# THE DENTAL COMPLIANCE AND DENTAL HEALTH STATUS OF ILLINOIS SCHOOL-AGE CHILDREN IN KINDERGARTEN, SECOND, AND SIXTH GRADES FOR THE 2009-2010 SCHOOL YEAR

# ILLINOIS STATE BOARD OF EDUCATION DIVISION OF DATA ANALYSIS AND PROGRESS REPORTING

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#### **Foreword**

Dental data are collected annually from Illinois public and nonpublic schools as required by Section 27-8.1 of the <u>Illinois School Code</u> (105 ILCS 5/27-8.1). This report is a compilation of the 2009-2010 data on the dental health of Illinois school-age children in kindergarten and second and sixth grades, with the exception of City of Chicago School District 299. The interpretations and conclusions expressed herein were based on the available data and do not necessarily reflect the official position or policy of the Illinois State Board of Education. Inquiries regarding this report should be directed to Mr. Md. Shafiqul Azam in the ISBE Division of Data Analysis and Progress Reporting at 217/782-3950 or <u>mazam@isbe.net</u>.

# **Background**

As mandated by Section 27-8.1 of the <u>Illinois School Code</u> (105 ILCS 5/27-8.1), all children in kindergarten and second and sixth grades are to have dental examinations by May 15 of each year to be in compliance with the rules adopted by the Illinois Department of Public Health. In addition, the <u>Illinois School Code</u> requires all public school districts and nonpublic schools to submit completed surveys to the Illinois State Board of Education that summarize the dental compliance status of all children in kindergarten and second and sixth grades by June 30 of each year. This report provides a summary of the data collected.

### **Major Findings**

The 2009-2010 dental examination status data reported for Illinois school-age children in kindergarten and second and sixth grades (excluding City of Chicago School District 299) indicates the following:

- The compliance level of all students in all reported schools was 80.20 percent.
- The compliance level of public school students in all reported schools was 78.40 percent.
- The compliance level of nonpublic school students in all reported schools was 93.00 percent.
- A statewide total of 81,617 reported students (19.80 percent) of the total reported students (412,178) were in noncompliance with the dental examination mandates on May 15, 2010.
- The compliance level of all reported students in kindergarten was 86.82 percent. Compliance rates for public and nonpublic schools were 85.58 percent and 94.57 percent, respectively.
- The compliance level of all reported students in second grade was 77.71 percent. Compliance rates for public and nonpublic schools were 75.74 percent and 92.38 percent, respectively.
- The compliance level of all reported students in sixth grade was 76.12 percent.
   Compliance rates for public and nonpublic schools were 74.11 percent and 91.78 percent, respectively.
- Compliance levels obtained for nonpublic schools were much higher than those for public schools, by overall measure as well as by grade levels.

#### **Limitations**

The following should be considered when interpreting the results provided in this report:

- Dental data obtained from public schools do not include dental data from City of Chicago School District 299, the largest public school district in Illinois.
- Dental data were submitted by 2,428 public schools and 879 nonpublic schools.
- Public school dental data represent 760 public school districts (excluding City of Chicago School District 299) that serve any combination of kindergarten and second and sixth grades.
- In some instances, the total percentage may not add up to 100 due to rounding errors.

#### **Procedures**

Data collection instruments and procedures used to collect dental data were developed by Illinois State Board of Education staff, in consultation with Illinois Department of Public Health staff. Data have been collected via a Web-based online survey since the 2005-2006 school year. Only students entering kindergarten and second and sixth grades are required to have a dental examination.

School administrators are required to provide information on the number of children who have received the required dental examination, the number of children who have not received the required dental examination, the number of children who are exempt from the dental examination on religious grounds, the number of children who have received a waiver or exemption, and the number of children with scheduled appointments. Beginning with the 2006-2007 school year, additional data elements, such as counts on dental sealants, caries/restoration history, and untreated caries, were included in the data collection. The online dental survey must be completed no sooner than May 16 and no later than June 30 of each year.

#### **Results**

#### **Compliance Data**

Compliance for students (only those in kindergarten and second and sixth grades) were calculated based upon the information provided by Illinois school officials. Data reported by school officials show overall compliance with the requirements of the dental examination mandate. Second and sixth grade students in noncompliance may have their report cards withheld by school authorities.

Students were identified as being in compliance with state law if they presented proof of having a dental examination, had religious exemptions, had received a waiver for the dental examination due to undue burden or lack of access to a dentist, or if they were on an approved schedule for a dental examination.

#### **Statewide Compliance**

Table 1 shows the 2009-2010 compliance levels for all reported Illinois school-age children in kindergarten and second and sixth grades. The compliance level for the total 412,178 reported public and nonpublic children in Illinois was 80.20 percent. The data show 81,617 children (19.80 percent) in noncompliance because they did not have a completed dental examination or did not receive a waiver or exemption.

