Connecticut State Department of Education

Health Services Program Information Survey Report

November 20, 2017

Developed for:

The Connecticut State Department of Education

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Executive Summary

Background and Methodology:

The Connecticut State Department of Education (CSDE), as part of its ongoing efforts to support and expand school health services provided to Connecticut students, is continuing the data collection process for school health services begun in 2004. This process is designed to assist the CSDE to understand the status of school health services in Connecticut school districts, the needs of school districts and students in the area of school health services and progress being made in these areas over time. As one component of these ongoing efforts, the CSDE commissioned the Center for Program Research and Evaluation (CPRE) at EdAdvance (formerly EDUCATION CONNECTION) to develop an online survey to collect information regarding the status of school health services from school districts throughout the state.

The survey development process was designed to encourage participation of state and district staff through each stage in the process. The process included the initial consultation of the CSDE with the CPRE. The survey was developed for data collection after a review of the professional literature related to school health services. The CSDE and the Connecticut State Health Records Committee (CSHRC) assisted EdAdvance to adapt the survey development process as necessary to meet the needs of school districts and the CSDE.

The CSDE and the CSHRC provided suggestions to EdAdvance for areas and categories for which they sought information. Additionally as appropriate, questions were used from similar surveys administered by other states. The use of these questions was intended to maximize survey reliability and to allow Connecticut to compare results as necessary, with results from other states.

EdAdvance staff developed specific questionnaire items based on these suggestions and questions asked on other state health questionnaires. The CSDE and CSHRC approved all aspects of survey development before survey administration. The survey was pilot-tested in spring 2003. Based on the results of the pilot test, and consequent survey administrations, the survey has been revised as necessary over time.

Scales were developed to identify perceptions of the importance, satisfaction or frequency of an item using a Likert-type scale. Demographic information was collected including: type of district; types of districts served by the respondent; district reference group (DRG); and name and identification number of the school district. Open-ended questions allowed respondents to comment freely on their expectations, needs and satisfaction. Survey questions have been revised slightly each year based on district requests or the results of survey data analysis.

The survey was incorporated into the EdAdvance website to facilitate completion by respondents. The Coordinator of Health Services (or equivalent) in each Connecticut school district was asked to complete the online survey.

Questionnaire results were analyzed statistically using IBM SPSS Statistical software. Frequencies and means were obtained on all data as appropriate.

Profile of Districts Who Participated in the Data Collection Process:

During 2016-2017 a total of 197 questionnaires were distributed with 171 received in time to be analyzed, yielding a response rate of 86.8%.

The majority of respondents (95.3%) represented public school districts, and 2.9% were from charter schools. Suburban districts accounted for 44% of responses while urban districts were represented by 16.4% of

respondents, and rural districts, 39.2%. Districts serving only public schools made up 62% of responses, and 38% indicated that their districts served private, non-profit schools as well. All survey-takers responded to demographic questions.

Respondents represented districts from all District Reference Groups (DRG) and were grouped by the following percentages:

DRG	% Survey Responses
A	5.8
B	12.9
C	16.4
D	14.0
E	19.3
F	9.4
G	11.1
H	4.7
I	6.4

School Health Services Conclusions and Recommendations:

Overall, school health services staff reflected varying perceptions of the status of health services in Connecticut districts, as indicated by the quantitative survey results and the number of comments within the survey. The CSDE and EdAdvance staff examined date resulting from the fourteenth year of survey administration.

That examination resulted in the following conclusions regarding school health services in Connecticut:

- Optional services provided by participating districts to public school students generated approximately 4,600 referrals to outside providers. (Since 2014-2015, dental screening services have not been included in this report.)
- For the first time, students in Private, non-profit schools served by responding districts were reported as being more likely than their public school counterparts to be referred to outside providers for mental health services.(56.5% vs. 36.8%).
- In general, nurse-to-student ratios decrease as grade levels increase. Approximately 19.6% of respondents indicated that their districts had only one nurse to more than 750 students.
- Districts reported variation in their medical advisor specialties: most frequently in 2016-2017 by Pediatricians or Family Medicine practitioners.
- Connecticut school districts continued to care for students with a wider range of physical, developmental, behavioral and emotional challenges.
- Connecticut districts report a total of 18,895 students with documented dietary restrictions including milk, peanut, tree-nut allergies, as well as lactose-intolerance.
- Districts prescribe emergency medications as needed, especially epinephrine (40.6%), with fewer reporting the use of diastat (15.2) and Glucagon (5.9%)
- Survey participants continue to express a need for more mental health services training and support on site in their districts.
- In 2016-2017, 2,394 9-1-1 calls were reported by participating Connecticut public and private, non-profit schools for students and adults combined, up slightly from the prior year.
- Responding districts indicated that a total of 3,678 public school student were reported as uninsured during 2016-2017 (down by 1% from prior year), however, 236 private, non-profit school students were reported as uninsured, more than doubling since the prior year.
- Approximately 94% of public schools, and 49% of private, non-profit schools report using computer software to collect and record school health information. SNAP continues to be the most commonly used

software for public and private, non-profit schools, followed by 'other' software not listed as a survey option.

- Between 56%-71% of respondents indicated at least some involvement in teaching topics including: Nutrition, Physical Activity, Human Sexuality, Injury Prevention and Substance Abuse Prevention. Other topics mentioned include: Personal Hygiene management, Allergy Awareness, Chronic disease management and Mental Health Issues and Supports.
- The most consistently articulated suggestions by respondents pertained to the ratio in some districts of 1 nurse to over 750 students at the secondary level, and the growing number of students with complex medical and behavioral concerns. Several participants suggested additional nurse training to accommodate these needs.

Future Data Collection Conclusions and Recommendations:

Specific recommendations for the CSDE regarding future data collection efforts were also developed, and are specified within the report.

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INTRODUCTION

EdAdvance submits this report to the Connecticut State Department of Education (CSDE) in fulfillment of the task to collect survey data to assist the CSDE to identify the status of school health service in Connecticut. Survey results are used to monitor the characteristics of, and trends in school health services in CT school districts at the elementary, middle and high school levels. Data was collected through the administration of the Health Services Program Information Survey. Funding for this project was provided by the SSCE. This report summarizes the results of data collection for the 2016-2017 academic year. This is the fourteenth year for which data has been collected.

THEORETICAL FRAMEWORK

The theoretical framework of the planning and implementation of the data collection process includes the concepts of participatory evaluation, systems thinking, and a constructive theory of learning.

