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Alaska Division of Public Health December 2011 February 2017 February 2017

SECTION I: PRACTICE OVERVIEW

Name of the Dental Public Health Activity: Alaska Childhood Understanding Behaviors Survey

Public Health Functions:

Assessment – Acquiring Data Assessment – Use of Data

Healthy People 2020 Objectives:

- OH-1 Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth
- OH-7 Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year

State: Alaska	Federal Region:	Key Words for Searches: PRAMS, data collection, use of data, children oral health, child behavior, prenatal, assessment, access
		to care

Abstract:

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, Section of Women's, Children's and Family Health, in 2006. After a pilot period in 2006 and 2007, CUBS has been ongoing since January 2008. 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. By using the methodology of re-interviewing mothers who completed a PRAMS survey, CUBS is also able to evaluate factors present at birth or early life that affect risk for later adverse childhood outcomes.

From its formation, CUBS has worked with numerous child health stakeholders, including the Alaska dental health officer, 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 and at what age the child first saw a dentist, and what types of dental care the child has received. Data on associated risk factors, such as consumption of soda, juice, and sweetened drinks, is also collected. By linking back to the PRAMS survey, data analyses can also examine associations between maternal dental health during the pre-pregnancy, prenatal, and postpartum periods and health outcomes for the child at age three.

The PRAMS survey uses a stratified randomized sample to select about 1/6 of all births in the state. All women who respond to PRAMS are sent a CUBS survey when their child is three years old. Surveys are conducted by mail and phone. Women are not eligible for follow-up if they have moved out of Alaska since the child's birth. In 2015, 721 women were eligible for CUBS and 472 responded (65%). Data are weighted by year of child's birth to represent all children born in Alaska in that year. Supplies, postage, incentive and reward gifts, and statistical weighting for CUBS come to about \$18,000 annually funded through the Maternal and Child Health Block Grant. This does not include staff time for 1.5 FTEs who support the program.

CUBS data are available for a variety of health-related measures among young children in Alaska. The Alaska Oral Health program is using CUBS data to track success in encouraging parents to take their child in for a dental visit before age one.

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SECTION II: PRACTICE DESCRIPTION

History of the Practice:

In Alaska, health-related data for mothers and infants are collected from the Pregnancy Risk Assessment Monitoring Survey (PRAMS). For older children and teenagers data are collected from the Youth Risk Behavior Survey and for adults data are collected from the Behavioral Risk Factor Surveillance System. However, very little is known about the health, behaviors and early childhood experiences of young children before they enter school. CUBS' purpose is to fill a gap in knowledge by collecting information related to behaviors, health, health care access, and school readiness among Alaska's 3-year-olds. CUBS operates as a follow-up survey to PRAMS. The CUBS program began with a 6-month pilot period in 2006, when follow-up was initially two years after the child was born. In January 2008, CUBS began ongoing surveillance as a 3-year follow-up survey. For the first few years surveys were conducted only by mail, however a phone interview component has been included since 2009 to combat declining mail response rates. In 2015, 71% of all responses were by mail and 29% were by phone.

Justification of the Practice:

Prior to CUBS, the Alaska oral health program had no annual statewide population-based data on the oral health of children. Unlike national surveys, such as the National Survey of Child Health, CUBS data can be analyzed by regions of the state as well as many other maternal and child characteristics.

Three other states, Oklahoma, Rhode Island, and Oregon, currently conduct similar ongoing PRAMS follow-up surveys. These states were consulted to hear their lessons learned prior to initiating CUBS in Alaska. Oklahoma began their follow-up survey in December 1994, Rhode Island began in January 2005, and Oregon in September 2005. The usefulness of the Rhode Island PRAMS follow-up survey was described in an article in the April 2011 issue of Maternal Child Health Journal titled "New Options of Child Health Surveillance by State Health Departments."

Inputs, Activities, Outputs and Outcomes of the Practice:

Names and contact information for women who respond to the PRAMS survey are electronically imported into the CUBS MS Access-based operations database after the PRAMS program closes out a year of data collection. Respondents who had out-of-state addresses at the time they completed PRAMS are left in the system, but are flagged so their addresses can be checked again before CUBS mail-outs start. Active surveillance with CUBS begins three years after the mother was initially sampled for PRAMS.

The following process is repeated at the beginning of every month. The CUBS monthly batch is drawn for all PRAMS respondents whose child was born in the prior calendar month of the surveillance year (i.e., January 2014 births are pulled into CUBS in February 2017). A personalized pre-letter is sent to all participants to introduce CUBS and let her know that she will soon receive a survey packet in the mail. One week later, the initial mail questionnaire packet is sent to all participants. This packet includes a personalized letter, a survey, a CUBS fact sheet and an informed consent sheet, a health resources list, a postage paid self-addressed return envelope, and a tape measure for measuring her child. The second mail questionnaire packet is sent to all mothers who did not respond after two more weeks. The second packet is the same as the first questionnaire packet. If the mother has not responded after two more weeks, a phone interview is attempted. Up to five calls are made per phone number that the CUBS program is able to find for the mother. All women who respond to CUBS

are offered a choice of either a \$10 gift card to one of four stores (Fred Meyer, Carrs/Safeway, Walmart, or the AC Store) or a set of four small children's books.

