



Colorado Head Start Oral Health Screening

2013-2014

Objective: To assess the prevalence of caries experience, untreated decay, treatment urgency, and dental home among children in Head Start in Colorado.

Methods: The Colorado Department of Public Health and Environment conducted a statewide oral health screening of children in Head Start in 2013-2014. A total of ten Head Start Centers were selected for the sample, and nine centers agreed to participate.

Active consent forms were used to obtain guardian consent to participate in screenings resulting in a response rate of 53.2 percent. Dental hygienists participated in calibration trainings and screened 739 children enrolled in the participating Head Start centers. The results were statistically weighted to be representative of children in Head Start in Colorado.

Results:

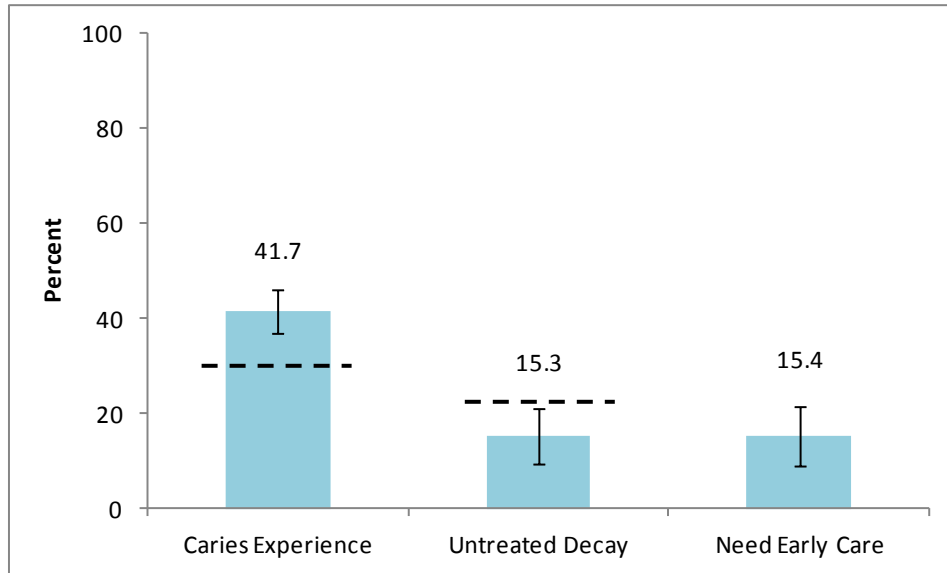
Participants

The children screened ranged in age from 3 to 5 years and the mean age was 3.9 years. Just over half of the children screened were female (52.8 percent) while 47.2 percent were male. The majority of children screened were Hispanic (71.0 percent), 18.8 percent were White, and 9.8 percent were Other (Black, Asian, American Indian/Alaska Native, multi-racial, or other), and 0.5 percent were of unknown race (Table 1).

Oral Health

- 41.7 percent of children enrolled in Head Start had caries experience (defined as decayed, missing, and filled teeth) (Figure 1)
- 15.3 percent of children enrolled in Head Start had untreated decay (defined as cavitated lesions) (Figure 1)
- 15.4 percent of children enrolled in Head Start needed early dental care (defined as untreated decay or broken restorations) (Figure 1)
- 92.1 percent of children enrolled in Head Start had a self-reported dental home (defined as an ongoing source of continuous, accessible dental care provided by a dentist)

Figure 1. Prevalence of caries experience, untreated decay, and treatment urgency (those needing early care) among children in Head Start, Colorado Head Start Oral Health Screening, 2013-2014



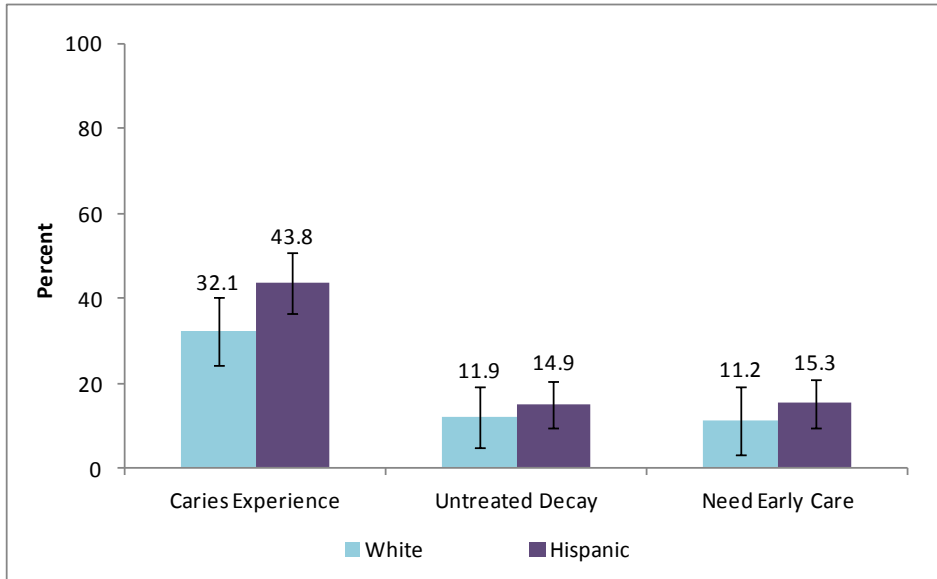
---- HP2020 Targets. No target exists for treatment urgency.

