



State of Washington
Joint Legislative Audit and Review
Committee

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Survey of School Nurses

Report 97-5

September 10, 1997

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SURVEY OF SCHOOL NURSES

Summary

The 1996 Omnibus Supplemental Appropriations Act required the Joint Legislative Audit and Review Committee (JLARC) to conduct a survey of school nurses and other health workers providing health services in Washington's public schools, and their funding sources. The purpose of the survey was to provide the legislature with information on the number of school nurses and other health workers in the K-12 system, the nature and frequency of services provided, and to identify current student health conditions. It was not intended to address school nurse workloads, and thus our report does not include an assessment of the adequacy or effectiveness of school district health care activities, or the staffing thereof.

BACKGROUND

School districts in Washington use a variety of personnel to provide a wide range of student health services. Under state law, they are not required to have nurses on staff nor to provide medical care. However, federal law may impose such a requirement under certain circumstances. Districts individually determine the amount of health care and medical personnel they wish to provide.¹ Staffing decisions may be based on student needs within the districts, funding availability, and health services provided in the local community. These can include hiring certificated Registered Nurses (RNs) who hold state Educational Staff Associate certificates (RN-ESAs), non-certificated RNs or Licensed Practical Nurses (LPNs), and contracting with local health care providers.

¹ There are state statutes which give school districts the authority to hire nurses and to perform certain medical procedures; however, none of which require school districts to provide them. (RCW 28A.210.300; RCW 28A.210.260-.270; RCW 28A.210.280-.290).

Overview

Staffing and service levels established by local school districts

Health care services provided by licensed and non-licensed personnel

Non-medically licensed personnel, including teachers, paraprofessionals, and office staff, can also legally provide certain nursing care services to students within the school setting, provided they receive the appropriate training and supervision from an RN. Nursing care activities performed by these individuals are regulated under state law by RCW 18.79, which governs the conditions under which unlicensed staff may perform these medical procedures within the school setting.

The level of health services provided by schools is determined at the local level; as a result, a wide range of nurse staffing possibilities exists. Under its rule-making authority for establishing certification requirements, the State Board of Education (SBE) requires that anyone holding the title of “school nurse” must be a Registered Nurse and possess an ESA certificate.² Based on this administrative rule, the Office of Superintendent of Public Instruction (OSPI) requires that the “school nurse” in Class I districts (those with over 2,000 students) must be an RN-ESA. Under state law, Class II districts (those with enrollments under 2,000) are not subject to this requirement.³

SURVEY FINDINGS

JLARC surveyed all 296 school districts in Washington State. The response rate was 71 percent, including 80 percent of Class I districts and 73 percent of Class II districts. The 211 districts responding represent 79 percent of enrolled students.

95% of sample students have RNs in their district

The survey results show that school districts use a wide variety of both nursing and non-nursing personnel to provide health services to their students. Of those districts in our sample with on-staff nurses, most employ Registered Nurses with Educational Staff Associate certificates (RN-ESAs), while classified RNs are the next most commonly employed. Analysis shows that most students in our sample (94.7 percent) have either certificated or classified RN staffing in their district, and that students in smaller districts have more limited access to an RN. The ratio of FTE RNs (certificated or classified) to FTE students is 1:1,713. Many districts report contracting out for health care services, including 18 of the 45 districts with no nurses on staff.

² WAC 180-79A-433

³ RCW 28A.210.300

Regarding the health services provided in schools, survey data shows that nurses and other district personnel perform and assist with a wide range of activities. Those most frequently performed are relatively consistent among both large and small districts, with the administration of first aid and oral medications at the top of the list. Some advanced medical procedures that legally require intensive RN supervision are performed in the school setting, and our survey reveals that both nursing and non-nursing staff are performing and assisting with these. The most common student illnesses and conditions reported are shared by large and small districts, with asthma, attention deficit disorder, and drug/alcohol abuse most frequently reported.

The study mandate also directed JLARC to look at the funding sources for school nurses. Preliminary 1996-1997 school year data from OSPI on certificated nurses shows that most RN-ESA personnel are reported under the Instruction Support Program, and a much smaller percentage under Special Education Programs. However, because local dollars may fund these positions, and school districts are not required to track or report their expenditures by funding source, this data does not enable us to determine how certificated nurses are funded. Nurses employed as classified staff are reported to OSPI under the general category of "all classified staff"; and, therefore, detailed information on the number or funding sources of non-certificated nurses is not available from the agency. A limited survey of school districts shows that although most classified nurses appear to work within the Instruction Support Program category, the funds actually supporting them could come from multiple sources.

