# THE DENTAL COMPLIANCE AND DENTAL HEALTH STATUS OF SCHOOL-AGE CHILDREN IN ILLINOIS KINDERGARTEN, SECOND, AND SIXTH GRADES FOR THE 2007-2008 SCHOOL YEAR

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

## SEPTEMBER 2008

JESSE H. RUIZ, CHAIRMAN ILLINOIS STATE BOARD OF EDUCATION CHRISTOPHER A. KOCH, ED.D. STATE SUPERINTENDENT OF EDUCATION

## **Table of Contents**

Foreword	i
Background	. ii
Major Findings	. 1
Limitations	. 2
Procedures	. 3
Results	.4
Compliance Data	.4
Statewide Compliance	.4
Public District Compliance	.4
Nonpublic School Compliance	.4
Compliance by Grade Level	. 5
Dental Health Status of Students with Complete Dental Examination	. 5

## **Table of Tables**

Table 1	2007-2008 Dental Compliance Summary of Reported Educational Facilities	6
Table 2	2007-2008 Dental Examination Status for All Reported Illinois Public and Nonpublic School Students	7
Table 3	2007-2008 Dental Examination Status for All Reported Illinois Public School Students	
Table 4	2007-2008 Dental Examination Status for All Reported Illinois Nonpublic School Students	9
Table 5	2007-2008 Dental Examination Status of Kindergarten Students in All Reported Public and Nonpublic Educational Facilities	10
Table 6	2007-2008 Dental Examination Status of Second Grade Students in All Reported Public and Nonpublic Educational Facilities	11
Table 7	2007-2008 Dental Examination Status of Sixth Grade Students in All Reported Public and Nonpublic Educational Facilities	12
Table 8	2007-2008 Dental Health Status of All Students in All Reported Public and Nonpublic Educational Facilities	13
Table 9	2007-2008 Dental Health Status of Kindergarten Students in All Reported Public and Nonpublic Educational Facilities	14
Table 10	2007-2008 Dental Health Status of Second Grade Students in All Reported Public and Nonpublic Educational Facilities	15
Table 11	2007-2008 Dental Health Status of Sixth Grade Students in All Reported Public and Nonpublic Educational Facilities	16

## 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 2007-2008 data on the dental health of Illinois school-age children in kindergarten, second, and sixth grades, with the exception of City of Chicago Public 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. Direct inquiries regarding this report to Mr. Md. Shafiqul Azam in the Division of Data Analysis and Progress Reporting, 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, 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, second, and sixth grades by June 30 of each year. This report provides a summary of the data collected.

## **Major Findings**

The 2007-2008 dental examination status data reported for Illinois school-age children in kindergarten, second, and sixth grades (excluding City of Chicago Public School District 299) indicates the following:

- The compliance level of all students in all reported schools was 78.20 percent.
- The compliance level of public school students in all reported schools was 76.14 percent.
- The compliance level of nonpublic school students in all reported schools was 91.93 percent.
- A statewide total of 90,561 reported students (21.80 percent) of the total reported students (415,324) were in noncompliance with the dental examination mandates on May 15, 2008.
- The compliance level of all reported students in kindergarten was 85.22 percent. Compliance rates for public and nonpublic schools were 83.89 percent and 93.08 percent, respectively.
- The compliance level of all reported students in second grade was 78.92 percent. Compliance rates for public and nonpublic schools were 77.01 percent and 92.13 percent, respectively.
- The compliance level of all reported students in sixth grade was 70.61 percent. Compliance rates for public and nonpublic schools were 67.92 percent and 90.36 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.
- Compliance levels decreased with increasing 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 Public School District 299, the largest public school district in Illinois.
- Dental data were submitted by 2,450 public schools and 874 nonpublic schools.
- Public school dental data represent 759 of the 768 active public school districts (excluding City of Chicago Public School District 299) that serve any combination of kindergarten, second, and sixth grades.
- In some instances, total percentage may not add up to 100 percent due to rounding.