#### **Public District Compliance**

For Illinois public school districts, the compliance level for the total 361,337 reported children was 78.40 percent. (See Table 1.)

#### **Nonpublic School Compliance**

Of the 879 nonpublic schools that submitted dental data, the compliance level was 93.00 percent, which is significantly higher than that for public schools. (See Table 1.)

Table 2 shows statewide dental examination status information, including the number of students who obtained waivers, scheduled dental appointments, or obtained exemptions. Statewide, 78.91 percent of students completed dental examinations; 1.29 percent complied by obtaining a waiver, religious exemption, or approved schedules for a dental appointment; and 19.80 percent were in noncompliance.

Table 3 shows public school dental examination status information, including the number of students who obtained waivers, scheduled dental appointments, or obtained exemptions. Within public school districts, 77.17 percent of students completed dental examinations; 1.23 percent complied by obtaining a waiver, religious exemption, or approved schedules for a dental appointment; and 21.60 percent were in noncompliance.

Table 4 shows nonpublic school dental examination status information, including the number of students who obtained waivers, scheduled a dental appointment, or obtained exemptions. Within nonpublic schools, 91.27 percent of students completed dental examinations; 1.73 percent complied by obtaining a waiver, religious exemption, or approved schedules for a dental appointment, and 7.00 percent were in noncompliance. Compliance rates for nonpublic schools were much higher than the compliance rates for public schools.

#### **Compliance by Grade Level**

Tables 5, 6, and 7 provide dental examination status for kindergarten and second and sixth grade students (statewide, public, and nonpublic facilities), respectively.

*Kindergarten*—When public and nonpublic schools are considered, 86.82 percent of students were found to be in compliance (including those with waivers, exemptions, or with approved schedules for dental examinations). The compliance rate for public schools was 85.58 percent and the compliance rate for nonpublic schools was 94.57 percent, which is higher than the public school compliance rate.

Second Grade—A compliance rate of 77.71 percent was observed with combined public and nonpublic school students. The public school compliance rate was 75.74 percent and the nonpublic school compliance rate was 92.38 percent, which is higher than the public school compliance rate.

Sixth Grade—Compliance rates were 76.12 percent, 74.11 percent, and 91.78 percent for all schools, public schools, and nonpublic schools, respectively. There is a wide gap in compliance levels between public and nonpublic schools.

A close look at Tables 5, 6, and 7 reveals that the compliance rate gradually decreases with the increase in grade levels for public and nonpublic schools. While this decline is insignificant for nonpublic schools, it is pronounced for public schools.

#### **Dental Health Status of Students with Complete Dental Examination**

Table 8 provides dental health status (the number of students with or without dental sealants, the number of children with or without caries experience, the number of students with or without untreated caries, and the number of students who need urgent dental treatment) for statewide, public, and nonpublic facilities, respectively. A review of Table 8 indicates that among all examined public and nonpublic school students in kindergarten and second and sixth grades, 32.70 percent had dental sealants, 31.45 percent had caries/restoration history, 19.16 percent had untreated caries, and 1.64 percent needed urgent treatment. The corresponding figures for students from public educational entities were 33.33 percent, 32.34 percent, 20.37 percent, and 1.82 percent, respectively. For nonpublic students the corresponding figures were 28.95 percent, 26.07 percent, 11.86 percent, and 0.51 percent, respectively. Statistics indicate that, in general, nonpublic school students had better dental health indices.

Tables 9, 10, and 11 provide dental health status for students in kindergarten and second and sixth grades, respectively.

**Table 1. 2009-2010 Dental Compliance Summary of Reported Educational Facilities** 

	Public Sc	Public Schools Nonpublic Schools			All Schools		
Compliance Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent	
Students in compliance	283,277	78.40	47,284	93.00	330,561	80.20	
Students not in compliance	78,060	21.60	3,557	7.00	81,617	19.80	
All students	361,337	100.00	50,841	100.00	412,178	100.00	

Table 2. 2009-2010 Dental Examination Status for All Reported Illinois Public and Nonpublic School Students

Compliance Status	Number of Students	Percent
In compliance with complete dental examination	325,249	78.91
Approved appointment scheduled	2,213	0.54
Religious exemption	64	0.02
Unable to complete a dental examination due to a medical reason	16	0.00
Unable to complete a dental examination due to disability	48	0.01
Waiver: Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	909	0.22
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	286	0.07
Enrolled in Medicaid/All Kids but unable to locate a dentist or dental clinic in the community able to see the child and who will accept Medicaid/All Kids	1,006	0.24
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	770	0.19
Students not in compliance	81,617	19.80
Total	412,178	100.00

