalition data; state and local coalition meeting minutes

6-1.25:

Medicaid Utilization Data

By 2020, increase from 16% to 20% the percent of non-waiver Medicaid-eligible, over age 65 lowans who receive dental services.

Healthy People 2020

Healthy People 2020 Indicator	National Data Source	Iowa Data Source
OH-1: Reduce the proportion of children and adolescents who have dental caries experience in their primary teeth or permanent teeth.	NHANES	Basic Screening Surveys
OH-2: Reduce the proportion of children and adolescents with untreated dental decay.	NHANES	Basic Screening Surveys
OH-3: Reduce the proportion of adults with untreated dental decay.	NHANES	BRFSS
OH-4: Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease.	NHANES	BRFSS
OH-5: Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis.	NHANES	Not available
OH-6: Increase the proportion of oral and pharyngeal cancers detected at the earliest stage.	NPCR, SEER	Iowa Cancer Registry
OH-7: Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year.	MEPS	NSCH Medicaid utilization data
OH-8: Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year.	MEPS	Medicaid CMS 416 Report
OH-9: Increase the proportion of school-based health centers with an oral health component.	SBHCC	Not available
OH-10: Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health program.	UDS ASTDD Annual Synopsis	UDS
OH-11: Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year.	UDS	UDS

OH-12: Increase the proportion of children and adolescents who have received dental sealants on their molar teeth.	NHANES	Basic Screening Surveys
OH-13: Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water	WFRS	WFRS
OH-14: (Developmental) Increase the proportion of adults who receive preventive interventions in dental offices.	NHANES	Medicaid utilization data
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.	ASTDD Annual Synopsis	Not available
OH-16: Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system.	ASTDD Annual Synopsis	ASTDD Annual Synopsis
OH-17: Increase health agencies that have a dental public health program directed by a dental professional with public health training.	ASTDD Annual Synopsis Indian Health Service	ASTDD Annual Synopsis
C-6: Reduce the oropharyngeal cancer death rate.	NVSS-M	Iowa Cancer Registry
AHS-6.3: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary dental care.	MEPS	Not available
D-8: Increase the proportion of persons with diagnosed diabetes who have at least an annual dental examination.	NHIS	BRFSS
TU-1: Reduce tobacco use by adults.	NHIS	BRFSS
TU-2: Reduce tobacco use by adolescents.	YRBSS	YRBSS

Data Sources

The following data sources are used by the Iowa Department of Public Health to track the oral health of Iowans. In addition to measuring progress on the Healthy Iowans and Healthy People indicators, these data sources also provide additional information about the prevalence of oral disease and utilization of dental services.

Barriers to Prenatal Care

Theme: General health behaviors of postpartum women

Collected by: University of Northern Iowa

IDPH contact: Bureau of Family Health - Steph Trusty

Timing: Annual; oral health questions every other year (October)

Targeted Demographic: Postpartum women

Details: Barriers is a large scale survey of women upon discharge from the hospital after giving birth. It is completed by nearly half of all women who give birth in the state; however, it is not representative of the Iowa birth population because many at-risk groups are underrepresented. Every other year, an oral health module is included with questions about visiting the dentist during pregnancy, reasons for not visiting, and dental problems experienced during pregnancy.

Data available at: Internal IDPH records

Basic Screening Survey (BSS)

Theme: Oral health status of Iowa preschool and school-age children

Collected by: Iowa Department of Public Health

IDPH contact: Bureau of Oral and Health Delivery Systems – Greg Freedman

Timing: Every 3 years per population group (approximate)

Targeted Demographic: Third grade students, Head Start and WIC participants

Details: The BSS is based on the ASTDD basic screening survey tool, an open mouth screening to gather data on the presence of sealants, untreated decay, demineralization, and history of decay. Information is also gathered on insurance status and dental visit frequency. Since 1999, IDPH has coordinated a representative survey of students in 3rd grade, and Head Start and WIC participants on an alternating basis.

Data available at: <http://idph.iowa.gov/ohds/oral-health-center/reports>

Behavioral Risk Factor Surveillance Survey (BRFSS)

Theme: General health behaviors of adults in U.S. (including Iowa)

Collected by: Centers for Disease Control and Prevention

IDPH contact: Division of Tobacco Control and Prevention -Don Shepherd

Timing: Annual; oral health questions every other year (summer)

Targeted Demographic: Adult population, 18+

Details: The BRFSS is a large telephone-based survey that is weighted to be nationally and state representative, and has included 7,000-8,000 adults in recent years. Every other year an oral health module is included, which contains a question about the last dental visit and the number of teeth missing. In the 2015 survey, IDPH collaborated with Delta Dental of Iowa to ask several questions about access to the dentist and reasons for not going.