## **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, second, and sixth grade 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 between May 16 and June 30 of each year.

## Results

#### **Compliance Data**

Compliance for students (only those in kindergarten, second, and sixth grade) 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 2007-2008 compliance levels for all reported Illinois school-age children in kindergarten, second, and sixth grades. The compliance level for the total 415,324 reported public and nonpublic children in Illinois was 78.20 percent. The data show 90,561 children (21.80 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 361,314 reported children was 76.14 percent (see Table 1).

#### **Nonpublic School Compliance**

Of the 874 nonpublic schools that submitted dental data, the compliance level was 91.93 percent (see Table 1), which is significantly higher than that for public schools.

Table 2 shows statewide dental examination status information, including the number of students who obtained waivers, scheduled dental appointments, or obtained exemptions. Statewide, 76.50 percent of students completed dental examinations; 1.70 percent complied by obtaining a waiver, religious exemption, or approved schedules for a dental appointment; and 21.80 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, 74.52 percent of students completed dental examinations; 1.62 percent complied by obtaining a waiver, religious exemption, or approved schedules for a dental appointment; and 23.86 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, 89.75 percent of students completed dental examinations; 2.18 percent complied by obtaining a waiver, religious exemption, or approved schedules for a dental appointment, and 8.07 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, second, and sixth grade students (statewide, public, and nonpublic facilities), respectively.

*Kindergarten*—When public and nonpublic schools are considered, 85.22 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 83.89 percent and the compliance rate for nonpublic schools was 93.08 percent, which is higher than the public school compliance rate.

*Second Grade*—A compliance rate of 78.92 percent was observed with combined public and nonpublic school students. The public school compliance rate was 77.01 percent and the nonpublic school compliance rate was 92.13 percent, which is higher than the public school compliance rate.

*Sixth Grade*—Compliance rates were 70.61 percent, 67.92 percent, and 90.36 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 grades kindergarten, second, and sixth grades, 29.60 percent had dental sealants, 29.69 percent had caries/restoration history, 20.10 percent had untreated caries, and 1.95 percent needed urgent treatment. The corresponding figures for students from public educational entities were 29.79 percent, 30.30 percent, 21.57 percent, and 2.20 percent, and for nonpublic students, 28.50 percent, 26.29 percent, 11.93 percent, 0.57 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, second, and sixth grades, respectively.

	Public Schools Nonpublic Sch			c Schools	All Sch	ools
Compliance Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
Students in compliance	275,113	76.14	49,650	91.93	324,763	78.20
Students not in compliance	86,201	23.86	4,360	8.07	90,561	21.80
All students	361,314	100.00	54,010	100.00	415,324	100.00

## Table 1. 2007-2008 Dental Compliance Summary of Reported Educational Facilities

Compliance Status	Number of Students	Percent
In compliance with complete dental examination	317,719	76.50
Approved appointment scheduled	3,174	0.76
Religious exemption	75	0.02
Unable to complete a dental examination due to a medical reason	31	0.01
Unable to complete a dental examination due to disability	30	0.01
Waiver: Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance(Medicaid/All Kids)	1,490	0.36
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	280	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	1,148	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	816	0.20
Students not in compliance	90,561	21.80
Total	415,324	100.00

## Table 2. 2007-2008 Dental Examination Status for All Reported Illinois Public and Nonpublic School Students

Compliance Status	Number of Students	Percent
In compliance with complete dental examination	269,243	74.52
Approved appointment scheduled	2,270	0.63
Religious exemption	31	0.01
Unable to complete a dental examination due to a medical reason	25	0.01
Unable to complete a dental examination due to disability	24	0.01
Waiver: Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance(Medicaid/All Kids)	1,432	0.40
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	256	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	1,100	0.30
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	732	0.20
Students not in compliance	86,201	23.86
Total	361,314	100.00

