Dental Public Health Activity Descriptive Report Submission Form

The Best Practices Committee requests that you complete the Descriptive Report Submission Form as follow-up to acceptance of your State Activity Submission as an example of a best practice.

Please provide a more detailed description of your **successful dental public health activity** by fully completing this form. Expand the submission form as needed but within any limitations noted.

ASTDD Best Practices: Strength of Evidence Supporting Best Practice Approaches
Systematic vs. Narrative Reviews: http://libguides.mssm.edu/c.php?g=168543&p=1107631

NOTE: Please use Verdana 9 font.

CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS

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

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SECTION I: ACTIVITY OVERVIEW

Title of the dental public health activity:

Iowa Oral Health Survey – Oral Health Surveillance

Public Health Functions*: Check one or more categories related to the activity.

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

***ASTDD Guidelines for State and Territorial Oral Health Programs that includes 10 Essential Public Health Services to Promote Oral Health**

Healthy People 2020 Objectives: Check one or more key objectives related to the activity. If appropriate, add other national or state HP 2020 Objectives, such as tobacco use or injury.

"X"	**Healthy People 2020 Oral Health Objectives**	
X	OH-1	Reduce the proportion of children and adolescents who have 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 to 74 years with moderate or severe periodontitis
	OH-6	Increase the proportion of oral and pharyngeal cancers 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
X	OH-8	Increase the proportion of low-income children and adolescents who received any preventive dental service during the past 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 (FQHCs) that have an oral health component
	OH-11	Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year

X	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	Increase the proportion of adults who receive preventive interventions in dental offices
	OH-15	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
X	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

"X"	**Other national or state Healthy People 2020 Objectives: (list objective number and topic)**	

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

Survey, Basic Screening Survey, sealant, data, policy, prevalence, acquiring oral health data, use of oral health data, children oral health

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

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

In 2016, the Iowa Department of Public Health (IDPH), Bureau of Oral and Health Delivery Systems, conducted a survey to measure the oral health status of third-grade children in Iowa. Oral health staff conducted a calibration training for Maternal and Child Health (MCH) agency I-Smile Coordinators and direct service dental hygienists from across the state who would complete the survey screenings. A computerized random sample of 5,660 third-grade children from 72 schools was selected (2,470 or 43.6 percent participated). The survey included schools with school-based sealant programs, which had been previously excluded. The survey found that 59.4 percent of the children had at least one sealant on a permanent first molar, 47.1 percent had at least one filled tooth, and 16 percent had a cavitated lesion. The 2016 sealant rate (59.4 percent) was higher than the 2012 survey's rate (45.6 percent). In 2016, more children had untreated decay (16 percent) than in 2012 (14.1 percent); however, that untreated decay was isolated to one tooth for 54.4 percent and to two teeth for 24.4 percent of the children with decay. Also, more Iowa children now have a payment source for their dental care than in previous years (87.9 percent in 2016 compared to 79.4 percent in 2012). The Bureau of Oral and Health Delivery Systems utilizes survey findings to develop strategies to increase prevalence of dental sealants, decrease the number of children with tooth decay and assure children have access to dental care in Iowa.

SECTION II: DETAILED ACTIVITY DESCRIPTION

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

Complete using **Verdana 9 font.

Rationale and History of the Activity:

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

The Iowa Department of Public Health (IDPH) has conducted regular surveys of third grade children for more than 15 years, using the Association of State and Territorial Dental Directors (ASTDD) Basic Screening Survey (BSS) methodology. The initial intent was to measure the prevalence of dental sealants on permanent molars, in response to a Maternal and Child Health (MCH) national performance measure. Over time, the survey protocol was changed to include additional information, such as presence of cavitated lesions and/or filled teeth. The survey results provide important information about the oral health status of Iowa children, ability of parents to access dental care for their children, and how families pay for dental care.

IDPH uses the survey to assist in program and policy planning and evaluation of their current public health initiatives. For example, previous survey results indicated dental uninsured rates to be much higher than medical uninsured rates, which helped advance the Iowa Children's Health Insurance Program (CHIP) dental-only ***hawk-i*** policy. Also, prior surveys had resulted in a push to expand school-based sealant programming, which in turn resulted in the statewide "I-Smile™ @ School" (school-based dental sealant) program.