Data available at: <http://idph.iowa.gov/brfss>; or <http://www.cdc.gov/oralhealthdata/>

Child and Adolescent Reporting System (CAREs)

Theme: Health-related services provided to children and adolescents

Collected by: Title V Child Health Agencies

IDPH contact: Bureau of Family Health – Brad Hummel

Timing: Ongoing

Targeted Demographic: Children and adolescents through age 21

Details: CAREs is a secure web-based data system used by Title V Child Health agencies to monitor client needs and report provision of services. CAREs serves as both a permanent clinical health record and a data system. This system will be integrated with the Women’s Health Information System (see below) into a new data system (anticipated 2017) for the Bureaus of Family Health and Oral and Health Delivery Systems.

Data available at: Internal IDPH records

Health Professional Shortage Area Designations (HPSA)

Theme: Access to health care

Collected by: Health Resources and Services Administration (HRSA); provided to states

IDPH contact: Bureau of Oral and Health Delivery Systems – Lloyd Burnside

Timing: Every 4 years

Targeted Demographic: Iowa primary care, dental, and mental health providers

Details: HPSAs are designated by HRSA and may be geographic (county or service area), demographic (low income or Medicaid population) or institutional (comprehensive health center, FQHC or other public facility). This may include ratios of dentists to the population as a whole, and low-income and Medicaid-enrolled individuals without adequate access to dentists.

Data available at: <http://datawarehouse.hrsa.gov/tools/analyzers/hpsafind.aspx>

Hospitalization Data

Theme: In-patient and out-patient hospitalizations

Collected by: Iowa Hospital Association

IDPH contact: Bureau of Environmental Health Services – Tim Wickham

Timing: Annual (July)

Targeted Demographic: All Iowans

Details: The hospitalization dataset provides data on all hospitalizations in the state of Iowa, some demographic information about the patient, and the diagnosis code. The Oral Health Center worked with IDPH information management staff to add oral health related emergency room visits and hospital visits, by county, year and age, to the Iowa Public Health Tracking Portal’s interactive visualizations.

Data available at: <https://pht.idph.state.ia.us/healtheffects/oralhealth/Pages/default.aspx>

Iowa Cancer Registry

Theme: Cancer incidence

Collected by: State Health Registry of Iowa – Michele West

IDPH contact: Not applicable

Timing: Annual (September, 3 year delay)

Targeted Demographic: All Iowans

Details: The State Health Registry of Iowa is a population-based cancer registry that collects and reports cancer incidence, survival, and mortality among Iowans. This includes data on the rates of oral cavity and pharynx cancer by age and sex in the state of Iowa.

Data available at: <http://www.cancer-rates.info/ia/>

Iowa Health Professions Tracking Center

Theme: Demographics of dentists in Iowa

Collected by: Office of Statewide Clinical Education Programs (OSCEP)

IDPH contact: Bureau of Oral and Health Delivery Systems – Lloyd Burnside

Timing: Ongoing

Targeted Demographic: Iowa's health professionals

Details: The OSCEP tracking system collects data on Iowa's major health professionals, including dentists. Data includes the number, demographics (age, gender, and worksite), education, and work trends (e.g. days worked per week) of Iowa dentists.

Data available at: <http://www.medicine.uiowa.edu/oscep/products/>

Medicaid Utilization Data (CMS 416 Annual EPSDT Participation Reports and Iowa Medicaid Enterprise Data Requests)

Theme: Utilization of dental services by all Medicaid enrollees

Collected by: Iowa Medicaid Enterprise

IDPH contact: Bureau of Oral and Health Delivery Systems – Greg Freedman

Timing: Annual (April)

Targeted Demographic: Medicaid-enrolled children and adolescents (0-20)

Details: The CMS 416 report provides basic information on participation in the Medicaid EPSDT program. This includes the number and percent of children who have received any dental service from a dental or non-dental provider, and any preventive dental service from a dentist, with data by county and age group (1-20, 0-20, 1-5, 0-14). The Oral Health Center also requests annual information about utilization of services by children ages 0-12 and billing by dentist to evaluate the I-Smile Program.