## Table 3. 2007-2008 Dental Examination Status for All Reported Illinois Public School Students

Compliance Status	Number of Students	Percent
In compliance with complete dental examination	48,471	89.75
Approved appointment scheduled	904	1.67
Religious exemption	44	0.08
Unable to complete a dental examination due to a medical reason	6	0.01
Unable to complete a dental examination due to disability	6	0.01
Waiver: Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance(Medicaid/All Kids)	58	0.11
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	24	0.04
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	48	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	84	0.16
Students not in compliance	4,360	8.07
Total	54,005	100.00

## Table 4. 2007-2008 Dental Examination Status for All Reported Illinois Nonpublic School Students

	Public Sc	hools	Nonpublic	e Schools	All Sch	ools
Compliance Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	96,462	82.66	17,961	91.05	114,423	83.87
Approved appointment scheduled	575	0.49	293	1.49	868	0.64
Religious exemption	11	0.01	25	0.13	36	0.03
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	12	0.01	4	0.02	16	0.01
Waiver:						
Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance(Medicaid/All Kids)	272	0.23	22	0.11	294	0.22
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	74	0.06	12	0.06	86	0.06
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	285	0.24	17	0.09	302	0.22
Does not have any type of dental insurance and there are no low-cost dental clinics in the						
community that will see the child	204	0.17	27	0.14	231	0.17
Students not in compliance	18,803	16.11	1,365	6.92	20,168	14.78
Total	116,704	100.00	19,727	100.00	136,431	100.00

## Table 5. 2007-2008 Dental Examination Status of Kindergarten Students in All Reported Public and Nonpublic Educational Facilities

	Public So	chools	Nonpublic	c Schools	All Sch	ools
<b>Compliance Status</b>	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	91,922	75.49	15,849	90.16	107,771	77.34
Approved appointment scheduled	776	0.64	10	0.06	1,032	0.74
Religious exemption	9	0.01	0	0.00	19	0.01
Unable to complete a dental examination due to a medical reason	9	0.01	5	0.03	14	0.01
Unable to complete a dental examination due to disability Waiver:	10	0.01	17	0.10	10	0.01
Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	413	0.34	10	0.06	430	0.31
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	61	0.05	14	0.08	71	0.05
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	348	0.29	33	0.19	362	0.26
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	225	0.18	256	1.46	258	0.19
Students not in compliance	27,990	22.99	1,384	7.87	29,374	21.08
Total	121,763	100.00	17,578	100.00	139,341	100.00

## Table 6. 2007-2008 Dental Examination Status of Second Grade Students in All Reported Public and Nonpublic Educational Facilities

	Public So	chools	Nonpublic	c Schools	All Sch	ools
<b>Compliance Status</b>	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	80,859	65.82	14,666	87.79	95,525	68.45
Approved appointment scheduled	919	0.75	355	2.13	1,274	0.91
Religious exemption	11	0.01	9	0.05	20	0.01
Unable to complete a dental examination due to a medical reason	10	0.01			10	0.01
Unable to complete a dental examination due to disability Waiver:	2	0.00	2	0.01	4	0.00
Enrolled in the free and reduced price lunch program and not covered by private or public dental insurance (Medicaid/All Kids)	747	0.61	19	0.11	766	0.55
Enrolled in the free and reduced price lunch program and ineligible for public insurance (Medicaid/All Kids)	121	0.10	2	0.01	123	0.09
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	467	0.38	17	0.10	484	0.35
Does not have any type of dental insurance and there are no low-cost dental clinics in the community that will see the child	303	0.25	24	0.14	327	0.23
Students not in compliance	39,408	32.08	1,611	9.64	41,019	29.39
Total	122,847	100.00	16,705	100.00	139,552	100.00