ACKNOWLEDGMENTS

We appreciate the assistance provided by Judy Maire of the Office of the Superintendent of Public Instruction (OSPI), the School Nurses Organization of Washington (SNOW), and the many school districts who participated in our survey.

This study was conducted by JLARC staff member Elizabeth DuBois and former staff member Martin Chaw. Ron Perry served as the project supervisor.

Cheryle A. Broom
Legislative Auditor

Variety of
staff
providing
wide range
of services

Discrete
funding
sources not
identifiable

On September 10, 1997, this report was approved by the Joint Legislative Audit and Review Committee and its distribution authorized.

Representative Cathy McMorris
Chair

INTRODUCTION

Chapter One

The 1996 Omnibus Supplemental Appropriations Act required the Joint Legislative Audit and Review Committee (JLARC) to conduct a survey of the use of school nurses and other health workers providing health services in Washington’s public schools, and their funding sources. The purpose of the survey was to provide the legislature with information on the number of school nurses and other health workers in the K-12 system, the nature and frequency of services provided, and to identify current student health conditions. It was not intended to address school nurse workloads, and thus our report does not include an assessment of the adequacy or effectiveness of school district health care activities, or the staffing thereof.

School districts in Washington use a variety of personnel to provide a wide range of student health services. Under state law, school districts are not required to have nurses on staff nor to provide medical care. However, federal law may impose such a requirement under certain circumstances.¹ They are required to provide certain health “screening activities,” including vision, hearing, and scoliosis screening; however, these activities do not have to be performed by nurses.² Districts determine the level of health services they wish to provide, and select from a number of different provision methods. These can include hiring Registered Nurses who hold state Educational Staff Associate certificates (RN-ESAs), non-certificated RNs or Licensed Practical Nurses (LPNs), and contracting with

Background

Local school districts determine health care staffing and service levels

¹ There are state statutes which give school districts the authority to hire nurses and to perform certain medical procedures; however, none of which require school districts to provide them. (RCW 28A.210.300; RCW 28A.210.260-.270; RCW 28A.210.280-.290).
² RCW 28A.210.020 and RCW 28A.210.080-.250.

Health care staff include nurses, non-medically-licensed district personnel, and contractors

local health care providers (i.e., hospitals, medical centers, public health departments) on an as-needed basis. Such staffing decisions may be based on student needs within the districts, funding availability, and health services provided in the local community.

Non-medically licensed personnel can also legally provide health services to students within the school setting, under certain conditions. Under RCW 18.79, RNs can delegate certain activities to district personnel such as teachers, office staff, and para-professionals, provided that the appropriate training and supervision are given.

Under its rule-making authority for establishing certification requirements, the State Board of Education (SBE) requires that anyone holding the title of “school nurse” must be a Registered Nurse and possess an ESA certificate.³ Based on this administrative rule, OPSI requires that the “school nurse” in Class I districts (those with over 2,000 students) must be an RN-ESA. Under state law, Class II districts (those with enrollments under 2,000) are not subject to this requirement.⁴

APPROACH AND METHODOLOGY

School District Survey

All school districts sent a survey

To answer the question of who is providing health care services in the state’s school districts, we needed information on the number and type of nurses and other health care workers employed by the districts. While the Office of Superintendent of Public Instruction (OSPI) has data on the number of district-employed RN-ESAs (RNs with Educational Staff Associate certificates), information on the number of RNs and LPNs employed as either classified or contracted employees is only available at the district level. Information on the type and frequency of health care activities, as well as cumulative information on student health conditions, are not routinely tracked by either the districts or OSPI. Therefore, to answer the questions of who is providing health care and what services are being provided, we surveyed the school districts directly.

³WAC 180-79A-433

⁴RCW 28A.210.300

Earlier this year, with the assistance of representatives from both OSPI and the School Nurse Organization of Washington (SNOW), we developed and sent a questionnaire to all 296 districts in the state, requesting them to track and report their health care activities for a one-month period.

We received complete responses from 211 districts, an overall response rate of 71 percent. These 211 districts serve 773,905 students, or 79 percent of all students in the state's K-12 system, and are representative of all district sizes and geographical locations. Of those responding, 77 were Class I districts, representing 80 percent of all students in Class I districts across the state, and 134 were Class II districts, representing 73 percent of all students in Class II districts statewide.