Data available at: <http://idph.iowa.gov/ohds/oral-health-center/reports>

National Survey of Children's Health (NSCH)

Theme: Children's health behaviors

Collected by: Centers for Disease Control and Prevention

IDPH contact: Not applicable

Timing: Periodic

Targeted Demographic: Children 0-17

Details: This is a telephone survey sponsored by HRSA and conducted by CDC to gather information about the health status and demographics of school aged children. The survey was initiated in 2003, and done again in 2007 and 2011. Data is available at the national and state level. The survey includes oral health questions about dental visits and dental problems.

Data available at: <https://childhealthdata.org/learn/NSCH>

Pregnancy Risk Assessment and Monitoring System (PRAMS)

Theme: Health status of pregnant women

Collected by: Iowa Department of Public Health

IDPH contact: Bureau of Family Health – Sarah Mauch

Timing: Annual (July)

Targeted Demographic: Pregnant women

Details: PRAMS is a randomized survey of Iowa mothers. It is on a smaller scale than the Barriers survey; however the CDC helps to weight the sample so that it is representative of the Iowa birth population. There is also an over sample of African American and Hispanic women to provide better comparisons between these groups. Oral health questions include pregnancy dental visits and oral health problems.

Data available at: <http://idph.iowa.gov/prams>

Public Health Supervision (PHS) Reporting

Theme: Services provided by dental hygienists working under public health supervision

Collected by: Iowa Department of Public Health

IDPH contact: Bureau of Oral and Health Delivery Systems – Greg Freedman

Timing: Annual (January)

Targeted Demographic: All dental hygienists providing public health services

Details: Dental hygienists are required to submit information about the services they provide in public health settings. The PHS reporting information includes the number of screenings, sealants, fluoride varnish applications, prophylaxis, individual and group counseling performed, and the number of referrals given. The data is split into children aged 0-20 and 21 and older.

Data available at: <http://idph.iowa.gov/ohds/oral-health-center/reports>

School Dental Screening Audits

Theme: Student oral health

Collected by: I-Smile Coordinators and school staff

IDPH contact: Bureau of Oral and Health Delivery Systems – Steph Chickering

Timing: Annual (June)

Targeted Demographic: Kindergarten and 9th grade students

Details: Every student entering Kindergarten and 9th grade in an accredited Iowa public or private school is required to provide proof of a dental screening. The required Certificate of Dental Screening form gathers data on basic oral health status (no obvious problems, requires dental care, requires urgent care) and screening provider type. Data is presented by school, district and county on the IDPH website.

Data available at: <http://idph.iowa.gov/ohds/oral-health-center/reports>

School-based Sealant Program Data Report

Theme: School dental services through IDPH contracted programs

Collected by: Sealant program contractors (Title V Child Health Agencies)

IDPH contact: Bureau of Oral and Health Delivery Systems – Steph Chickering

Timing: Monthly

Targeted Demographic: Elementary and middle school students

Details: All school-based sealant programs complete excel spreadsheets with information about student services and demographics. This includes data on the targeted schools, the number of children screened, the number of sealants placed, decay status, and insurance status.

Data available at: <http://idph.iowa.gov/ohds/oral-health-center/reports>

Title V Dental Data Reports

Theme: Dental services provided through Title V dental fund vouchers

Collected by: Title V Child Health Agencies

IDPH contact: Bureau of Oral and Health Delivery Systems – Steph Chickering, Mary Kay Brinkman

Timing: Quarterly

Targeted Demographic: Title V eligible children 0-20

Details: All child health contractors complete dental data reports that include the services and number of children by age that receive care from local dental providers paid through Title V dental vouchers. The data also includes the amount of funding used per quarter for the dental services provided.

Data available at: Internal IDPH records

Water Fluoridation Reporting System (WFRS)

Theme: Community water fluoridation

Collected by: Water operators and submitted to CDC by IDPH

IDPH contact: Bureau of Oral and Health Delivery Systems – Kelsey Feller

Timing: Ongoing

Targeted Demographic: All users of community water systems in Iowa

Details: Water operators provide Monthly Operation Reports to IDPH staff, who then input the data into the WFRS system. This system is managed by CDC and provides information about the fluoridation status of community water systems in the U.S. Data collected includes the county that the system is in, number of people served, fluoridation method, and the fluoride level.