REVIEW OF THE LITERATURE

A summary of national literature regarding the importance of school health services and student health to student academic performance was provided in the 2003-2004 report and will not be repeated here. The concepts outlined in this review of the literature were used to guide and focus data collection efforts and include the following:

Academic Performance and Health

- Nutrition
- Physical Health
- Mental Health
- Vision Care
- Oral Health
- Access to Health Care and Coverage

Status of Student Health

- Alcohol and Drug Use
- Injury & Violence Prevention (including suicide)
- Nutrition
- Physical Activity
- Sexual Behaviors
- Tobacco Use

Status of School Health Services

- Staffing
- Medication Administration
- Computer Software Available
- Role of School Health Services
- Guidelines and Ratios
- Health Care Provision in School Districts
- Effectiveness of School Health Services

Emerging Issues

- Concussion Occurrence (new in 2015)
- Food Safety
- Asthma
- Skin Cancer
- Type I Diabetes
- Type II Diabetes
- Dental Disease

DATA COLLECTION PROCESS

Survey Development

All survey development processes were described in the 2003-2004 report and will not be repeated here. Based on results of the 2009-2010 survey administration, a limited number of changes were made in the survey prior to the 2011 through 2015 administrations, and again for the 2015-2016 survey. The CSDE and the Connecticut State Health Records Committee assisted EdAdvance to adapt the survey as necessary to meet the needs of school districts and the CSDE. Ongoing adaptations have been made in collaboration with Kevin Glass, MSRSM, Director of the Center for Program Research & Evaluation at EdAdvance. The survey collected data in the following areas:

- Types and results of services provided in CT public and private, non-profit schools
- Staff of health services in CT schools
    - number of staff
    - nurse/student ratios
    - qualifications of staff
    - specialists linked to nursing services
        - Number of students dismissed and reasons for dismissal in public and private, non-profit schools
- Number of students without health insurance in public and private, non-profit schools
- Number of, and reasons for 9-1-1 calls in public and private, non-profit schools
- Concussion Diagnosis and Frequency
- Availability of health coordination and education activities
- Involvement of health services staff with health coordination an education activities
- Software available to support health service data collection
- Demographic information including:
    - District Reference Group (DRG)
    - Type of district
        - rural/urban/suburban: and private/public school/district
- Types of schools to which the districts provides health services
- Name and identification of district, and
- Name of survey respondent

Reliability and validity of the survey were discussed in previous reports and are not repeated here. Reliability was maximized through a comprehensive pilot testing process and through the development of questions following generally accepted standards. Survey validity is primarily determined through the use of a survey development process that collects data on all relevant key concepts and is generally assessed non-statistically by a panel of experts. This survey was developed in close partnership with CSDE. It is expected that the questionnaire is sufficiently valid and reliable.

Survey Administration

The survey was posted to EdAdvance's website to increase ease of completion. Survey directions, sources of data necessary for survey completion, and results of the thirteen prior survey administrations are also available for downloading from the EdAdvance website.

Ms. Stephanie Knutson, the CSDE Education Consultant, Bureau of Health/Nutrition, Family Services and Adult Education, introduced participants to the purpose and history of the survey and shared it with the group online. Ms. Knutson answered questions concerning the practicalities of survey completion, state expectations for its completion and expected use of the data.

The CSDE sent a letter of intent to each Coordinator of Health Services or the equivalent in Connecticut, informing them that they would shortly be receiving a letter requesting that they complete the survey. The letter directed recipients to the EdAdvance website for survey completion

The CSDE and EdAdvance responded to questions and concerns regarding the survey as they arose. Of the 197 questionnaires distributed, **171** responses were sufficiently completed in time to be analyzed, yielding a response rate of **86.8%.**

Data Analysis Methodology

Survey results were analyzed using IBM SPSS Statistical software. The total number of individuals, frequencies and means were obtained as appropriate.

RESULTS

The response totals, mean frequencies or mean responses are listed below s appropriate. Responses of "Don't Know" were not included in the analysis.

During 2016-2017, districts reported information for public school districts, and private, non-profit schools separately for a variety of of topics as appropriate. Approximately 38% of responding districts reported that they also provided health services to private, non-profit schools.

Concussion Evaluation 2016 - 2017

Across all districts, survey participants reported that a total of **6,797** students were diagnosed with concussions during the 2016-2017 school year. The numbers of **FEMALE** vs **MALE** students diagnosed with concussion by grade level during the 2016-2017 school year are detailed in the table below.

Table 1: Number of Female vs. Male Students diagnosed with Concussion

Grade	N Female	N Male	Total
Pre-Kindergarten	4	9	13
Kindergarten	24	22	46
1st Grade	35	31	66
2nd Grade	43	65	108
3rd Grade	64	113	177
4th Grade	78	156	234
5th Grade	149	233	382
6th Grade	220	306	526
7th Grade	292	330	622
8th Grade	399	376	775
9th Grade	586	572	1,158
10th Grade	597	482	1,079
11th Grade	478	381	859
12th Grade	393	359	752
Total	**3,362**	**3,435**	**6,797**

Of the diagnosed concussions that occurred during the 2016-2017 school year, number of occurrences in reporting districts during the categories listed below:

Table 2: Number of Occurrences in Reporting Districts for Following Categories

Category	N Occurrences
Physical Education Class	407
School Recess	224
School Athletics - Intramural	220
School Athletics - Interscholastic	2,079
Any other school-sponsored activities	205
Non-school sports-related (i.e. Local town recreational sports)	1,071
Outside of school - Other	1,822
Don't know	505
Other	265
Total	**6,797**

Of all diagnosed concussions that occurred during school-related sports events, occurrences are broken out by each school sport below.

Table 3: Number of concussions that occurred during each of the following sports. (Including both interscholastic and intramural events)

Sport	N Occurrences
Boys Soccer	276
Girls Soccer	266
Cheerleading	188
Boys Basketball	162
Girls Basketball	161
Football	634
Boys Lacrosse	97
Girls Lacrosse	72
Field Hockey	84
Track and Field	24
Baseball	72
Softball	54
Boys Volleyball	17
Girls Volleyball	107
Swimming and Diving	36
Wrestling	49

Of students diagnosed with concussions during the 2016-2017 schoolyear, the accommodations below were provided for the following number of students

Table 4: Number of Students Requiring the following Accommodations:

Accommodations	N Students
Individual Health Care Plan	1,813
Section504 Plan	343
Academic Accommodations	4,250
Physical Activity Accommodations	5,169
Homebound Instruction	75
No Accommodations required	378

Of diagnosed concussions during the 2016-2017 school year, AVERAGE length of time (in days) that accommodations were needed:

Table 5: Average Length of Time Accommodations Needed:

Accommodation	Mean Av. N Days
Individual Health Care Plan	17.6
Section 504 Plan	30
Academic Accommodations	23.5
Physical Activity Accommodations	25.7
Homebound Instruction	5.9
Not known	1.4

Number of students (if known) who missed school days due to diagnosed concussions during the 2016-2017 school year for the following categories:

Table 6: Number of School Days Missed Due to Diagnosed Concussions

Category	N Students Missing Days
Less than 5 school days	3,931
5-10 school days	788
11-15 school days	135
16-20 school days	54
21-60 school days	38
61-120 school days	16
Greater than 120 school days	12
Not known	601

Student Health

Student Health Care Needs

Participating districts provided data on a wide range of topics related to student health. The 2016-2017 survey collected information on the health care needs of students in public and private non-profit schools served in these districts. 38 % of responding districts served students in private, non-profit schools. Results are summarized below.