Table 3. 2009-2010 Dental Examination Status for All Reported Illinois Public School Students

Compliance Status	Number of Students	Percent
In compliance with complete dental examination	278,847	77.17
Approved appointment scheduled	1,636	0.45
Religious exemption	42	0.01
Unable to complete a dental examination due to a medical reason	13	0.00
Unable to complete a dental examination due to disability	44	0.01
Waiver: Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	804	0.22
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	258	0.07
Enrolled in Medicaid/All Kids but unable to locate a dentist or dental clinic in the community able to see the child and who will accept Medicaid/All Kids	959	0.27
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	674	0.19
Students not in compliance	78,060	21.60
Total	361,337	100.00

Table 4. 2009-2010 Dental Examination Status for All Reported Illinois Nonpublic School Students

Compliance Status	Number of Students	Percent
In compliance with complete dental examination	46,402	91.27
Approved appointment scheduled	577	1.13
Religious exemption	22	0.04
Unable to complete a dental examination due to a medical reason	3	0.01
Unable to complete a dental examination due to disability	4	0.01
Waiver: Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	105	0.21
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	28	0.06
Enrolled in Medicaid/All Kids but unable to locate a dentist or dental clinic in the community able to see the child and who will accept Medicaid/All Kids	47	0.09
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	96	0.19
Students not in compliance	3,557	7.00
Total	50,841	100.00

Table 5. 2009-2010 Dental Examination Status of Kindergarten Students in All Reported Public and Nonpublic Educational Facilities

	Public Schools		Nonpublic	c Schools	All Schools	
Compliance Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	99,551	84.40	17,558	93.08	117,109	85.59
Approved appointment scheduled	428	0.36	165	0.87	593	0.43
Religious exemption	15	0.01	9	0.05	24	0.43
Unable to complete a dental examination due to a medical reason	6	0.01	1	0.01	7	0.01
Unable to complete a dental examination due to disability	17	0.01	1	0.01	18	0.01
Waiver:						
Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	281	0.24	43	0.23	324	0.24
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	60	0.05	10	0.05	70	0.05
Enrolled in Medicaid/All Kids but unable to find a dentist or dental clinic in the community able to see the child and who will accept Medicaid/All Kids	361	0.31	16	0.08	377	0.28
Does not have any type of dental insurance and there are no low-cost dental clinics in the						
community that will see the child	231	0.20	35	0.19	266	0.19
Students not in compliance	17,007	14.42	1,025	5.43	18,032	13.18
Total	117,957	100.00	18,863	100.00	136,820	100.00

Table 6. 2009-2010 Dental Examination Status of Second Grade Students in All Reported Public and Nonpublic Educational Facilities

	Public Schools		Nonpublic	All Schools		
Compliance Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	89,436	74.51	14,599	90.49	104,035	76.41
Approved appointment scheduled	633	0.53	209	1.30	842	0.62
Religious exemption	9	0.01	7	0.04	16	0.01
Unable to complete a dental examination due to a medical reason	5	0.00	1	0.01	6	0.00
Unable to complete a dental examination due to disability Waiver:	14	0.01	2	0.01	16	0.01
Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	211	0.18	29	0.18	240	0.18
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	93	0.08	9	0.06	102	0.07
Enrolled in Medicaid/All Kids but unable to locate a dentist or dental clinic in the community able to see the child and who will accept Medicaid/All Kids	298	0.25	15	0.09	313	0.23
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	209	0.17	33	0.20	242	0.18
Students not in compliance	29,120	24.26	1,229	7.62	30,349	22.29
Total	120,028	100.00	16,133	100.00	136,161	100.00

Table 7. 2009-2010 Dental Examination Status of Sixth Grade Students in All Reported Public and Nonpublic Educational Facilities

	Public Schools		Schools Nonpublic Schools		Public Schools Nonpublic Schools All Schools		ools
Compliance Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent	
In compliance with complete dental examination	89,860	72.85	14,245	89.90	104,105	74.79	
Approved appointment scheduled	575	0.47	203	1.28	778	0.56	
Religious exemption	18	0.01	6	0.04	24	0.02	
Unable to complete a dental examination due to a medical reason	2	0.00	1	0.01	3	0.00	
Unable to complete a dental examination due to disability Waiver:	13	0.01	1	0.01	14	0.01	
Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	312	0.25	33	0.21	345	0.25	
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	105	0.09	9	0.06	114	0.08	
Enrolled in Medicaid/All Kids but unable to locate a dentist or dental clinic in the community able to see the child and who will accept Medicaid/All Kids	300	0.24	16	0.10	316	0.23	
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	234	0.19	28	0.18	262	0.19	
Students not in compliance	31,933	25.89	1,303	8.22	33,236	23.88	
Total	123,352	100.00	15,845	100.00	139,197	100.00	

