

## Dental Public Health Project Descriptive Report Form

Please provide a description of your organization's successful dental public health project by completing this form. Add extra lines to the form as needed but stay within **word limits**.

Please return the completed form to Lori Cofano: <a href="mailto:lcofano@astdd.org">lcofano@astdd.org</a>

## Name of Project

## Alaska Childhood Understanding Behaviors Survey

# Executive Summary (250-word limit))

The Alaska Childhood Understanding Behaviors Survey (CUBS) is a follow-up survey to the Pregnancy Risk Assessment Monitoring System (PRAMS) that was developed by the Alaska Division of Public Health in 2006. CUBS' purpose is to fill a gap in knowledge by collecting information related to child behavior, health, health care access, and school readiness among Alaska's 3-year-olds.

From its formation, CUBS has worked with numerous partners, including the Alaska Oral Health Program, the members of the Alaska Dental Action Coalition, and state and public health partners including Tribal health entities, to determine data needs. As a result, every version of the CUBS survey has included multiple questions related to the child's dental health, including whether a health care provider has ever said the child had tooth decay or cavities, whether the child has ever been to see a dentist, at what age the child first saw a dentist, what types of dental care the child has received, and reasons for the child's first dental visit. Data on associated risk factors, such as consumption of sugar sweetened beverages, screen time, socioeconomic status, and access to care (among many other early childhood issues), is also collected. By linking back to PRAMS, data analyses can also examine associations between maternal dental health during pregnancy and health outcomes for the child at age three.

The PRAMS survey uses a stratified randomized sample to select about 1/5 of all Alaskaresident births. All people who respond to PRAMS are sent a CUBS survey when their child is three years old. Surveys are initially sent by mail, with email and phone follow-up. PRAMS respondents are not eligible for CUBS if they have moved out of Alaska since the child's birth.

## Name of Program or Organization Submitting Project

Alaska Division of Public Health

#### Essential Public Health Services to Promote Health and Oral Health in the United States

Place an "X" in the box next to the Core Public Health Function(s) that apply to the project.

Х	Assessment	
	Policy development	
	Assurance	1

#### http://www.astdd.org/state-guidelines/

Project submissions will be categorized by the Core Public Health Functions on the ASTDD website.

#### **Healthy People 2030 Objectives**

List Healthy People 2030 objectives related to the project.

- Reduce the proportion of children and adolescents with lifetime tooth decay OH-01
- Reduce the proportion of children and adolescents with active and untreated tooth decay
   OH-02
- Increase use of the oral health care system OH-08

This information will be used as a data resource for ASTDD purposes.

## Keywords for sorting the project by topic.

Provide **three to five** keywords (e.g., access to care, children, coalitions, dental sealants, fluoride, policy, Medicaid, older adults, pregnant women, etc.) that describe the project. Keywords are used to categorize submissions.

Acquiring oral health data, use of oral health data, PRAMS, children oral health, child behavior, access to care, pregnant women (prenatal/perinatal) services

## **Detailed Project Description**

#### **Project Overview**

(750-word limit)

#### 1. What problem does the project address? How was the problem identified?

A gap in population-based data about early childhood was identified by the Alaska Division of Public Health in 2006. This led to the implementation of a follow-up survey to PRAMS respondents by a Council of State and Territorial Epidemiologists/Centers for Disease Control and Prevention (CSTE/CDC) Applied Epidemiologist fellow. This survey was modeled on follow up surveys to PRAMS that at the time were being conducted in Oklahoma, Rhode Island, and Oregon. CUBS has been ongoing as a three-year follow-up since 2008 and collects data on child-focused topics and items specific to maternal and family experiences for children ages 0 to 3 years.

#### 2. Who is the target population?

The target population for data collection is parents living in Alaska who participated in the PRAMS survey and who have a 3-year-old child. Target audiences for the data and results include public health programs, health care providers, policy makers, and advocates. Intended beneficiaries of the data are Alaska families and community and public health partners.

#### 3. Provide relevant background information.

The CUBS implementation protocol is a modified PRAMS protocol. PRAMS is an established surveillance project designed and sponsored by the CDC that has been well-documented by experts to be an effective method for collecting population-based data on pregnancy and infants. CUBS data are weighted back to the original birth population using the same methodology used by PRAMS. By re-interviewing mothers who completed a PRAMS survey, CUBS is able to evaluate those factors present at birth or early life that increase risk for later adverse childhood outcomes. Although the CUBS process has not been peer-reviewed, Alaska¹ as well as a few other PRAMS follow-up states, including Oregon² and Oklahoma³,have published results of studies using our surveys in peer-reviewed journals.