Table 7: Number of Students with Specific Health Care Needs

Specific Health Care Need	Total N Students PUBLIC	Total N Students PRIVATE	Total Students
Allergies - Bee Sting	2,538	160	2,698
Allergies - Food (Life Threatening)	17,264	1,631	18,895
Allergies - Latex	910	88	998
Allergies - Seasonal	26,665	2,100	28,765
Allergies - Other	15,520	1,123	16,643
Arthritis	401	51	452
Asthma	58,432	3,270	61,702
Autism Spectrum Disorders	6,928	252	7,180
Behavioral/Emotional - ADHD/ADD	21,487	1,239	22,726
Behavioral/Emotional - Anxiety	8,251	611	8,862
Behavioral/Emotional - Depression	4,885	323	5,280
Behavioral/Emotional - Eating Disorders	587	55	642

Behavioral/Emotional - Other	5,520	311	5,831
Blood Dyscrasias - Hemophilia	219	11	230
Blood Dyscrasias - Sickle Cell Trait	473	26	502
Blood Dyscrasias - Other	905	53	956
Cancer	314	18	332
Cardiac Conditions	2,445	140	2,585
Cerebral Palsy	714	21	735
Diabetes Type I	1,167	75	1,242
Diabetes Type II	262	16	278
Lyme Disease	967	87	1,054
Migraine Headaches	3,487	326	3,813
Neurological Impairments	2,763	125	2,888
Orthopedic Impairment	4,507	322	4,829
Seizure Disorder	3,072	110	3,182
Speech Defects	9,731	271	10,002
Severe Vision Impairment	1,807	69	1,876
Severe Hearing Impairment	1,926	103	2,029
Spina Bifida	113	1	114
Swallowing Dysfunction	292	2	294

A total of **18,543** students across all reporting school districts (PUBLIC and PRIVATE, non-profit schools) have special dietary needs documented by an appropriate medical statement that is maintained on file.

Table 8: Student Diagnoses Responsible for Dietary Accommodations:

Diagnoses	**% of Districts having Students with this Diagnosis**
Peanut Allergies	94.6
Tree Nut Allergies	93.8
Milk Allergies	93.1
Lactose Intolerance	90.6
Diabetes	89.1
Shellfish Allergies	87.6
Egg Allergies	87.3
Wheat Allergies	85.8
Celiac Disease	81.7
Fish Allergies	80.3
Other Allergies	79.5
Soy Allergies	79.0
Other Food Intolerances	77.8
Seed Allergies	72.8
Other Diagnoses	59.6

Other Food Allergy Diagnoses: Top 5 most reported: Irritable Bowel Syndrome, Fruits (strawberries, kiwi most common), Food dyes, Religious Accommodation (most commonly pork), and Gluten Sensitivity/Intolerance.

Table 9: Emergency Medication Administration

Emergency Medication Administration	% of Districts having used in the past year
Epinephrine	40.6
Diastat	15.2
Glucagon	5.9
Automatic External Defibrillator	2.2
Cardiopulmonary Resuscitation	2.2

Districts reporting emergency medication interventions indicated that epinephrine was administered in 40.6% of districts. Diastat use was reported by 15.2% of survey participants, and Glucogen use by 5.9%. 159 students with DIAGNOSED life threatening food allergies required administration of epinephrine during the 2016-2017 school year.

Table 10: Number of Students DIAGNOSED with life threatening food allergies administered epinephrine by the following individuals:

	Total Epinephrine Administration
School Nurse (RN) / Nurse	80
Other Personnel	5

Table 11: Number of students UNDIAGNOSED with life threatening food allergies administered epinephrine by the following individuals:

	Total Epinephrine Administration
School Nurse (RN) / Nurse	43
Other Personnel	3

Table 12: Percent of PUBLIC and PRIVATE, non-profit school districts that performed the following health care

Procedure	% of PUBLIC SCHOOL Districts Performing Service in School Settin	% of PRIVATE SCHOOL Districts Performing Service in School Settin
Blood Sugar Testing	93.4	49.0
Nebulizer Treatments	91.1	63.3
Insulin Pump Management	83.8	40.8
Gastronomy Tube Feedings	55.6	4.1
Catheterizations	32.6	2.0
Other Treatments	28.9	10.6
Ostomy Care	26.9	4.1
Suctioning	27.5	0
Oxygen Therapy	18.9	2.0
Tracheostomy Care	17.6	0
Ventilator Care	9.9	0
Nasogastric Tube Feedings	6.9	0
IV Therapy	3.8	2.0

OTHER procedures most frequently performed in **PUBLIC SCHOOL** Districts; Glucose/Insulin administration, Blood Pressure Monitoring, and Wound Care. OTHER procedures most frequently performed in

PRIVATE, Non-Profit School Districts; Blood Pressure Monitoring, Pulseoximetry, and Metered Dose Inhaler management.

Table 13: Percentage of students receiving a nursing intervention returned to classroom within one half hour:

% Students Returned within One Half Hour	% Response
0 - 25%	1.5
26 - 50%	0
51 - 75%	6.6
76 - 100%	92.0
Total	100.0

92% of Survey participants indicated that between 76 - 100% of students were returned to their classrooms within one half hour of receiving a nursing intervention.

Table 14: In responding districts, percentage of students dismissed and NOT returned to class for the following reasons, in PUBLIC and PRIVATE, Non-Profit school districts

Reason for Dismissal	% of PUBLIC SCHOOL Students Dismissed	% of PRIVATE SCHOOL Students Dismissed
Illness	85.9	89.6
Injury	9.9	7.5
Other	4.2	2.9

The majority of dismissals for PUBLIC and PRIVATE, Non-Profit school students were due to illness, while 9.9% of PUBLIC SCHOOL students, and 7.5% of PRIVATE, Non-Profit SCHOOL students were sent home due to injury.

Table 15: **Dismissal Destination Percentage for students NOT returned to class, for PUBLIC and PRIVATE, Non-Profit schools**.

Dismissal Destination	Public School Districts	Private, Non-Profit Schools
Home	91%	91.8%
Emergency Room	2.9	1.9
Other Healthcare Provider	6.1	6.3

Over 90% of students who were dismissed for health reasons from PUBLIC and PRIVATE, Non-Profit schools were sent home. Another 2.9% of PUBLIC SCHOOL students and 1.9% of PRIVATE SCHOOL students were sent to an emergency room.

Other Factors impacting Student Health

Table 16: 9-1-1 Calls reported for students in PUBLIC SCHOOLS and PRIVATE, Non-Profit Schools:

	Public Schools	Private, Non-Profit Schools	Total
Number of Students in Responding Districts	422,208	35,247	457,455
Number of 9-1-1 Calls per 1,000 Students	3.8	3.3	3.7
Total Number of 9-1-1 Calls*	1,897	136	2,033

*Total number includes 9-1-1 calls made for students and staff combined.

For students, 134 PUBLIC SCHOOL districts reported total 9-1-1 calls made for the 2016-2017 school year, and 48 PRIVATE, Non-Profit School Districts reported 9-1-1 calls. Approximately 3.6 calls per 1,000 students were placed for PUBLIC SCHOOL Districts, while 3.3 calls per 1,000 students were reported for PRIVATE, Non-Profit Schools.

Fifty-one percent of respondents for PUBLIC and PRIVATE, non-profit schools identified 'Other' as the primary reason for placing 9-1-1 calls, while injuries became the second most common reason, followed by 'Anaphylaxis' and 'Seizure'. ('Other' may have in part referred to reasons unknown.)

For staff members and other adults, 133 PUBLIC SCHOOL districts reported a total of 312 9-1-1 calls made, while 49 PRIVATE, Non-Profit Schools reported a total of 21 9-1-1 calls made.

Table 17: Number Students Referred to Receive HEALTH INSURANCE

	Number of Public School District Students Referred for Health Insurance	Number of Private School Students Referred for Health Insurance
Districts Reporting	123	43
Total Students Referred	3,678	236

In 2017, one hundred and twenty-three PUBLIC SCHOOL Districts provided information on the number of students without Health Insurance coverage. In those districts, 3,678 students were reported to be without health insurance during the school year.