Data available at: https://nccd.cdc.gov/DOH_MWF/Default/Default.aspx

Women's Health Information System (WHIS)

Theme: Health-related services provided to women

Collected by: Title V Maternal Health Agencies

IDPH contact: Bureau of Family Health – Steph Trusty

Timing: Ongoing

Targeted Demographic: Prenatal and Postpartum Women

Details: WHIS is a secure web-based data system used by Title V Maternal Health agencies to monitor client needs and report provision of services. WHIS serves as both a permanent clinical health record and a data system. This system will be integrated with CAREs (anticipated in 2017) into a new data system for the Bureaus of Family Health and Oral and Health Delivery Systems.

Data available at: Internal IDPH records

Youth Risk Behavioral Surveillance System (YRBSS)

Theme: Health risk behaviors of high school students

Collected by: Centers for Disease Control and Prevention

Timing: Every two years

Targeted Demographic: 9th-12th grade students

Details: YRBSS provides representative national and state data about health risk behaviors that contribute to leading causes of death and disability among youth and young adults. The survey includes questions about tobacco use and last dental visit.

Data available at: <http://www.cdc.gov/healthyyouth/data/yrbs/index.htm>

Other IDPH Programmatic and Meeting Data

Theme: Partnerships and Programmatic Successes

Collected by: IDPH and local contractors

IDPH contact: N/A

Timing: Ongoing

Targeted Demographic: Oral Health Programs

Details: IDPH collects meeting minutes for the state Life Long Smiles Coalition meetings and also from I-Smile and I-Smile Silver coordinators on their meetings and partnerships.

Data Dissemination and Use

The Oral Health Center uses several mechanisms to disseminate and use data. The first Iowa *Burden of Oral Disease 2015* report was completed in October 2015 as part of an oral health surveillance plan strategy within the CDC Oral Disease Prevention Grant Project. The report is available as a comprehensive document or as individual fact sheets for different stages of life, and will be updated annually. Each year the *Inside I-Smile Report* is completed and includes statistical data and success stories about the impact of the I-Smile program on children's oral health. These reports and others are available on the Reports section of the IDPH website at: <http://idph.iowa.gov/ohds/oral-health-center/reports>

Data is also shared through white papers and also through emails to stakeholders and in presentations at internal and external meetings and conferences. Data is also shared in fact sheets and brochures on the Resources section of IDPH website at: <http://idph.iowa.gov/ohds/oral-health-center/resources>.

Data Source Details

Data Source	Measures	Frequency	Population Level	Category
Barriers to Prenatal Care	Percent of women who received dental care during pregnancy Barriers to dental care during pregnancy Dental issues experienced during pregnancy	Bi-Annual	Hospital +	Access OH status
Basic Screening Surveys	Percent of children with a sealant (3 rd grade only) Percent of children with untreated decay Percent of children with demineralization Percent of children with history of decay Percent of children with private dental insurance, Medicaid, <i>hawk-i</i> , or self-pay	As Indicated	State	Access OH status Disparities
Behavioral Risk Factor Surveillance System	Percent of adults with teeth removed due to decay or gum disease Length of time since last visit to dentist or dental clinic (adults) Length of time since last professional teeth cleaning (adults) Barriers to getting dental care-2015 only	Bi-Annual	State	Access OH status
Child and Adolescent Reporting System	Number and type of services provided to Title V Child Health (CH) clients Percent of CH clients at high, moderate, and low risk for decay Percent of CH clients with a sealant Percent of CH clients n with untreated decay Percent of CH clients with history of decay Percent of CH clients with a dental home Barriers to dental care for CH clients	As indicated	County +	Access OH status
Health Professional Shortage Area Designations	Ratio of population to dentists in a geographic area Ratio of low-income population to dentists Ratio of Medicaid-enrolled population to dentists	4 years	Precinct +	Access