Healthy People 2020 Targets

- Reduce the proportion of children ages 3 - 5 years who have dental caries experience in their primary teeth to 30.0 percent
- Reduce the proportion of children ages 3 - 5 years who have untreated decay in their primary teeth to 21.4 percent

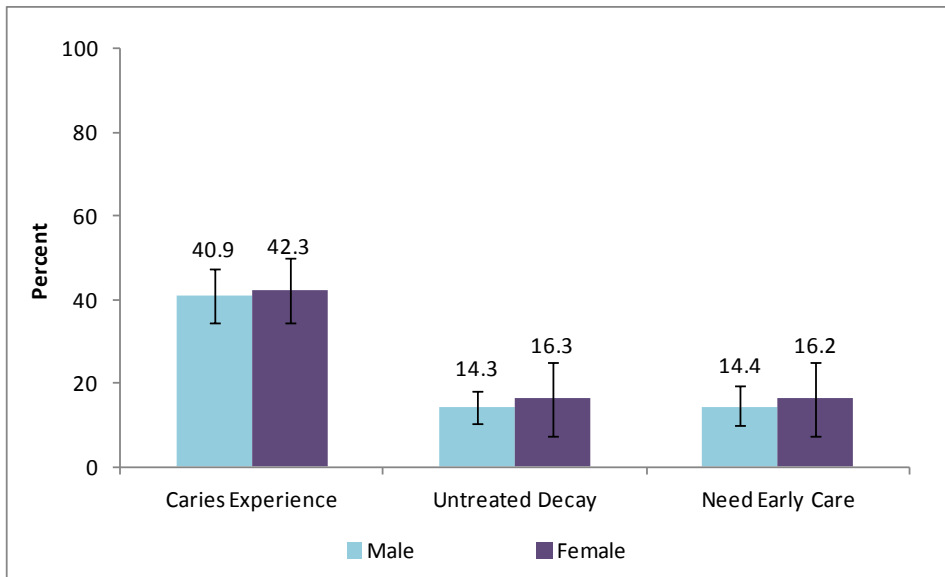
There were no significant differences in caries experience, untreated decay, or treatment urgency between White and Hispanic children (Figure 2). The prevalence of dental home did not differ between White (86.1 percent) and Hispanic (95.8 percent) children.

Figure 2. Prevalence of caries experience, untreated decay, and treatment urgency (those needing early care) among children in Head Start by race/ethnicity, Colorado Head Start Oral Health Screening, 2013-2014



There were no significant differences in caries experience, untreated decay, or treatment urgency between males and females (Figure 3). The prevalence of dental home did not differ between males (91.1 percent) and females (93.0 percent).

Figure 3. Prevalence of caries experience, untreated decay, and treatment urgency (those needing early care) among children in Head Start by sex, Colorado Head Start Oral Health Screening, 2013-2014



Conclusions:

- This is the first population-based screening of the Head Start population in Colorado and these results are considered baseline. Please note, the 2005 and 2012 oral health in Colorado burden reports include data on dental services among children enrolled in Head Start from the Head Start Program Information Report (PIR). The PIR does not collect information on caries experience, untreated decay, or care urgency. The 2005 burden report includes screening results from a convenience sample of the Head Start population, but these results are not comparable to the results of the 2013-2014 Head Start Oral Health Screening due to methodological differences.
- Colorado does not meet the Healthy People 2020 goal of 30.0 percent for caries experience in children ages 3-5 years.
- Colorado does meet the Healthy People 2020 goal of 21.4 percent for untreated decay in children ages 3-5 years.
- Although demographics such as sex, age, and race/ethnicity were collected for each child screened, there were no significant differences between groups for any of the oral health indicators.
- Although the screening results are not directly comparable, results from the Head Start screening should be considered along with results from the elementary school screening¹. The prevalence of caries experience and untreated decay among children in Head Start are similar compared to children in kindergarten. The prevalence of needing early care among children in Head Start might be slightly higher than the prevalence among children in kindergarten.
- Colorado will continue to assess the oral health of children in Head Start every four years in order to assess trends in these indicators over time.