Forty-three PRIVATE, Non-Profit School survey respondents reported a combined total of 236 students **without** Health Insurance during the school year.

Services Provided in Connecticut School Districts

Table 18A: PUBLIC SCHOOL students Receiving Services as Percent of Total

Note: For the table below, percentages were calculated ONLY for districts for which all data is available. Therefore, the total number of students reported by the districts varies by category and is dependent upon whether other data necessary to calculate percentages was provided. The total number of public school students reported by participating districts is **422,208**.

Health Service	Districts Reporting Students Receiving Service	Total N Public School Students Reported by Participating Districts	N Students Receiving Service Reported by Participating Districts	% Students Receiving Service	Districts Reporting Students Referred to Outside Provider	N Students Referred to Outside Provided	% Students Receiving Service Referred to Outside Provider
Optional Services							
Body Mass Index Screening	114	147,284	20,101	13.6	102	76	0.4
Pediculosis	125	209,258	41,031	19.6	112	2,134	5.2
Nutrition Screening	114	159,290	1,236	0.8	105	141	11.4
Mental Health Consultation	117	171,841	6,220	3.6	108	2,287	36.8
Total			**68,588 screenings**			**4,638 referrals**	
Mandatory Services*							
Vision					131	13,849	3.2
Scoliosis					128	1,396	0.03
Hearing					129	4,066	1.0
Total						**19,308 referrals**	

*No data collected for mandatory services, as these screenings are required for all students.

Table 18B: PRIVATE, Non-Profit School Students Receiving Services as Percent of Total

Note: For the table below, percentages were calculated ONLY for districts for which all data is available. Therefore, the total number of students reported by the districts varies by category and is dependent upon whether other data necessary to calculate percentages was provided. The total number of PRIVATE school students reported by participating districts for the 2016-2017 school year is **35,247**.

Health Service	Districts Reporting Students Receiving Service	Total N Public School Students Reported by Participating Districts	N Students Receiving Service Reported by Participating Districts	% Students Receiving Service	Districts Reporting Students Referred to Outside Provider	N Students Referred to Outside Provided	% Students Receiving Service Referred to Outside Provider
Optional Services							
Body Mass Index Screening	44	15,235	1,524		42	7	0.5%
Pediculosis	48	18,746	2,818		44	115	4.1
Nutrition Screening	46	16,966	348		45	21	6.0
Mental Health Consultation	47	17,851	519		44	293	56.5
Total			**5,209 screenings**			**436 referrals**	
Mandatory Services*							
Vision					49	832	2.3
Scoliosis					48	136	0.4
Hearing					48	311	0.8
Total						**1,279 referrals**	

*No data collected for mandatory services, as these screenings are required for all students.

Staffing of Health Services in Connecticut School Districts

I. Nursing Staff

Table 19: Numbers and Classification of Staff

Staff Type	Nursing Staff Classifications	Total N Staff in Participating Districts (FTE)	Total % Staff in Participating Districts
Registered Nurse	Nurse Leaders (no school assignments)	43	3.0
	Nurse Leaders (with school assignments)	112	7.8
	School Nurses	1,022	70.0
	Permanent Float Nurses	29	2.0
	One-to-One Nurses	46	3.2
Total Registered Nurse Staff	**All RN Classifications**	**1,252**	**86.0**
Nursing Support	Licensed Practical Nurses	52	4.0
	Health Aide	99	7.0
	Nursing Clerk / Other Support Staff	42	3.0
Total Nursing Support Staff	**All Support Classifications**	**193**	**14.0**
Total Staff	**All Classifications**	**1,445**	**100%**

For the 2016-2017 school year, Nurse Leaders were designated as either assigned to particular schools, or NOT assigned to schools. In reporting districts (between 108 -133), all Nurse Leaders composed 10.8% of full-time equivalent of school health services staff. 70% were reported as registered nurses who do not hold leadership positions. The majority of remaining staff were classified as nursing support staff.

II. Additional Staff

District Medical Advisor:

78.5 % of survey respondents in 135 districts reported receiving monthly services by a medical advisor. Among these, approximately 91.1 % received services less than 10 hours per month. 5.9 % received between 11-20 hours of service per month, and another .7% received services between 21-30 hours per month. Two districts reported receiving more than 40 hours of service from a medical advisor each month.

Medical Advisors serving Connecticut school districts specialize in the following areas:

- Adolescent Health 17.0%
- Family Medicine 26.3%
- General Medicine 7.0%
- Internal Medicine 4.1%
- Orthopedics 2.3%
- Pediatrics 53.2%
- Public Health 4.7%
- Sports Medicine 3.5%
- Other 2.3%

Note: Medical advisors can have more than one specialty area. Numbers do not equal 100%.

District Dental Services:

Results for 2016-2017 indicate that a majority (68.4%) of responding Connecticut districts do NOT provide dental services to their students. Among districts reporting these services, 18.2% received services from a dentist and 81.8% received services from dental hygienist.

III. Staffing Levels:

79.9% of responding districts reported having a nurse leader designee who is a nurse. Responding districts also reported a total of 1,178 Full-Time equivalent (FTE) registered nurses and 212 FTE nursing support staff in 2016-2017.

Staffing by Grade Level and School:

Table 20: Nurse to Student Ratio

	One Nurse to less than 250 Students	One Nurse to 250-500 Students	One Nurse to 501-750 Students	One Nurse to More Than 750 Students
Elementary nurse-to-student ratio	20.2	65.1	13.2	1.6
Secondary nurse-to-student ratio	11.8	26.9	42.0	19.3

A majority of Connecticut schools continue to meet national guidelines recommending that school districts have a nurse to student ratio of no less than 1 nurse to 750 students in the general population. In addition, the guidelines recommend 1 nurse to 225 students in student populations requiring daily professional school nursing services or interventions. , 1 nurse to 125 students in student populations with complex health care needs, and 1 nurse per student for individual students who require daily and continuous professional nursing services. Survey results indicate that slightly less than 1 in 5 CT secondary schools may not meet general population guidelines. It is important to note that no information is collected regarding the acuity levels of the population of students reported.

IV. Staff Qualifications:

Table 21: Qualifications of Nurse Leaders - Percent Response

	Number of Respondents	Diploma Registered Nurse	Associate Degree in Nursing	Other Associates Degree	Bachelor of Science in Nursing	Other Bachelors Degree	Master of Science in Nursing	Master of Public Health	Master of Health Educat-ion	Master of Business Administration
Nurse Leader 1	154	13.6%	13.0%	0.6%	49.4%	5.8%	9.7%	3.2%	3.9	0.6
Nurse Leader 2	20	30.0	20.0	5.0	40.0	0	0	0	5.0	0
Nurse Leader 3	10	30.0	20.0	0	40.0	10.0	0	0	0	0
Nurse Leader 4	7	28.6	0	0	28.6	42.9	0	0	0	0
Nurse Leader 5	5	40.0	20.0	0	20.0	20.0	0	0	0	0

Districts reported the qualifications of each nurse leader in their district. Districts with more than one nurse leader reported additional qualifications under Nurse Leader 2-5 above. The most prevalent degrees among Nurse Leaders were Bachelor's Degrees in Nursing followed by Diploma Registered Nurses. Over 50% of districts reported having at least one nurse leader with a BSN (Bachelor of Science in nursing). Other qualifications provided by respondents included APRNs (Advanced Practice Registered Nurse), MPAs (Master of Public Administration), NCSNs (National Certified School Nurse), and MHAs (Master of Health Administration).