Data Source	Measures	Frequency	Population Level	Category
Hospitalization Data	Number of hospitalizations with a primary diagnosis related to oral health Number of emergency department visits with a primary diagnosis related to oral health	Annual	County +	OH status
Iowa Cancer Registry	Rate of population with oral cavity and pharynx cancer	Annual	County +	OH status
Iowa Health Professions Tracking Center	Number, demographics (age, gender), and practice arrangements (including location and number of days/week) of dentists in Iowa	Ongoing	County +	Access
Medicaid Utilization Data (CMS 416 Report and Iowa Medicaid Enterprise Data Requests)	Percent of Medicaid-enrolled children who receive any dental service by a dental provider Percent of Medicaid-enrolled children who receive any dental service by a non-dental provider Percent of Medicaid-enrolled children who receive any dental service (any provider) Percent of Medicaid-enrolled children who receive preventive dental service by a dentist	Annual	County +	Access
National Survey of Children's Health	Percent of children with oral health problems Percent of children who had a preventive dental visit Percent of children who had any dental care	Annual	State	OH status Access
Pregnancy Risk Assessment and Monitoring System	Percent of pregnant women who think oral health is important Percent of pregnant women who talked with Healthcare Worker about oral health Percent of pregnant women who had teeth cleaned during pregnancy Percent of pregnant women who have dental insurance Percent of pregnant women who had a dental problem during pregnancy Percent of pregnant women who went to a dentist for a problem	Annual	State	OH status Access Disparities

Data Source	Measures	Frequency	Population Level	Category
Public Health Supervision Reporting	Number of services (screenings, fluoride varnish, prophylaxis, sealants, individual counseling, or group education) provided by hygienists under public health supervision Number of regular and urgent referrals to dentists	Annual	State	Access
School Dental Screening Audits	Percent of student compliance Percent of school compliance Percent of students with treatment needs Percent of screenings by provider type (dentist, hygienist, physician, physician assistant, nurse)	Annual	School +	OH status
School-based Sealant Program Data Report	Number of children screened Average sealants placed Percent of children receiving a sealant Percent of children with untreated decay Percent of children with history of decay Percent of children with private dental insurance, Medicaid, <i>hawk-i</i> , or self-pay	Monthly and Annual	Service Area +	OH status Access
Title V Dental Data Reports	Number of children by county of residence who receive care using Title V dental funds Number of children by age who receive care using Title V dental funds Type of dental procedures provided using Title V dental funds Amount of reimbursement to dentists using Title V dental funds Infrastructure-building activities provided using Title V dental funds	Quarterly	Service Area +	Access
Water Fluoridation Reporting System	Percent of population served by fluoridated water system Level of fluoride in community water systems	Ongoing	Municipality +	Environmental Factors Disparities

Data Source	Measures	Frequency	Population Level	Category
Women's Health Information System	Number and type of services provided to Title V Maternal Health (MH) clients Number of MH clients with a dental provider Number of MH clients at high, moderate, and low risk for dental disease Number of MH clients with untreated decay Number of MH clients with history of decay Barriers to dental care for MH clients	As Indicated	Service Area +	Access OH status
Youth Risk Behavioral Surveillance System	Percent of teenagers who use tobacco products in last 30 days (cigarettes, chewing/snuff/dip, cigar/cigarillos/little cigars) Percent of teenagers who have been to the dentist in the last 12 months	Bi-annual	State	Access Personal Factors

Acronym List

Attachment A

ASTDD	Association of State and Territorial Dental Directors
BRFSS	Behavioral Risk Factor Surveillance System
BSS	(ASTDD) Basis Screening Survey
CAReS	Child and Adolescent Report System
CDC	Centers for Disease Control and Prevention
CMS 416	Centers for Medicare and Medicaid Services (report on EPSDT services)
EPSDT	Early and Periodic Screening, Diagnostic and Treatment (Medicaid services for children)
FQHC	Federally Qualified Health Center
HPSA	Health Professional Shortage Designation
HRSA	Health Resources and Services Administration
IDPH	Iowa Department of Public Health
MEPS	Medical Expenditure Panel Survey
NHANES	National Health and Nutrition Survey
NHIS	National Health Interview Survey
NPCR	National Program of Cancer Registries
NSCH	National Survey of Children's Health
NVSS-M	National Vital Statistics System-Mortality
OSCEP	Office of Statewide Clinical Education Programs
PHS	Public Health Supervision
PRAMS	Pregnancy Risk Assessment and Monitoring System
SBHCC	School-based Health Care Census
SEER	Surveillance, Epidemiology, and End Results Program

Title V (CH and MH)	Federally funded block grant program contracted to local public and not-for-profit Child Health (CH) and Maternal Health (MH) agencies to provide health services to low-income children and pregnant women
UDS	Uniform Data System
WFRS	Water Fluoridation Reporting System
WHIS	Women's Health Information System
YRBSS	Youth Risk Behavior Surveillance System