Sealant Survey Report: FY01 Iowa Department of Public Health Dental Health Bureau

In the spring of 1999, the Iowa Department of Public Health (IDPH) implemented a plan to conduct surveys designed to determine the prevalence of dental sealants in third grade children in Iowa. The surveys have been carried out for three years. The results from these three surveys provide baseline information about sealant prevalence in Iowa. The following describes the process for conducting the 2001 survey and the results.

Subjects

Based on information from the Iowa Department of Education, the number of third graders in Iowa public schools for school year 2000-2001 was 35,818. A computerized random sample of 1,773 third grade children was selected, based upon the location of 26 Title V child health centers in Iowa.

Examiners and support staff

The survey was conducted in collaboration with the state's Title V child health centers, each of which contracted with a dental hygienist to carry out the survey in each area. Screening protocol was given to each hygienist. The school superintendents and principals were informed, and consent forms were provided to each school to be completed prior to the date of the survey.

Materials and methods

The screenings were visual only. Mouth mirrors and dental explorers were not used, with the exception of Kalona Elementary and East and North Elementary (Storm Lake). The survey used data from these three schools that was collected through school-based sealant programs in those schools. Toothbrushes were provided to all participating children. The brushes could be used to deflect tongue and cheeks and also to cleanse the teeth if necessary. Hygienists also had the option of using a toothpick to feel the occlusal surfaces of the molars.

Data information

The screenings determined the number of children with at least one permanent first molar with a sealant. In addition, the consent forms collected information on payment source of dental care, participation in the free and reduced lunch program, whether each child had a dentist, and recency of last dental visit. All consent forms were returned to IDPH. Data was entered and

analyzed by the use of SPSS. Data collected is confidential. Any report or publication of this information requires permission from the Dental Health Bureau of the IDPH.

Results

Fifty-five percent of the eligible students were screened (975 of 1,773). Of those surveyed, 41.4 percent had at least one sealant on a first permanent molar. Twenty-six percent of the students participated in the free and reduced lunch program. Fifty-four percent had private dental insurance, 34 percent paid for dental care out-of-pocket, and 12 percent had Medicaid or hawk-i as their insurance carrier.

Discussion

The number of children without dental insurance (34%) is a decrease from the previous two years (37 % in 1999 and 41% in 2000). In other words, more children are enrolled with an insurance plan, either through a private insurer or Medicaid and hawk-i.

The overall rate of third graders who had not seen a dentist for three or more years is at 13 percent. This number is almost doubled when looking at children enrolled in Medicaid or hawk-i (24%). Fewer Medicaid-enrolled children have a dentist. The sealant rates for Medicaid-enrolled and children without dental insurance is also lower, at 38.8 percent and 34.6 percent respectively, compared to 46.7 percent for children with private dental insurance.

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	OVERALL TOTAL	Children on F/R Lunch	not on K/R		No dental insurance	Medicaid or hawk -i	Private dental insurance				
Sealant Rate	41.4%	36.2%	44.2%		34.6%	38.8%	46.7%				
Children with a dentist	90.5%	77.7%	94.1%		85.3%	80.4%	97.0%				
Time since last dental visit											
6 months	64.9%	50.2%	72.5%		55.1%	50.0%	77.3%				
1 year	21.8%	23.4%	19.9%		28.3%	25.5%	17.1%				
3 years	9.5%	19.0%	5.3%		13.0%	20.4%	4.9%				
5 years	1.2%	2.0%	0.9%		2.4%	2.0%	0.2%				
Never	2.6%	5.4%	1.4%		1.2%	2.0%	0.5%				
Free / Reduc	Dental Insurance Coverage										
Yes	No	Private Insurance		Medicaid / hawk-i		No Insurance					
26%	74%	52%		12%			34%				

Survey Summary

Seal Survey						Students	Surveyed	Sealants	Percent
COUNTY	#	AGENCY	DISTRICT	SCHOOL	PHONE		•		
Jefferson	51	1	FAIRFIELD	PENCE		46	39	19	48.7%
Bremer	9	2	SUMNER	DURANT	319/578-5400	57	29	10	34.5%
Clinton	23	26	CAMANCHE	CAMANCHE	319/259-3016	61	32	7	21.9%
Cedar	16	3	NORTH CEDAR	NORTH CEDAR	319/432-6933	43	38	11	28.9%
Marion	63	4	PELLA	JEFFERSON	515/628-8267	65	37	19	51.4%
Muscatine	70	20	MUSCATINE	MADISON	319/263-6062	31	18	11	61.1%
Calhoun	13	5	SOUTHERN CAL	LINCOLN	712/464-3091	45	37	15	40.5%
Cass	15	6	ATLANTIC	WASHINGTON		116	58	26	44.8%
Harrison	43	6	WOODBINE	WOODBINE	712/647-2440	44	33	20	60.6%
Lee	56	12	KEOKUK	WELLS-CAREY	319/524-2581	43	18	5	27.8%
Jasper	50	9	NEWTON	WOODROW WILSON	515/792-7311	50	24	17	70.8%
Linn	57	10	CEDAR RAPIDS	POLK	319/398-2475	40	5	2	40.0%
Linn	57	10	CEDAR RAPIDS	JACKSON	319/398-2471	84	23	15	65.2%
Johnson	52	11	IOWA CITY	KIRKWOOD	319/339-6841	58	27	15	55.6%
Johnson	52	11	IOWA CITY	GRANT WOOD	319/339-6869	67	34	19	55.9%
Marshall	64	14	MARSHALLTOWN	FISHER	515/754-1030	63	48	13	27.1%
Scott	82	17	DAVENPORT	BUCHANAN	319/391-1463	41	18	6	33.3%
Madison	61	13	EARLHAM	EARLHAM	515/758-2213	42	22	9	40.9%
Story	85	14	AMES	EDWARDS	515/239-3760	35	14	3	21.4%
Sioux	84	15	ROCK VALLEY	ROCK VALLEY	712/476-2769	42	35	22	62.9%
Mitchell	66	16	ST ANSGAR	ST ANSGAR	515/736-2331	60	42	17	40.5%
Woodbury	97	18	RIVER VALLEY	RIVER VALLEY	712/384-2568	37	13	2	15.4%
Page	73	19	SOUTH PAGE	SOUTH PAGE	712/582-3212	28	16	5	31.3%
Buena Vista	11	21	STORM LAKE	EAST & NORTH	712/732-8076	49	23	4	17.4%
Dubuque	31	8	DUBUQUE	EISENHOWER		86	52	25	48.1%
Clayton	22	8	CENTRAL	ELKADER	319/245-1472	52	47	17	36.2%
Pottawattamie	78	22	TREYNOR	TREYNOR	712/487-3422	39	29	13	44.8%
Polk	77	23	DES MOINES	JEFFERSON, WOODLAWN	515/279-9744	172	66	30	45.5%
Henry	44	24	NEW LONDON	CLARK	319/367-0507	40	35	6	17.1%
Washington	92	24	MID-PRAIRIE	KALONA	319/656-2243	46	27	6	22.2%
Hamilton	40	26	HUMBOLDT	TAFT		92	60	18	30.0%
TOTAL	.1 * . 11	1 1	11		1	1174	999	407	40.7%

**The results on this table do not take all consent form information into account and are based strictly on the raw count provided by the survey examiners. See the written report for the actual statistical data.