While the results of our survey are statistically representative of all sizes and geographic locations of the state's school districts, the responses are self-reported and have not been independently validated; therefore, we cannot attest to the accuracy of the information provided.

Funding of School Nurses

To answer the question of how school nurses are funded, we first looked at OSPI data on district-employed RN-ESAs. This information identifies district expenditures for each RN-ESA, and shows the FTE allocation by program (Instruction Support, Special Education, etc.). However, because local dollars may fund these positions, this data did not enable us to determine discrete funding sources for school nurses. School districts can use their apportioned funds at their discretion, and are not required to track or report their nursing staff expenditures by funding source.

In school district reports to OSPI, nurses employed as classified staff are included in the general count of "all other classified staff." Thus, a separate total of non-certificated nurses is not collected on an on-going basis, and neither is information on their funding source. To obtain an understanding of how these classified positions are funded, we contacted several school districts of different sizes and geographic locations.

Districts
responding
represent
79% of all K-
12 students

Districts
report
certificated--
but not
classified--
nurse
staffing to
OSPI

SURVEY FINDINGS

Chapter Two

As discussed earlier, health care staffing decisions are made by the local school districts. The results of our survey show that districts use several different types of personnel to provide health services, and have varying staffing levels and patterns. Medically-licensed personnel reported include Registered Nurses with Educational Staff Associate certificates (RN-ESAs), Registered Nurses (RNs), and Licensed Practical Nurses (LPNs). Other individuals providing health services include school office personnel, Emergency Medical Technicians (EMT), teachers, paraprofessionals (classroom aides/instructional assistants), psychologists and counselors, drug and alcohol intervention specialists, social workers, community volunteers, speech-language pathologists, audiologists, and physical and occupational therapists. School districts also report contracting out with local providers for a wide variety of health care personnel and services.

Our survey results show that most districts in our sample which have nurses, primarily employ RN-ESAs, while classified RNs are the second most commonly employed. In our sample of 211 districts (77 Class I and 134 Class II), 330 RN-ESA FTEs were reported, 315 of which were in Class I districts, and 15 in Class II districts. A total of 98 classified RN FTEs were reported, 72 in Class I and 26 in Class II districts, as were 36 LPN FTEs, 25 in Class I and 11 in Class II districts.¹

¹ Reported headcount numbers are as follows: RN-ESA - 409 total (374 in Class I, 35 in Class II); RN - 157 total (95 in Class I, 62 in Class II); LPN - 50 total (33 in Class I, 17 in Class II).

School
health care
staffing -
survey
findings

Certificated
RNs are most
common type
of nurse

We encountered multiple nursing staff combinations among the districts, which we have simplified into five basic staffing patterns listed below.

1. RN-ESA (certificated) only
2. RN (classified) only
3. LPN only
4. Combinations of the three types of nurses
5. No on-staff nurses (may include contracted services)

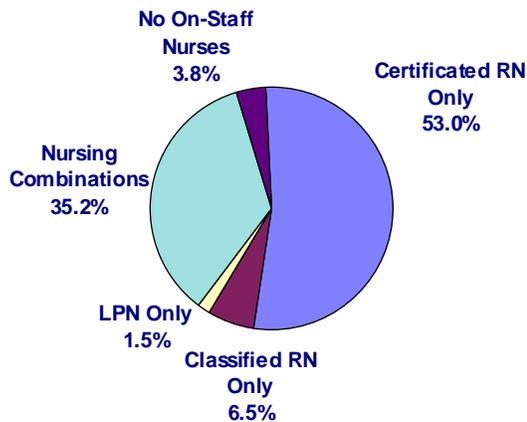
Nursing Staff by FTE Student Population

95% of sample students have RNs in their district

Analysis of the types of nursing staff serving the student population in our sample shows that the majority of students have RN staffing in their district (either certificated or classified), and that students in smaller districts have more limited access to an RN. Exhibit 1 below shows a detailed breakout of the proportion of the sample student population served by each of the five nursing staff patterns. As the chart demonstrates, 94.7 percent of the students represented by our sample have RN staffing (either certificated or classified) in their district (staffing patterns 1, 2, or 4). Of these students, 87 percent have access to an RN-ESA. The RN-to-student ratio for the entire sample (including both certificated and classified RNs) is one RN FTE for every 1,713 student FTEs.