Health Coordination/ Education

Table 22: Frequency of Provision of Health Care Management Services: ***Percent Response***

	Never	Sometimes	Always	Don't Know
Development of Individual Health Care Plan	0	12.4	87.6	0
Development of Individual Emergency Plan	0	13.9	86.1	0
Development of 504 Plan	0.7	67.6	31.6	0
Staff Training to meet Individual student health needs	0	17.6	81.6	0.7

In reporting districts, the majority of respondents report ALWAYS providing health care management services. Although a smaller percentage of respondents reported SOMETIMES for most services, 67.9% claimed to provide services in development of 504 Plans, and one respondent reported no provision of 504 plan development.

Table 23: Computer Software Used to Collect Student Health Information -
Percent Response

	Public School Districts	Private, Non-Profit Schools
None	6.4%	55.7
SNAP	58.2	16.4
Health Master	3.5	1.6
Other districtwide data program	31.9	14.8
School Nurse Manager	0	0
Not Known	0	9.8

53.1% of respondents in participating PUBLIC SCHOOL districts relied on computer-based SNAP software to collect student health information, whereas 55.7% of PRIVATE, Non-Profit schools reported using no computer-based programs for this purpose. 31.9% of all respondents indicated using other programs not identified in the survey.

Table 24: Collaboration of School Health Services Staff with Colleagues to Implement Health Programs

Type of Program	% That Collaborate
Injury Prevention and Safety	82.2
Asthma	75.2
Emotional and Mental Health	72.9
Physical Activity and Fitness	72.5
Violence Prevention (e.g. bullying, fighting, homicide)	64.1
Human Sexuality	61.5
Foodborne Illness Prevention	54.6
Alcohol and other Drug Use Prevention	49.2
Suicide Prevention	47.2
Tobacco-Use Prevention	42.5
STD Prevention	31.2
Pregnancy Prevention	28.6
HIV Prevention	22.8

The above table lists a variety of Health Programs that were implemented in the 2016-2017 school year. The data indicated that responding districts most frequently collaborate with School Health Services Staff on the topics of Injury Prevention & Safety, Asthma, and Emotional and Mental Health. The least amount of collaboration was indicated in the areas of Pregnancy Prevention and HIV Prevention.

Table 25: Involvement of School Health Services Staff in Teaching - *Percent Response*

	Never	Sometimes	Always	Don't Know
Nutrition	16.8%	71.0%	11.5%	0.8%
Physical Activity	19.1	70.2	9.2	1.5
Human Sexuality Education	24.4	56.6	17.6	1.5
Disease Prevention	13.6	50.0	35.6	0.8
Injury Prevention	15.3	51.9	32.1	0.8
Substance Abuse Prevention	27.1	58.1	11.6	3.1
Other	42.5	31.3	11.3	15.0

Among participating districts, respondents most often perceive themselves as SOMETIMES involved in teaching a variety of content areas, particularly on the topics of Nutrition and Physical Activity. Among respondents who listed OTHER content areas, additional topics most frequently selected included Personal Hygiene management, Allergy Awareness, Chronic Disease Management (i.e. diabetes, asthma), Family/Social Dynamics, and Mental Health Issues and Dental Health.

Table 26: Provision of Student Referrals to Sexual Health Services - *Percent Response*

Type of Sexual Health Service	% of Districts Providing Referrals
Formal or Informal Organization partnerships between districts, and youth-friendly sexual health service providers	33.3%
A list of youth-friendly organizations to which youth can be referred for sexual health services	51.2
A written procedure for making referrals	13.0
A written procedure for maintaining student confidentiality throughout the referral process	19.7

Slightly over half or reporting districts indicate that they provide a list of youth-friendly organizations to which youth can be referred for sexual health services, and 33% of respondents stated that their districts provided some type of formal or informal organizational partnerships between districts and youth-friendly sexual health service providers. Approximately 13% provide written procedures for making referrals. In 2016-2017, 19.5% of respondents identified their districts as having a school-based health center, and 9.1% state that their districts provide reproductive health services.

Demographics

Table 27: District Reference Group Representation

DRG	% of Survey Respondents
A	5.8
B	12.9
C	16.4
D	14.0
E	19.3
F	9.4
G	11.1
H	4.7
I	6.4

Respondents represented district from all District Reference Groups (DRGs), with highest representation for DRGs E, C, D and B.

Table 28: District Type

Urban	16.4
Suburban	44.4
Rural	39.2

A majority of respondents defined their districts as suburban, while 39.2% were rural, and less than 15% identified as urban districts.

Table 29: District Type

Public School District	95.3
Charter School	2.9
Regional Educational Service Center	1.8
Total	100.0

Survey Open-Ended Questions

Most Frequently addressed topics by respondents in open-ended question are summarized below.

Student Health:

Survey participants wanted the SDE to know about some of the following concerns that would facilitate increasing demand for support in their districts:

- *Increasing number of primarily Spanish speaking families*
- *We have many students without health insurance. Increased funding to support an increase in professional counseling services for students with behavioral/emotional issues is needed.*
- *An increase in issues related to student's using social media and causing spillover into school life.*
- *Many students eat breakfast at home and again at school. Most don't care for hummus. Large amounts of food thrown away.*
- *We have seen an ever increasing number of students with significant chronic health conditions such as persistent asthma, diabetes, and seizure disorders along with an alarming increase in students who have significant mental health issues (anxiety, depression, suicidal thoughts, hallucinations, etc.).*
- *There are many days when the school health room is functioning more like an emergency room than the school nurse's office.*
- *Many students are overweight and obese. Not enough physical education in the curriculum.*

- *We have a SBHC in the middle school which will see kids without insurance. There is poor compliance with nurse recommendations to seek pediatric care.*
- *The students in district suffer with asthma, bug infestation (lice, roaches, bed bugs, scabies), homelessness, etc. Many families resort to using the ER as a doctor's office which is why SBHC's are crucial. Students appear to lack the basic knowledge on healthy living, disease, and disease prevention.*
- *Dental van continues to be helpful. Lyme disease is most likely underreported by PCPs.*
- *There are NO services for truancy!*
- *This survey is extremely time consuming - took more than one full work day to compile data and complete survey.*
- *Our students are not seeing their primary care providers as often as they should. Some students go several years without seeing a medical professional or they go to the emergency room and never follow up with a primary care provider.*
- *There is no social worker or school psychologist support in the parochial schools.*
- *Gastrointestinal issues such as Crohn's disease and IBS are often reasons for frequent absences*
- *Low income, poor nutrition, students receive breakfast and lunch and refuse to eat; there are many students with anaphylaxis and np epi-pens available to them for home use; many students are not being taken for follow-up appointments due to parent's work schedule;*
- *We are concerned about the number of students who enter the district with immunizations 'in progress' and the amount of children who have been diagnosed with asthma. Parents and students are frequently using the health office as a clinic. We are seeing an increase in social emotional issues.*
- *We utilize the mobile dental van Across the Smiles out of Generations in Putnam. They provide cleanings, X-rays, sealants, fluoride treatments on site. They coordinate with families to provide more extensive care if necessary at the main office in Putnam. The health office also coordinates a VNA flu shot clinic here in the building in October.*
- *We have a couple of students who were denied by Husky and are now uninsured.*
- *Would love stronger parameters for snacks sold at lunch, holiday foods, PTO sales etc enforcing healthy eating.*
- *We have lots of asthma--few doctors using asthma action plans.*
- *We have a SBHC on premises with dental services but they are only here one day a week and could definitely fill more days.*
- *We have implemented 211 & 911 for assessments and or transports. There have been 31 hospitalizations for suicide attempts, or thoughts of suicide.*
- *Increase in number of cases of strep and tick bites*
- *ABA: Applied Behavioral Analysis program with DTI: Discrete trial Instruction under direction of BCBA: Board Certified Behavioral Analyst program is growing in our school system. Preschool had this program. It is now growing up the grades through grade 3/4.*
- *Amount of time nurse spends with students with socio/emotional/behavioral issues in this area is not tracked in this survey.*