Data to Action:

These data are important as they estimate the extent of oral health needs in young, low income children. Survey results will aid in the development of programs and interventions to prevent oral disease so that growth, development, and overall quality of life in Colorado's children are enhanced.

¹ The Basic Screening Survey: Children's Oral Health Screening Colorado, 2011-2012. Oral Health Unit. Colorado Department of Public Health and Environment.

Data Tables:

Table 1: Demographic characteristics and oral health screening results among children in Head Start (n=739) – Colorado Head Start Oral Health Screening, 2013-2014

	Unweighted Number with Data	Weighted Estimate	95% Confidence Interval
Age (years)			
Mean age	729	3.9 (SE 0.06)	
Age range		3-5	
Sex			
% Male	360	47.2	37.9-56.6
% Female	370	52.8	43.4-62.1
Race/Ethnicity			
% White	163	18.8	7.1-30.4
% Hispanic/Latino	475	71.0	54.0-88.0
% Other	91	9.8	2.9-16.6
% Unknown	2	0.5	0.0-1.4
Caries Experience			
% With caries experience	303	41.7	37.0-46.3
% Caries free	436	58.3	53.7-63.0
Untreated Decay			
% With untreated decay	88	15.3	9.4-21.3
% Without untreated decay	651	84.7	78.7-90.6
Treatment Urgency			
% With no obvious problem	648	84.2	78.4-90.1
% Need early care	85	15.4	9.2-21.6
% Need urgent care	6	DS	DS

Dental Home			
% With a dental home	629	92.1*	82.6-100.0
% Without a dental home	98	7.9*	0.0-17.4

SE: standard error; DS: data suppressed

Dental home: an ongoing source of continuous, accessible dental care provided by a dentist

*Based on relative standard error, estimate might be unreliable, so interpret with caution (see note on page 7).

Table 2. Oral health screening results among children in Head Start by race/ethnicity – Colorado Head Start Oral Health Screening, 2013-2014

	Race/Ethnicity		
	White (n=163)	Hispanic (n=475)	Other (n=91)
Caries experience (%)	32.1	43.8	45.1
(95% CI)	(24.1-40.2)	(36.7-50.9)	(23.7-66.6)
Untreated decay (%)	11.9	14.9	18.9*
(95% CI)	(4.9-19.0)	(9.5-20.3)	(2.4-35.4)
Treatment Urgency			
No obvious problem (%)	88.1	84.4	81.7*
(95% CI)	(81.0-95.2)	(79.0-89.8)	(64.9-98.5)
Need early care (%)	11.2*	15.3	18.3*
(95% CI)	(3.2-19.3)	(9.7-20.8)	(1.5-35.1)
Need urgent care (%)	DS	DS	0.0
(95% CI)			
Dental Home (%)	86.1*	95.8*	75.2*
(95% CI)	(68.7-100.0)	(91.1-100.0)	(48.7-100.0)

DS: data suppressed

*Based on relative standard error, estimate might be unreliable, interpret with caution (see note on page 7).

Table 3. Oral health screening results among children in Head Start by sex – Colorado Head Start Oral Health Screening, 2013-2014

	Sex	
	Male (n=365)	Female (n=371)
Caries experience (%) (95% CI)	40.9 (34.3-47.5)	42.3 (34.4-50.1)
Untreated decay (%) (95% CI)	14.3 (10.3-18.2)	16.3 (7.5-25.1)
Treatment urgency		
No obvious problem (%) (95% CI)	85.2 (80.9-89.4)	83.4 (74.9-92.0)
Need early care (%) (95% CI)	14.4 (9.7-19.2)	16.2 (7.4-25.1)
Need urgent care (%) (95% CI)	DS	DS
Dental Home (%) (95% CI)	91.1* (80.0-100.0)	93.0* (84.2-100.0)

DS: data suppressed

NOTE: Data are suppressed (DS) if the relative standard error (RSE) is greater than 50 percent. If the RSE is greater than 30 percent but less than or equal to 50 percent, the estimate is reported with a warning to interpret with caution because it does not meet standards for reliability.ⁱ

ⁱ Report of Guidelines for Data Result Suppression. Data Suppression Decision Rules Work Group. Utah Department of Health. October 5, 2009. <http://health.utah.gov/oph/IBIShelp/DataSuppression.pdf>. Accessed August 2014.