... and the remainder have LPNs only or no nurses on staff

Exhibit 1



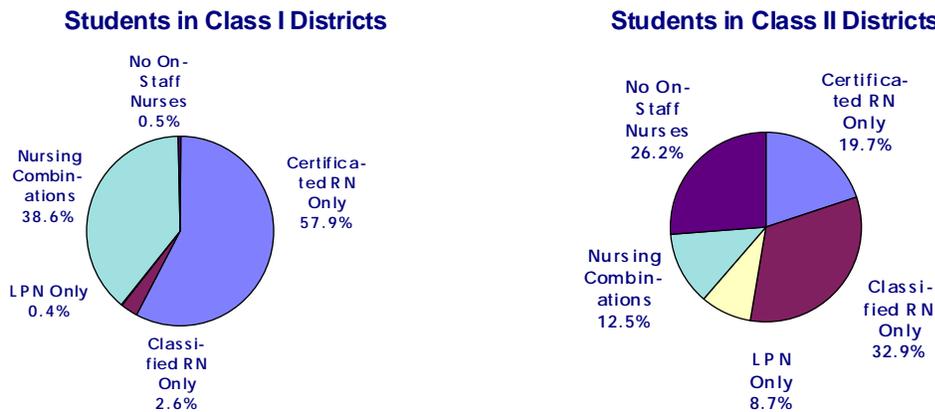
Some of the students without an RN of either type in their district have access to an LPN (1.5 percent), and the rest have no on-staff nurses (3.8 percent). As discussed earlier, school districts have the option of contracting out for any of their health care services, and of those students without on-staff nurses, 33 percent are in districts which report contracting out. The contracting services reported cover a broad range of activities, but typically include the hiring of licensed professionals (including doctors and public health nurses, physical and occupational therapists, speech and hearing specialists, etc.), who either work in a school district for a fixed amount of time per week or month, or are simply on call.

Analysis shows that students in smaller districts have more limited access to an RN (either certificated or classified) than do students in larger districts. As is demonstrated in Exhibit 2 below, nearly all (99.1 percent) students in Class I districts have RN staffing, compared to 65.1 percent of students in Class II districts.

Students in smaller districts have less access to RNs

Exhibit 2

Percentage of Students in Districts by Type of Staffing Pattern and by District Type



In addition, the RN-to-student ratio for Class II districts (1:2,311) is higher than that for Class I districts (1:1,650). Of the students with no on-staff nurses, 89 percent are in Class II districts.

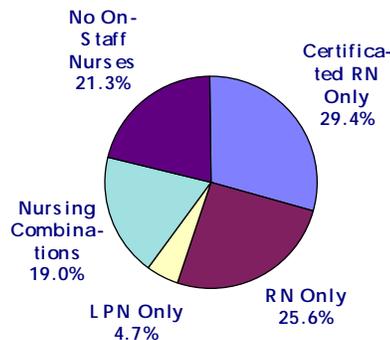
Nursing Staff by Local School District

74% of districts have RNs

An analysis of the number and types of nurses at the *district* level (versus by *student population*) provides additional information on the distribution of nursing staff among the state’s districts. The survey results show that most districts have some nurses on staff, the majority of which are RN-ESAs or RNs, with relatively few LPNs. Exhibit 3 below shows the percentage of districts with each type of nursing staff pattern.

Exhibit 3

Percentage of School Districts by Type of Staffing Pattern



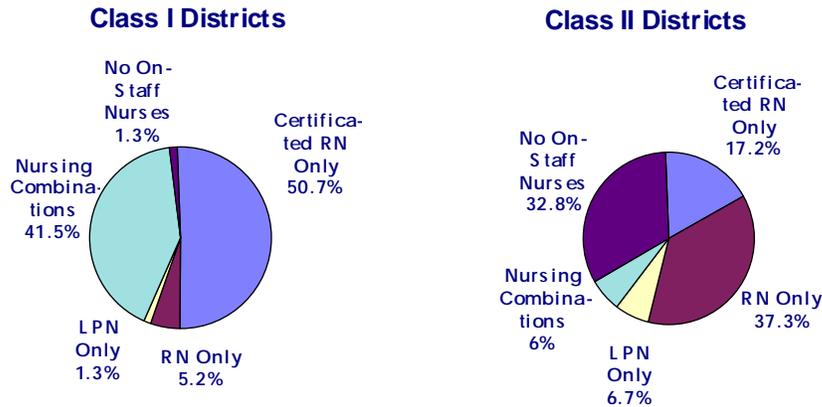
21% of districts have no nurses on staff

Seventy-four percent (156) of the sample districts report some RN staffing (either certificated or classified); of these, 100 districts report having an RN-ESA. Of those districts without RN staffing, a few (5 percent) have LPN staffing only, and the rest (21 percent) report having no on-staff nurses. As was discussed earlier, school districts have the option of contracting out for any of their health care services, and our survey results show that of the 45 districts without on-staff nurses, 18 of them report contracted services. (Please see the previous section on “Nursing Staff by Student FTE” for a discussion of the contract services reported by districts.)