Districts requested assistance from the CSDE in a broad range of areas. Respondents commonly cited the following needs:

- *Provide clearer guidance on dealing with students who start the school year without their mandated health assessments and/or immunizations. Provide clearer guidance on requiring 504 plans for students with medically documented life-threatening food allergies and other physical and mental health conditions*
- *Help educate our leaders so they can provide more educational opportunities for ALL staff .*
- *Provide more education and support, resources to school nurses/families re management of increasing mental health issues and increase of opioid use. More social workers and school psychologists are needed in the schools.*
- *Assist in supporting school based health centers and on-going training opportunities for school medical staff especially in the area of mental and behavioral health.*
- *Have a clear policy channel for recent immigrants legal or not to have access to health care. Same for unemployed families*

- *Find ways to motivate students to eat better, especially a good breakfast*
- *An improved Lice protocol. Bringing Health Educators into school districts.*
- *More training of "restorative discipline" and psychosocial behaviors of students,*
- *More funding for behavior/mental health professionals. Home visitors who work with parents regarding the importance of medical follow-up, attendance, and a supportive home for education.*
- *Laura Trinkoff, RN: "Related to RN's role, recognition of the increased level of responsibility that has occurred in the last 5 years.*
- *Jayne Cadrin, RN: Easier access for pre-school students to get flu vaccine from their medical provider.*
- *We feel mandating a ratio of students to MSWs and also nurse to student ratios would improve the overall mental and emotional health of our students therefore possibly improving school engagement*
- *More resources for students who are not eligible for insurance to access free or reduced cost health care.*
- *There is an ongoing problem with the wording on the mandates from the S.D.E. The term "MAY" exclude students who are non-compliant with vaccines or physical exams allows our administration to deter the nurses from exclusion. Parents have come to know that there is no consequence and simply do not comply.*
- *Allocate one full time BSN school nurse for every 400 students. We have many complicated medical cases now in our schools as do other districts. Need more services for regular education students that relate to anxiety and depression*
- *A universal health record system for all the schools in the state, and a school nurse should be mandated for every school, especially inner city schools*
- *Help with nutrition, STD and pregnancy prevention, also access to epi-pens for low income students without insurance; more specialized services for children in need; encouraging more parental involvement;*
- *Access & availability to health insurance. Provide families with an insurance contact person/persons to assist them.*
- *Access to mental health referral services*
- *Emotional/ psychosocial health should be incorporated at the elementary level in the district.*
- *Ensure coverage by Husky to get their flu shots here locally and would increase our compliance rate. At this time the VNA does not accept Husky and these families are excluded from the clinic.*
- *Access to social media during the school day via personal cell phones or school issued iPads harms emotional well-being of students, often prompting health office visits and dismissals*
- *No longer except religious exemption as an option.*
- *Consistency of forms across the state*
- *Admission to kindergarten date change from "turning 5 by December 31st of the admission year to turning 5 by September 1st of the admission year" for kindergarten readiness.*
- *The social workers here are so busy with the "diagnosed" students and behavior problems, the early stage/minor issues are ignored. We could fill in that gap with knowledge and training.*
- *The Affordable Health Care Act, has led to more students receiving well visits beyond the mandatory ones we require from the state.*
- *Would be helpful for physicians to be compliant (addressing all mandated screenings) with completing the State of CT health Assessment forms*
- *More lobbying against high health care costs. There is the need for more and affordable mental health care and addiction services.*
- *Chronic Fatigue Syndrome dx has numerous children on 504/reduced day and absence issues.*

<u>Services Provided/Staffing Levels</u>

Respondents shared the following concerns they wanted the State Department of Education to know regarding Health Services provided to Connecticut school districts:

- *The revised screening schedule has greatly improved health office efficiency and decreased missed class time.*
- *I believe there is an increase of students that require services such as GI feeds, Respiratory treatments, medication administration. There is also an increase in students with emotional (i.e anxiety/depression) and behavioral issues that has had a huge impact on the role of the school nurse.*

- *An increase noted in the number of students who have made potential comments regarding suicide- suicide assessments done in school.*
- *School Health Services are provided in the district by the Health District. There are 18 public, and parochial schools. The public schools include 2 high schools, 2 middle schools, 2 K-8 schools, 1 alternative educational school, 1 Early Childhood (Pre K) school, 6 K-5 schools, 1 Catholic regional High school and 3 -K-8 parochial elementary schools. There are 3v dental hygienists in the district. Oral Health screenings provided by registered dental hygienists in K-8 public and parochial. The hygienists are also available for individual problems or issues in all grades. There is increase in transient students/families from one district to another.*
- *Mental health services are on the rise and we are being used at an increasing rate to help out in that area. My office is used for time outs almost daily.*
- *The Catholic K-8 school with 188 students has 25 hours of nursing per week*
- *We are seeing a significant increase in the number of students with complex medical needs. For example the number of elementary aged students (ages 5 - 9) with insulin dependent diabetes increased three fold this school year.*
- *Our three high schools do have School Based Health Centers. A dental hygienist program is also available to our students during the school day.*
- *A. We have many immigrant children with vaccines in progress. There are many barriers for these students: language barriers, access to health care, transportation barriers and difficulty in making sure that parents understand the needs of their children to follow up for further vaccines in a series.*
  B. Nursing and food services are working together to insure safety for our students by having a nurse liaison that goes to food service meeting 3-4 times a year in order to have face to face communication about the needs of students and how to best meet their special dietary needs. We have not had any anaphylaxis related problems this school year.
- *Registered nurses taking daily attendance is a secretarial job and task, thereby taking away professional practice from students*
- *Large number of medically fragile students in school with one nurse.*
- *Need for more social work services. Students in the parochial schools with anxiety and emotional issues.*
- *More services to assist students dealing with mental health concerns; many students have complex medical needs/multiple diagnoses and disabilities and require total assistance and nursing care to provide a comfortable and safe learning environment.*
- *school provides services to PK3 and PK4 - who do not receive vision and hearing screenings at school*
- *Our software program identifies immunization non-compliance issues that MD offices are not tracking requiring lengthy amount of time following up with MDs and parents for compliance. RN's time involvement in Homebound impacts on delivery of health services.*
- *The neediness of the population has increased the Health Office visits every year. Our administration would like to reduce the high school coverage to 1.5 and increase the 1.5 to 2, which sounds good on paper, but doesn't take into account that we have lost our clerical person this year and are now responsible for ALL the paperwork and data entry ourselves.*
- *We serve a very needy population of students who often lack parental/family support at home*
- *Athlete clearance to play sports - still receive PE's minute before 1st practice done by the walk in clinic down the street. Anxiety/depression/self-harm behaviors have moved downward to gr 3/4/5.*
  Absences in school for MS and HS increasing - refuse to come to school