### 4. Describe the project goals.

The goal of CUBS is to provide data related to the health and well-being of Alaskan 3-year-olds. This goal is accomplished through the following objectives:

- Collecting high quality data regarding the health status and care of Alaskan children at three years of age
- Performing data analyses to advance the understanding of how health systems, individual behaviors and family practices contribute to health outcomes during early childhood
- Translating analytic results into practical information for planning and evaluating public health interventions and policies and promoting standards for early childhood healthcare
- Sharing findings with child health stakeholders, including health care providers, educators, and parents

## Resources, Data, Impact, and Outcomes (750-word limit)

1. What resources were/are necessary to support the project (e.g., staffing, volunteers, funding, partnerships, collaborations with other agencies or organizations)?

CUBS program staff are closely integrated with Alaska's PRAMS program staff. Staff for both programs are described below. Funding for all positions is provided through a combination of state funds and federal grants. The CDC PRAMS grant provides partial funding for the PRAMS Coordinator.

 PRAMS Coordinator (trained MPH-level epidemiologist) – does all PRAMS analyses, grant management, supervision of PRAMS data manager and Survey Operations Manager, collaborates with stakeholders who use PRAMS data. 1.0 FTE dedicated to PRAMS

<sup>&</sup>lt;sup>1</sup> Grage L, Wise F, Meyer J. Exploring factors associated with parent-reported early childhood caries with Alaska's childhood understanding behaviors survey data. *J Public Health Dent.* 2023; 83(3): 284–291. https://doi.org/10.1111/jphd.12577

<sup>&</sup>lt;sup>2</sup> The Association Between Prenatal Food Insecurity and Breastfeeding Initiation and Exclusive Breastfeeding Duration: A Longitudinal Study Using Oregon PRAMS and PRAMS-2, 2008–2015, <a href="https://www.liebertpub.com/doi/full/10.1089/bfm.2023.0126">https://www.liebertpub.com/doi/full/10.1089/bfm.2023.0126</a>

<sup>&</sup>lt;sup>3</sup> Pregnancy Intentions and Maternal and Child Health: An Analysis of Longitudinal Data in Oklahoma, <a href="https://link.springer.com/article/10.1007/s10995-014-1609-6">https://link.springer.com/article/10.1007/s10995-014-1609-6</a>

- 2. CUBS Coordinator (trained MPH-level epidemiologist) does all CUBS analyses and supervision of CUBS data manager, makes final decisions on survey revisions and other big picture process decisions for CUBS. 0.15 FTE dedicated to CUBS.
- 3. Survey Operations Manager conducts Quality Assurance, monitoring and verification for both surveys, process evaluation, oversees daily operations. Provides some oversight over data managers. 1.0 FTE split between PRAMS and CUBS
- 4. PRAMS data manager PRAMS batch import, data cleaning, mail outs and emails, some phone calls. 1.0 FTE dedicated to PRAMS
- 5. CUBS data manager CUBS data cleaning, mail outs and emails, some phone calls. 0.4 FTE dedicated to CUBS.

Each month, the CUBS data manager begins a new batch of survey participants based on the child's month of birth. Contact with participants begins with a preletter which tells them a survey will be sent to them soon in the mail. A QR code with a link to complete the survey online is also included in the letter. About two weeks later, a survey packet with the survey booklet (as well as a letter with the QR code) is mailed. If an email address is available for the participant, they also receive an email with the survey link. In the second month, phone interview attempts are made to non-respondents, up to two more emails are sent, and a postcard reminder is mailed.

Until 2025, CUBS contracted out the majority of phone survey operations. The contractor provided a team of up to four interviewers and a program manager that spent roughly 4-6 hours a week making and monitoring calls. Due to declining phone response rates along with increasing web responses, this contract was terminated as it was no longer needed in 2025. Currently CUBS staff conduct phone calls and attempt interviews, although due to capacity the program may shift to targeted phone calls to populations with lower response rates or phone prompts.

All staff that have contact with survey participants complete the four-module CDC PRAMS human subjects training course that is renewed annually. Ten percent of phone attempts and interviews by Alaska CUBS program staff are monitored and 10% data entry of mailed responses are verified through double data entry for quality assurance purposes.

The CUBS Steering Committee is composed of health care providers, public health practitioners and researchers, representatives from Tribal health organizations, and childcare providers. The Steering Committee meets every 1-2 years and more frequently during times of survey revision.

CUBS is located in Alaska's Title V agency and collaborates closely with Title V, which provides the majority of funding for CUBS.

- 2. (a) What process measure data are being collected (e.g., sealants placed, people hired, etc.)?
  - (b) What outcome measure data are being collected (e.g., improvement in health)?
  - (c) How frequently are data collected?

The current version of the CUBS survey as well as past versions are available in the Resources section of the <u>CUBS Data Visualization Tool</u>. The survey asks up to 68 questions, as applicable, to respondents, who may skip questions that are designated skippable based upon response.