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

Assessment, one of the three core functions of public health, is used at IDPH to drive programming and policies. Surveillance, a key component of assessment, has historically provided IDPH with the knowledge needed to implement and expand key oral health programs to target high-risk populations.

Oral Health surveillance is incorporated within our statewide "I-Smile™" program. Surveillance is important for local and state needs assessments. Information learned from surveillance measures is used to direct program and policy development.

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

For the 2016 survey:
August 2015 – Survey discussions and planning began
September 2015 – Statistical Analyst began reviewing ASTDD survey methodology
October 2015 – Consent/recording forms developed and peer-reviewed
November 2015 – Forms approved by Assistant Attorney General, randomized sample drawn
December 2105 – Randomly selected schools' superintendents notified of survey via letter from state dental director, phone calls and emails to confirm survey participation, calibration training developed
January 2016 –Calibration training for screeners conducted, survey materials disseminated to survey screeners
February – April 2016 – Survey screenings occurred
May 2016 – Data entry completed by IDPH support staff
June – July 2016 –Data analysis conducted by CDC Epi intern
August – September 2016 – draft report written
October 2016 – Final report approved and disseminated

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

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES

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

The 2016 third grade oral health survey was planned and coordinated by Iowa Department of Public Health employees, using list of school data from the Iowa Department of Education. Partnerships

included school administration and staff, I-Smile™ Coordinators, public health dental hygienists, parents and students.

I-Smile™ Coordinators and MCH agency dental hygienists were key resources for this project. Coordinators were required to contact participating schools to schedule survey dates and distribute consents. Screenings were provided by I-Smile™ Coordinators and public health dental hygienists. Follow-up care coordination was provided through the I-Smile™ program.

INPUTS	**PROGRAM ACTIVITIES**	OUTPUTS	OUTCOMES

2. Please provide a detailed description the key aspects of the activity, including the following aspects: administration, operations, and services.

Administration of the 2016 third grade oral health survey was provided by Iowa Department of Public Health (IDPH) staff. An IDPH oral health consultant and statistical analyst planned and executed the processes of school selection, confirmation of participating schools, calibration materials and training.

Operations of the survey were done at the local level, by I-Smile™ Coordinators and MCH agency dental hygienists.

In addition to scheduling the survey and distributing consent forms, I-Smile™ Coordinators and MCH agency dental hygienists provided the survey screenings for all children who submitted valid parent/guardian consent and were responsible for the care coordination of all students found to have dental needs.

Data were gathered by I-Smile™ Coordinators and MCH agency dental hygienists and were sent to IDPH for data entry. IDPH staff compiled and assessed the data and also wrote a summary report.

INPUTS	PROGRAM ACTIVITIES	**OUTPUTS**	OUTCOMES

3. What outputs or direct products resulted from program activities? (e.g., number of clients served, number of services units delivered, products developed, accomplishments, etc.)

Two thousand four hundred and seventy students (43.6 percent of targeted students) in 72 Iowa schools participated in the survey. All participants received a visual screening; dental explorers were not used. During the screening, the presence or absence of and number of teeth with cavitated lesions, fillings and sealants were recorded. Additional information collected via consent form on each participating child included age, race/ethnicity, having a dentist, time since most recent dental visit, form of dental care payment, subject evaluation of ability to get dental care, and child's participation in the free and reduced lunch (FRL) program.

It is important to note that survey results indicated the percent of children with dental sealants rose (from 45.6 percent in 2012 to 59.4 percent in 2016). A slightly higher percentage of children participating in the FRL program had a dental sealant (61.4 percent) compared to children not participating in the FRL program (58.7 percent). These results are likely due to Iowa's investment in the expansion of school-based dental sealant programs. Through funding from Medicaid, federal grants, and Delta Dental of Iowa Foundation, IDPH has expanded school oral health services from 27 of Iowa's 99 counties in 2012 to 78 counties by 2015. This expansion must be maintained and expanded, as needed, to create more opportunities so that all at-risk students receive preventive dental services.