Respondents would like the State Department of Education to better provide Health Services to students in school districts in the following ways:

- *Encourage primary care providers, especially FQHCs to understand that it is their primary responsibility to follow their practice guidelines (Bright Futures) and perform these screenings, and provide communication to schools with the results so the screening does not need to be duplicated.*
- *Teaching students coping strategies for stress, peer pressure, social media issues and behavioral issues. Share strategies with parents.*
- *Actively support the need to have the state requirement of nurse to student ratio increased. More support to manage the increase of mental health and psychosocial issues of students.*
- *Publish a Pediculosis Guide similar to the one for BED BUGS.*

- *MDs not providing asthma action plans and at times inconsistent medical information provided. Earlier growth and development instruction to students.*
- *free educational posters*
- *Explore Kid Sight programs for Pre-K students*
- *Would like to see consistency in interpretation of policies/protocols throughout the State, i.e., what constitutes a Field Trip, lice protocols, PE excuse formats, change in parent "opt out" clause for Undiagnosed epipen regulations. Would also like to see clear guidelines on "off label" medications used for seizure disorders and delegation of same, such as Midazolam.*
- *Reinforce/educate pediatricians on timing of the immunizations to be in compliance.*
- *More mental health services. Better protocols for handling behavioral problems when nursing is dealing with medical issues for other students.*
- *More support for the social/emotional needs of students.*
- *We need a nurse in every building every day all day long. Please continue to support the school nurses by continuing to employ a school nurse consultant.*
- *Psych screenings during annual physicals with pediatrician. Make it easier for school/MD communication to occur.*
- *Work with mental health professionals to establish more beds for students with severe social/emotional/mental/behavioral health issues. Increase provider referrals (outpatient, in home etc) that accept children in the 3 - 8 age range.*

Staffing of Health Services in School Districts - Survey participants wanted the SDE to know that the need for increased staffing levels to address growing health demands continues to exist at the high school level, and is increasing at a faster rate at elementary and middle school levels, primarily due to greater student medical acuity, and mental/behavioral/emotional health support needs.

- *Our nurse-student ratio is skewed by including 5 designated special education schools*
- *It is imperative that every school has at least on nurse without "sharing schools". With the increase of acuity of students attending school, and the increase of mental health issues, the student/nurse ratio should be re-examined.*
- *School Health Services are provided by the local Health District. A school health services coordinator (not assigned to a school) oversees school health services. A public health nurse is assigned as the school nurse for the parochial schools overseeing health aides in each school. There is 1nurse and 1 health aide in one public. A middle school with one nurse and 6 students with Diabetes supported by the permanent float nurse.*
- *We feel fortunate to have One full time nurse in each school*
- *Additional nurses are required for coverage for 504, PPT meetings.*
- *The answer to question 43 is both Dental Hygienists and Dentists, as the district is serviced by both. The question only permitted one response.*
- *The LPNs are currently used to provide one-to-one services for the medically fragile students*
- *I have one health aide that works 19 3/4 hrs and I tried to put that in at 0.75 but the survey wouldn't take that. My other health aide was cut this year. We have many medically fragile students.*
- *The health needs among students are increasing every year and becoming more demanding.*
- *In spite of lower enrollment in recent years, the number of students seen annually in the nurses' office remains higher than it was five years ago. Mainstreaming children with special needs to keep them in their home school has had many benefits for the school system, but it results in a greater need for nursing support to provide for health and safety needs.*
- *One full time nurse to 400 students- the schools are seeing more complex medical issues, behavior issues, more treatments, more medication administrations, more 504's and PPT's.*
- *Difficult to obtain and maintain sub Rn's qualified as to be a school nurse with backgrounds to support more than first aide to staff and employees. Pay needs to reflect current educational levels.*
- *Students are more medically fragile in school with multiple health concerns. We have 2 students (one student is only in school part time) requiring 1:1 nurses for suctioning the student. We have a few students in the high school level requiring hoyer lifts to change students and provide care. This care involves at least 2 and sometime 3 people to lift the student. Increase in the number of diabetic students in the district.*

- *Nurse coordinator should not have a school assignment. It was difficult to properly service the nurses because of the assignment of 2 schools (parochial) and a pre-school.*
- *We are happy to report that this academic year we ran a very active hiring campaign to achieve our mission to provide a school nurse in every school and we are happy to announce that we have achieved our goal.*
- *Staffing tied to town budget, not BOE and not based on acuity needs of students. Frustration in convincing town of need for increased staffing/compensation/affordable health insurance. Nurse Leader is also the full time nurse at the elementary level with no additional time built in for supervisory work.*
- *All our nurses are BSNs. We have excellent staffing as we are supported by our superintendent and their administrative staff*
- *School nurse is stand-alone - Only supervisor is the principal. Meets a few times a year with other school nurses in Regional District #1*
- *Would like a realistic way for schools to uniformly staff schools using a formula for acuity*
- *More sub nurses are needed but our district pays $14.00 an hour*
- *School nurse substitutes are in high demand.*
- *Health aides would be helpful and having screening nurses to assist with mandatory screening is needed.*
- *Town driven budgets defer to education and look to cut health services as savings strategy.*
- *We are seeing decreasing student populations in the elementary schools. However they seem to be coming with more intense needs. Nurses are more frequently involved with students with behavioral/mental health issues. The students would benefit from more nurses with mental health backgrounds as well as additional support for psychologists, MSWs and behavioral specialists.*

What respondents would like from the SDE to address district and school staffing needs:

- *Administrators need to be educated on the multi-faceted role of the nurse, as well as the increased number of students with complicated medical and behavioral issues. Truth is nurses stand alone and most staff, (teachers, administrators, ancillary staff) don't understand the "medical world".*
- *Make a mandated nurse to student ratio that is closer to 1:400*
- *Continue development of clear and concise guidelines, policies and procedures to address and manage the ever changing nursing assessments, interventions and care of students.*
- *Requirement for a nurse in every school*
- *More nursing coverage is needed for increased emotional health needs*
- *Furthering Grant opportunities to expand Mental Health services to students.*
- *Set clear guidelines about Nurse to Student Ratio being RN to Students as administration tends to count LPNs and they are not school nurses.*
- *Have a program to train health aides for the nurses offices, have school nurses with BSN degrees or higher, Make the new school nurse orientation program with the Ct. School Nurse Association mandatory.*
- *Provide districts with guidance on RN/student ratios based on acuity needs of students. Provide guidance/support for RN in dual role of full time school nurse/full time supervisor.*
- *SNAP computer program should be installed across CT Schools so electronic transfer of health records can occur. Windham has e-school and many other schools have SNAP.*
- *It would be a great idea to have a pool of substitute (trained) school nurses available through the state. Just thinking outside the box...*
- *Should hire staff based on student need at Middle and High School, not 750 students.*
- *Addressing the qualifications of school nurses, which hasn't changed in the 20 years I've been a school nurse. Recognition from the educational department, that nursing degrees, certifications, etc. that are health related are as valid for nurses as the same level of credentials are for teachers.*

What survey participants would like the SDE to know about the coordination of Health Services, or about Health Education provided to students in their districts:

- *In the curriculum, Human Sexuality is taught by a Health Teacher. I think nurses should be more involved in developing that curriculum. Although the nurses don't "officially teach" in the classroom, the health office is a place of ongoing learning for the students on many levels.*

- *Some school nurses work collaboratively with Physical Ed teachers to provide programs to increase awareness of healthy eating, activities, and life styles.*
- *Nurses rarely have an opportunity to provide school wide or classroom health education due to curriculum demands on the teachers and lack of time for the nurses. Their offices are busy and demands on their time for other responsibilities do not make it possible.*
- *A health teacher was added to one elementary school which has been very beneficial. Kids will access the SBHC in our high school from our alternative school. Next year that school will have a SBHC for emotional/behavioral care.*
- *SBHC for Mental Health Services only.*
- *The district works with Planned Parenthood of Southern New England and local healthcare facilities in regards to Reproductive Health Services. There is collaboration with UCONN Medical Schools Health Teaching Program. Demonstrations in the classroom as a form of health education have appeared to be beneficial and result in positive responses from students. There is a need for increased health education despite these efforts.*
- *The nurses do individual teaching but not formally in the classroom*
- *It would be beneficial for all students within our district to have access to School Based Health Centers.*
- *We have a very well developed Health curriculum in the district which thoroughly covers human sexuality, pregnancy prevention and STDs. We are available on an individual basis to answer any student question related to these areas and to give support when needed.*
- *Only 1 of the 8 schools has a School Based health service. One of the middle schools only.*
- *Smile Builders through Stay Well provides dental services in our schools.*
- *School nurses are a critical component of the interdisciplinary team. However, we are not monetarily on par with the BOE employees.*
- *School nurses participate in the district's health and wellness committee.*
  Although we do not do formal health teaching we do informal individual teaching in our health offices daily
- *School nurses work with all health teachers to review content of sexual education and puberty classes*
- *I didn't see any place to suggest that all this information that each nurse inputs be compiled electronically, with the supervisor questions separate... time consuming for hand tabulation of each of the school during the busiest time of the school year. Thank you.*
- *We need to teach nutrition and healthy eating at the K-5 level. We need human sexuality in grade 4 and 5 not wait until 6. We need a lot more drug awareness training for both staff and students*
- *We are a yet to be appreciated resource in our schools. Our offices are ridiculously busy and the support services provided to our students are fragmented. We rarely get to put our heads together to plan what's best for our kids.*
- *I would like the state to look at trends with adolescent social/emotional health and the effects of social media (cyber bullying, sexting, etc.).*
- *Don't have sex is what we are told to say - avoids pregnancy and STD's.*
  Does the nurse provide private 1:1 student help? - absolutely!
- *We find that it's getting harder to get routine state mandated health assessment information from providers without first getting written parent consent. I thought the HIPAA privacy limits were discussed and addressed when HIPAA first came out. Now free standing health clinics will not transfer health information to school nurses trying to facilitate a student's entry to school.*

(All open-ended questions are available to the CSDE upon request.)

DATA STRENGTHS AND LIMITATIONS

This report summarizes data collection efforts developed and implemented to present a comprehensive picture of status of school health services in public and private, non-profit schools in Connecticut.

To this end, the data collection effort has the following strengths:

- Highly accurate analysis of data collected from the School Health Services Survey (Health Services Program Information, 2017);
- Data received from a wide variety of types of schools including public and private, non-profit schools, schools in each DRG, and urban, rural and suburban schools.
- A good response rate of 86.8%.
- Fourteen years of data collection.

However, as with any research study, data collection and the use of data have some limitations. These include, but are not limited to:

- Differential response rate per question and a high percentage of questions with missing data. Specifically, districts often skep a question if the answer is "0". However, missing data cannot be assumed to be a zero. The percentage of districts that do not enter 0 into the appropriate box may lead to the data being skewed in a positive direction.
- Use of one data collection tool. There is no supporting data available from focus groups, interviews or other triangulated data collection methods.
- Changes in the data collection tool on a yearly basis to reflect the changing needs and interests of the CSDE and participating districts. Prior to 2016, as a result of changes, some data was tracked longitudinally while some other topics were not, or no longer were.

CONCLUSIONS

As in previous years, school health services staff express a broad range of perspectives regarding the status of health services in Connecticut school districts. Respondents offered a wide range of observations and suggestions for improvement as indicated by the number of constructive comments posted throughout the survey. The CSDE and EdAdvance staff examined date resulting from the fourteenth year of survey administration. That examination resulted in the following conclusions regarding school health services in Connecticut.

- Optional services provided by participating district to public school students generated approximately 4,600 referrals to outside providers. This reflects ongoing need for, and interest in screenings in these areas. (Dental screenings are no longer included in this report.)
- Nurse-to-student ratios continue to decrease as grade levels increase. In 2016-2017 at the secondary level, the ratio of one nurse to more than 750 students increased by 1%, from 18.6% in 2015-2016, to 19.3% in 2016-2017.
- Connecticut school districts continue to care for students with increasingly complex physical, developmental, behavioral and emotional conditions.
- Connecticut school districts have approximately 18,500 reported students with documented food allergies/conditions including primarily peanut, tree nut, milk allergies and lactose intolerance.
- 40.6% of districts reported administering epinephrine as needed, while 15.2% administered diastat and and 5.9% reported using glucagon.

- In 2016-2017, 1,700 9-1-1 calls were made for students in PUBLIC and PRIVATE, non profit schools. For staff and other adults, 312 were tracked for PUBLIC and PRIVATE schools in the same time-frame.
- In responding districts, 3,678 PUBLIC school students, and 236 PRIVATE, non-profit school students were reported as being referred for health insurance services.
- Connecticut districts once again reported a variety of software programs to collect and record students' health data. The most frequently reported program used in both PUBLIC and PRIVATE, non-profit schools is SNAP, though over 55% of PRIVATE schools respondents report using no software for health-tracking purposes.
- The following health-related topics were most frequently reported as 'sometimes' or 'always being taught with nursing staff involvement: Disease Prevention (85.6%), Injury Prevention (84%), and Nutrition (82.5%).
- As in previous years, survey participants offered a wide range of suggestions regarding ways to improve district satisfaction with the provision of health services to students. Suggestions included providing more school-based health centers in districts with emphasis on emotional/behavioral health services, improving communication between primary care providers, free-standing health clinics and school nurses (better understanding of HIPAA practices so nurses can keep student health records up-to-date/accurate), and improving the ratio of school nurses to student population at the secondary level.

RECOMMENDATIONS FOR FUTURE DATA COLLECTION

The following specific recommendations for the CSDE to consider for future survey administration are described below:

- Survey data collection continues to provide diverse information on a variety of issues related to school health services. However, some of the following concerns remain among respondents: the time necessary to gather information from school nurses and complete the survey, and to a lesser degree than in previous years, understanding instructions for filling out the survey.

- The use of numeric data regarding numbers of students and referrals requires districts to provide information in each category allowing for accurate calculations of percentages between categories. To maximize the accuracy of information provided, it is critical that a high response rate be achieved for survey completion, and that respondents complete each question on the survey. For 2015-2016, an 86.8% overall response rate was obtained, up slightly from the prior year. Missing data for individual questions continue to potentially cause bias in the resulting data. Recommendations for future data collection include continuing to strengthen processes and communication designed to increase the overall participation and accuracy of results, ensuring that districts complete all questions.