Outcome measure data are collected by various state and partner programs. Some outcome measures are listed in further detail below, under results sharing.

Data are collected on an ongoing basis through the year, with monthly batches. Once a year the data are statically weighted to represent the total annual cohort of births in Alaska during the child's birth year. Data files for research and analysis purposes are available annually.

#### 3. How are the results shared?

At the time this report was being prepared, Alaska CUBS has 16 years of weighted data that are available for analysis (2008-2023, representing Alaska births during 2005-2020). Results from 2015-2022 are available through an online data dashboard at <a href="https://alaska-dph.shinyapps.io/CUBS/">https://alaska-dph.shinyapps.io/CUBS/</a>. Topic-specific data analyses are published through State of Alaska Epidemiology Bulletins that are distributed to health care providers and other professionals through an extensive email distribution list.

CUBS data have been used by a variety of other programs in the Alaska Division of Public Health to monitor outcomes and evaluate progress, including the Section of Chronic Disease Prevention and Health Promotions Physical Activity and Nutrition (PAN) program. The PAN program uses CUBS to monitor child Body Mass Index (BMI) at the statewide level and used the CUBS sugar-sweetened beverage consumption data to design a targeted intervention to reduce consumption of these drinks among the early childhood population. CUBS data has been used in statewide and regional needs assessments and are presented at state and national conferences.

Two measures from CUBS annual well child visit and daily consumption of sugar-sweetened beverages were selected after a rigorous process to be included as statewide Healthy Alaskans 2030 indicators. CUBS data are used to supplement existing child health indicators tracked at the state level and are provided to healthcare and educational professionals to improve service delivery.

### **Budget and Sustainability**

(500-word limit)

Note: Charts and tables may be used.

#### 1. What is/was the budget for the project?

Supplies and postage projected for CUBS in 2025 totaled approximately \$25,000. This does not include staff time for 1.5 FTEs of State of Alaska employees on the program (excluded from budget below). Please see Resources, Data, Impact, and Outcomes section, part 1, CUBS program staff, for further details. In 2019, With the addition of web mode in 2022 and subsequent declines in mail and phone responses, the costs of the program are rapidly changing.

Budget				
Activity/Item	Brief Description	Quantity	Total	
Postage	Mailing survey packets		\$3,000	
	and rewards to mothers			
Contract for annual data	Contract with statistician		\$7,000	
weighting	to calculate analysis			
	weights			
Survey Monkey licenses	HIPAA-compliant data	3	\$3,000	
	system used to collect			
	survey data in all three			
	modes			
Gifts and Incentives	\$20 value gift provided to		\$9,000	
	all respondents. Studies			
	have shown that moms			

	are more likely to respond when they are given small thank you gifts	
Mail Supplies	Printed Surveys, envelopes, and other materials used in the mailing process	\$3,000
Total Amount:		

## 2. How is the project funded (e.g., federal, national, state, local, private funding)?

CUBS is located in Alaska's Title V agency and collaborates closely with Title V. Title V provides the majority of funding for CUBS, which is funded through federal and state sources.

## 3. What is the sustainability plan for the project?

CUBS is exploring the option of greatly reducing time dedicated by Alaska CUBS program staff on phone attempts, or only conducting targeted phone calls to rural participants who tend to have lower response rates by the web mode. The future of CUBS is currently uncertain due to federal changes with the CDC PRAMS program.

#### **Lessons Learned**

(750-word limit))

- (a) What lessons were learned that would be useful for others seeking to implement a similar project?
- (b) Any unanticipated outcomes?
- (c) Is there anything you would have done differently?

The most time-consuming aspect of CUBS has been tracking down participants whose addresses have changed in the three years since they responded to PRAMS. Also, having a diverse steering committee is important for "marketing" the data so that stakeholders know that it is available. Sending out multiple email reminders to participants has helped to increase web responses. Contacting participants through multiple modes, including mail, email, and phone, has helped to maintain response rates of a diverse population. Over time, CUBS has reduced the number of mail and phone contacts while adding email outreach, however it is anticipated that all three modes of contact will likely remain in order to assure broad representation of respondents.

Since its inception in 2006, the CUBS program has been contacted by numerous other states requesting information about how to start a PRAMS follow-up survey. Since CUBS began, at least two other states, Missouri and New Mexico, have started a similar program. CUBS is regularly in contact with other PRAMS follow-up states to share lessons learned and information about operations.

#### Resources

List resources developed by this project that may be useful to others (e.g., guidelines, infographics, policies, educational materials). Include links if available.

Please visit the CUBS Data Visualization Tool for survey results, technical notes and resources. At the time of this report, April 2025, the <u>State of Alaska Department of Health website</u> is under construction. The CUBS webpage may be found on the site when construction is completed.

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