Also, more Iowa children now have a payment source for their dental care than in previous years. There are more children with private insurance since 2012 (51.3 percent in 2012 compared to 49.9 percent in 2016), and more are enrolled in Medicaid (29.7 percent compared to 24.8 percent) and, ***hawk-i*** (6.9 percent compared to 5.3 percent). Increased outreach efforts to enroll children and families on Medicaid and ***hawk-i*** are strategies of the I-Smile™ program. In addition, state policies such as presumptive eligibility for Medicaid and the dental-only ***hawk-i*** option could contribute to the higher enrollment numbers.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	**OUTCOMES**

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

Despite the positive changes in children's oral health in Iowa, it is apparent that inequities still exist for low-income families. Children from families of low socioeconomic status are experiencing more tooth decay. And although more children have some financial assistance to pay for dental care than in the past, having a way to help pay for dental care does not automatically translate into more access to services – this is particularly true for those on Medicaid. Although children on Medicaid have a slightly higher likelihood of having a preventive dental sealant, these children were the least likely to have seen a dentist in the last 6 months, have a dentist of record, or describe their ability to get care as excellent.

It will be important for the state's I-Smile™ Coordinators to maintain relationships and referral systems with dental providers to ensure that low-income children have access to the dental care that they need.

It will also be important for public health programs, such as I-Smile™, to continue working to prevent dental disease of low-income Iowa children. IDPH will consider how best to assure Iowa children can have early and regular dental care, including preventive services to stop dental disease before it can begin. I-Smile™ will be critical for provision of gap-filling preventive care, care coordination services for families to receive regular dental care, outreach and enrollment assistance regarding payment sources for dental care, and oral health promotion for the public about the importance of oral health. In turn, the oral health of Iowa children may improve and contribute to the goal of being the healthiest state in the nation.

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

1. What is the annual budget for this activity?

The annual budget for this activity is unknown. The administrative costs to IDPH are funded through our CDC, MCH, and I-Smile™ budgets. Time spent by staff to administer the survey are not tracked specifically. The costs to conduct the survey by our I-Smile™ program locally are part of agency I-Smile™ budgets and required/contracted services with IDPH.

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

Costs for the survey included IDPH staff time for planning and coordinating the survey, analyzing data, and writing the report. Additional costs included the web-based calibration training and printing and shipping of consent forms. Costs for administering the survey at the local level included staff time and survey materials (e.g. toothbrushes, gloves, hand sanitizer, disposable mirrors and penlights). These costs were part of the I-Smile™ budgets for local MCH agencies through contracts with IDPH. Toothbrushes were provided for each student in participating classrooms.

3. How is the activity funded?

The MCH Block Grant, Centers for Disease Control and Prevention grant and I-Smile ™ budgets provided funding for IDPH survey costs. Local MCH agency costs were funded through I-Smile™ budgets (a combination of state appropriations and federal funding), the MCH Block Grant and Medicaid.

4. What is the plan for sustainability?

IDPH will continue to conduct oral health surveys in order to maintain an understanding about the oral health status of children. Sustainability will require continued state and federal funding of the oral health programs.

Lessons Learned and/or Plans for Addressing Challenges:

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

It was advantageous for IDPH staff to start the survey process early. As expected, it was time-consuming to get permission from school administrators to participate in the survey. Often, multiple emails and/or phone calls were necessary. Starting the process early allowed us time to replace schools in the event that participation was refused.

In hindsight, it would have been advantageous to have a list of back-up schools prepared at the same time the targeted schools list was formulated. Finding a back-up school (after one denied participation) using the same random sampling technique required the time of the statistical analyst, who was not always immediately available. Time was of the essence and immediate information would have been beneficial.

We benefit, in Iowa, from having a statewide infrastructure through the I-Smile program that provides the local manpower to carry out the survey. Without this infrastructure, the process would be very different.

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

One challenge was the refusal of participation from six schools. Multiple contact attempts to discover the school was not willing to participate created a shorter amount of time to randomly select a replacement and receive approval.

Another challenge was to determine the best approach for schools within the sample that were part of the IDPH school-based sealant program. Decisions had to be made regarding the time frame of the data collection and how data would be reported.

The greatest challenge was that the IDPH statistical analyst that helped set up the survey and random sample moved out of state prior to the completion of data collection. Epidemiology staff from other bureaus within IDPH had to learn the history of the project in order to assist with data analysis.

Available Information Resources:

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

The 2016 Iowa Third Grade Oral Health Survey Report can be accessed at:

http://idph.iowa.gov/Portals/1/userfiles/163/2016%20Third%20Grade%20Survey%20FINAL%209_23_16.pdf

TO BE COMPLETED BY ASTDD	
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