Table 8. 2009-2010 Dental Health Status of All Students in All Reported Public and Nonpublic Educational Facilities

	Public Schools		Nonpublic	Schools	All Schools		
Dental Health Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent	
In compliance with complete dental examination	278,847	_	46,402	_	325,249	_	
Dental sealants: with	92,937	33.33	13,433	28.95	106,370	32.70	
Dental sealants: without	179,976	64.54	30,394	65.50	210,370	64.68	
Dental sealants: unknown	5,934	2.13	2,575	5.55	8,509	2.62	
Caries experience/restoration history: with	90,193	32.34	12,095	26.07	102,288	31.45	
Caries experience/restoration history: without	182,290	65.37	31,601	68.10	213,891	65.76	
Caries experience/restoration history: unknown	6,364	2.28	2,706	5.83	9,070	2.79	
Untreated caries: with	56,806	20.37	5,505	11.86	62,311	19.16	
Untreated caries: without	214,520	76.93	37,895	81.67	252,415	77.61	
Untreated caries: unknown	7,521	2.70	3,002	6.47	10,523	3.24	
Needing urgent treatment	5,084	1.82	236	0.51	5,320	1.64	

Table 9. 2009-2010 Dental Health Status of Kindergarten Students in All Reported Public and Nonpublic Educational Facilities

	Public Schools		Nonpublic Schools		All Schools	
Dental Health Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	99,551	_	17,558	_	117,109	_
Dental sealants: with	8,236	8.27	1,583	9.02	9,819	8.38
Dental sealants: without	89,090	89.49	15,083	85.90	104,173	88.95
Dental sealants: unknown	2,225	2.24	892	5.08	3,117	2.66
Caries experience/restoration history: with	22,470	22.57	3,069	17.48	25,539	21.81
Caries experience/restoration history: without	2,134	2.14	13,518	76.99	88,465	75.54
Caries experience/restoration history: unknown	74,947	75.29	971	5.53	3,105	2.65
Untreated caries: with	20,709	20.80	2,162	12.31	22,871	19.53
Untreated caries: without	76,440	76.78	14,269	81.27	90,709	77.46
Untreated caries: unknown	2,402	2.41	1,127	6.42	3,529	3.01
Needing urgent treatment	2,066	2.08	142	0.81	2,208	1.89

Table 10. 2009-2010 Dental Health Status of Second Grade Students in All Reported Public and Nonpublic Educational Facilities

	Public Schools		Nonpublic	Schools	All Schools		
Dental Health Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent	
In compliance with complete dental examination	89,436	_	14,599	_	104,035	_	
Dental sealants: with	34,232	38.28	4,529	31.02	38,761	37.26	
Dental sealants: without	53,650	59.99	9,275	63.53	62,925	60.48	
Dental sealants: unknown	1,554	1.74	795	5.45	2,349	2.26	
Caries experience/restoration history: with	32,277	36.09	4,138	28.34	36,415	35.00	
Caries experience/restoration history: without	55,436	61.98	9,658	66.16	65,094	62.57	
Caries experience/restoration history: unknown	1,723	1.93	803	5.50	2,526	2.43	
Untreated caries: with	20,467	22.88	1,902	13.03	22,369	21.50	
Untreated caries: without	66,875	74.77	11,787	80.74	78,662	75.61	
Untreated caries: unknown	2,094	2.34	910	6.23	3,004	2.89	
Needing urgent treatment	2,104	2.35	68	0.47	2,172	2.09	

Table 11. 2009-2010 Dental Health Status of Sixth Grade Students in All Reported Public and Nonpublic Educational Facilities

	<b>Public Schools</b>		Nonpublic Schools		All Schools	
Dental Health Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	89,860	_	14,245	_	104,105	_
Dental sealants: with	50,469	56.16	7,321	51.39	57,790	55.51
Dental sealants: without	37,236	41.44	6,036	42.37	3,043	2.92
Dental sealants: unknown	2,155	2.40	888	6.23	43,272	41.57
Caries experience/restoration history: with	35,446	39.45	4,888	34.31	40,334	38.74
Caries experience/restoration history: without	51,907	57.76	8,425	59.14	60,332	57.95
Caries experience/restoration history: unknown	2,507	2.79	932	6.54	3,439	3.30
Untreated caries: with	15,630	17.39	1,441	10.12	17,071	16.40
Untreated caries: without	71,205	79.24	11,839	83.11	83,044	79.77
Untreated caries: unknown	3,025	3.37	965	6.77	3,990	3.83
Needing urgent treatment	914	1.02	26	0.18	940	0.90