## Table 7. 2007-2008 Dental Examination Status of Sixth 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	269,243	_	48,476	_	317,719	_
Dental sealants: with	80,212	29.79	13,817	28.50	94,029	29.60
Dental sealants: without	179,696	66.74	31,799	65.60	211,495	66.57
Dental sealants: unknown	9,335	3.47	2,860	5.90	12,195	3.84
Caries experience/restoration history: with	81,584	30.30	12,744	26.29	94,328	29.69
Caries experience/restoration history: without	176,596	65.59	32,522	67.09	209,118	65.82
Caries experience/restoration history: unknown	11,063	4.11	3,210	6.62	14,273	4.49
Untreated caries: with	58,067	21.57	5,781	11.93	63,848	20.10
Untreated caries: without	199,346	74.04	39,426	81.33	238,772	75.15
Untreated caries: unknown	11,830	4.39	3,269	6.74	15,099	4.75
Needing urgent treatment	5,927	2.20	276	0.57	6,203	1.95

## Table 8. 2007-2008 Dental Health Status of All Students in All Reported Public and Nonpublic Educational Facilities

	<b>Public Schools</b>		Nonpublic Schools		All Sch	ools
Dental Health Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent
In compliance with complete dental examination	96,462		17,961		114,423	
Dental sealants: with	8,085	8.38	1,870	10.41	9,955	8.70
Dental sealants: without	85,159	88.28	15,046	83.77	100,205	87.57
Dental sealants: unknown	3,218	3.34	1,045	5.82	4,263	3.73
Caries experience/restoration history: with	20,541	21.29	3,310	18.43	23,851	20.84
Caries experience/restoration history: without	72,383	75.04	13,438	74.82	85,821	75.00
Caries experience/restoration history: unknown	3,538	3.67	1,213	6.75	4,751	4.15
Untreated caries: with	21,323	22.11	2,137	11.90	23,460	20.50
Untreated caries: without	71,314	73.93	14,560	81.06	85,874	75.05
Untreated caries: unknown	3,825	3.97	1,264	7.04	5,089	4.45
Needing urgent treatment	2,362	2.45	114	0.63	2,476	2.16

## Table 9. 2007-2008 Dental Health Status of Kindergarten Students in All Reported Public and Nonpublic Educational Facilities

	Public Schools		Nonpublic	c Schools	All Schools		
Dental Health Status	Number of Students	Percent	Number of Students	Percent	Number of Students	Percent	
In compliance with complete dental examination	91,922	_	15,849	_	107,771	_	
Dental sealants: with	31,286	34.04	4,878	30.78	36,164	33.56	
Dental sealants: without	57,787	62.87	10,022	63.23	67,809	62.92	
Dental sealants: unknown	2,849	3.10	949	5.99	3,798	3.52	
Caries experience/restoration history: with	31,752	34.54	4,545	28.68	36,297	33.68	
Caries experience/restoration history: without	56,895	61.89	10,256	64.71	67,151	62.31	
Caries experience/restoration history: unknown	3,275	3.56	1,048	6.61	4,323	4.01	
Untreated caries: with	22,558	24.54	2,135	13.47	24,693	22.91	
Untreated caries: without	65,933	71.73	12,673	79.96	78,606	72.94	
Untreated caries: unknown	3,431	3.73	1,041	6.57	4,472	4.15	
Needing urgent treatment	2,492	2.71	124	0.78	2,616	2.43	

## Table 10. 2007-2008 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	80,859	_	14,666	_	95,525	_
Dental sealants: with	40,841	50.51	7,069	48.20	47,910	50.15
Dental sealants: without	36,750	45.45	6,731	45.90	43,481	45.52
Dental sealants: unknown	3,268	4.04	866	5.90	4,134	4.33
Caries experience/restoration history: with	29,291	36.22	4,889	33.34	34,180	35.78
Caries experience/restoration history: without	47,318	58.52	8,828	60.19	56,146	58.78
Caries experience/restoration history: unknown	4,250	5.26	949	6.47	5,199	5.44
Untreated caries: with	14,186	17.54	1,509	10.29	15,695	16.43
Untreated caries: without	62,099	76.80	12,193	83.14	74,292	77.77
Untreated caries: unknown	4,574	5.66	964	6.57	5,538	5.80
Needing urgent treatment	1,073	1.33	38	0.26	1,111	1.16

## Table 11. 2007-2008 Dental Health Status of Sixth Grade Students in All Reported Public and Nonpublic Educational Facilities