Mailings may be returned by the postal service if mothers have moved and left no forwarding address, the address does not exist, or the address contains insufficient information. Names and addresses on returned pieces of mail are researched to determine an alternate mailing address. Some approaches for identifying the correct address (and for finding phone numbers for phone interviews) include:

- Alternate contact information from contact cards returned with PRAMS survey.
- Searching health department maintained databases, such as the Medicaid eligibility database, WIC, and the Alaska Permanent Fund Dividend.
- Requesting "Address Correction Requested" service from the postal service.
- Searching reverse directories to identify the names of residents listed for the address given for the mother.
- The Internet.
- Social media sites.

In the event that the mother cannot be reached following all reasonable attempts, further efforts of communication are broken and her non-response is assumed to be a random occurrence.

The Alaska Department of Health and Social Services, Section of Women's, Children's, and Family Health administers the survey and conducts analyses of the findings. A steering committee composed of community and other stakeholders (pediatricians, dentists, nurses, epidemiologists, representatives of Alaska Native communities) provide advisory support.

CUBS staff includes one 0.25 FTE Program Coordinator, a 0.5 FTE Survey Operations Manager, and a 0.75 FTE Data Manager. The Data Manager conducts all daily operations of the program, including processing mail-outs, receiving returned surveys and undelivered mail, data entry of returned surveys, and conducting phone interviews. The Program Coordinator conducts most of the data analyses, and the Survey Operations Manager provides oversight and training, including of the phone interview contractors, and assists with data analyses.

CUBS publishes annual data sheets, including one on Oral Health (found here:

http://dhss.alaska.gov/dph/wcfh/Pages/mchepi/cubs/data/). Data analyses are included in State Health Department publications such as the Alaska Maternal and Child Health Data Book 2014: Life Course Edition (found here:http://dhss.alaska.gov/dph/wcfh/Pages/mchepi/mchdatabook/2014.aspx) and in peer-reviewed journals. Queryable CUBS data for 2012-2014 are available through the online Alaska Indicator Based Information System (IBIS), located here:

<u>http://ibis.dhss.alaska.gov/query/selection/cubs23/CUBSSelection.html</u>. CUBS data are also presented around the state and at statewide and national conferences, and are shared upon request.

Budget Estimates and Formulas of the Practice:

The Maternal and Child Health Block Grant provides funding for supplies, postage, gifts for respondents, and statistical weighting for CUBS; in this 2016 totaled approximately \$18,000. This does not include staff time for 1.5 FTEs on the program. In 2015, 721 women were eligible for CUBS and 472 responded. Costs are therefore about \$25 per eligible woman or \$38 per response.

Lessons Learned and/or Plans for Improvement:

Available Information Resources:

Link to CUBS survey

SECTION III: PRACTICE EVALUATION INFORMATION

Impact/Effectiveness

How has the practice demonstrated impact, applicability, and benefits to the oral health care and well-being of certain populations or communities (i.e., reference scientific evidence, outcomes of the practice and/or evaluation results)?

The Alaska Oral Health program has used CUBS data since 2008 for reporting with the HRSA TOHSS grant and also for the Maternal and Child Health Block Grant reports. Data have also been used in grant applications to show gaps and needs. Two questions from CUBS (tooth decay and child height and weight) were selected as State Performance Measures for the Alaska Title V Block Grant.

Efficiency

How has the practice demonstrated cost and resource efficiency where expenses are appropriate to benefits? How has the practice demonstrated realistic and reasonable staffing and time requirements? Provide unit cost analysis or cost-benefit analysis if appropriate.

By including oral health questions in a survey about multiple health behaviors, the unit cost of the oral health data is decreased. It would not be cost efficient to gather these data in a survey only about oral health. The time required to follow strict protocols that were established to maintain data quality is extensive. Because addresses are old, the most time consuming aspect of CUBS is tracking down women who addresses have changed since they responded to PRAMS. Additionally, the need to add the phone interview component due to decreasing mail response rates has increased the burden on staff time as each full interview takes about 25 minutes to complete, and additional time to track down and reach the correct sampled mother.

Demonstrated Sustainability

How has the practice showed sustainable benefits and/or how has the practice been sustainable within populations/communities and between states/territories? What mechanisms have been built into the practice to assure sustainability?

Collaboration/Integration

How has the practice built effective partnerships/collaborations among various organizations and integrated oral health with other health projects and issues? What are the traditional, non-traditional, public and private partnerships/collaborations established by the practice for integration, effectiveness, efficiency and sustainability?

Objectives/Rationale

How has the practice addressed HP 2020 objectives, met the National Call to Action to Promote Oral Health, and/or built basic infrastructure and capacity for state/territorial/community oral health programs?

Extent of Use Among States

Describe the extent of the practice or aspects of the practice used in other states?

Three other states, Oklahoma, Rhode Island, and Oregon, currently conduct similar ongoing PRAMS follow-up surveys. These states were consulted to hear their lessons learned prior to initiating CUBS in Alaska, and to review potential questions. Oklahoma began their follow-up survey in December 1994, Rhode Island began in January 2005, and Oregon in September 2005.