Analysis of nurse staffing by district also shows staffing differences between larger and smaller districts, as is demonstrated in Exhibit 4 below.

Exhibit 4

**Percentage of School Districts
by Type of Staffing Pattern and by District Type**



As the charts show, RN staffing (either certificated or classified) is reported in 98 percent of Class I districts in our sample, compared to 60 percent for Class II districts. Similarly, 1 percent of Class I districts report no on-staff nurses, whereas 21 percent of Class II districts do. All but one of the 45 districts without on-staff nurses are Class II districts; however, 33 of them have fewer than 500 students. As noted above, districts without on-staff nurses represent 3.8 percent of the student population in the sample.

Smaller districts have fewer nurses

**HEALTH CARE ACTIVITIES –
SURVEY FINDINGS**

To answer the question of what health care activities are being performed in schools and who is doing them, the survey requested that districts track the type and frequency of health care activity that occurred over a specific four-week period earlier in 1997. The survey found that both nurses and other district personnel perform and assist with a wide range of health care activities. As might be expected, the most frequently performed activities among both large and small districts were first aid administration and administering oral medications. As discussed earlier, school districts are mandated to screen students for vision, hearing, and scoliosis, and the fact that these three activities are also among the most frequently performed is evidence of this.² The top 20 most frequently performed activities are included in Exhibit 5 in order of

Nurses and school district personnel performing wide range of activities

² RCW 28A.210.020 and RCW 28A.210.080-250.

their reported frequency. Please see Appendix 3 for a glossary of the terms used.

Exhibit 5

Most Frequently Performed Activities

Class I		Class II	
Top 20 most frequent activities	Avg frequency/district	Top 20 most frequent activities	Avg frequency/district
First aid - administration	3,234	Oral Medications	164
Oral Medications	2,663	First aid - administration	157
Other Activities - clerical	2,030	Screening - vision	82
Activities of daily living	968	Review student health records	74
Review student health records	767	Screening - hearing	70
Other	603	Other	66
Health follow-up with parent	494	Activities of daily living	62
Screening - hearing	455	Screening - height and weight	62
Immunization compliance monitoring	402	Screening - spinal	57
Screening - vision	373	Immunization compliance monitoring	49
Medications (inhalers)	340	Health follow-up with parent	35
Screening - spinal	339	Medications (inhalers)	33
Assistive devices	335	Counseling - mental health	30
Positioning	262	Other Activities - clerical	30
Feedings - oral	212	Positioning	29
Finger stick glucose testing	199	Assistive devices	27
Counseling - mental health	196	Other Activities - classroom teaching	27
Formal health assessment	177	Prescribed exercises - performs	23
Screening - dental	159	Feedings - oral	20
Seizure management	150	Formal health assessments	17

Large and small districts perform same activities

The table also demonstrates that the most frequently performed activities are relatively consistent among Class I and II districts, sharing 16 of the top 20. In addition, Class I districts performed four activities during the survey time period that Class II districts did not: central venous line care, nasogastric feedings, respirator or ventilator care, and stoma care. Please see Appendix 4 for a complete list of activities for Class I and II districts who performed them, and their reported frequency during our four-week survey period.

Scope of Practice Issue

Many medical procedures administered in the school setting must either be performed by a licensed medical professional, or delegated by an MD or RN. However, some advanced nursing care procedures are performed in schools that require more intensive RN supervision

than others. State law (RCW 18.79) regulates the conditions under which an RN can train and delegate these activities to unlicensed staff within the school setting. Exhibit 6 below provides a list of these procedures, the number of school districts reporting this activity, and the number of districts reporting each personnel type involved (please note that multiple individuals can perform or assist with any of the procedures). Please see Appendix 4 for a breakout of these tasks by Class I and II districts.

Exhibit 6

Nursing Activities: Frequency and Personnel

Activity	# Dists reporting each activity	RN-ESA	RN	LPN	EMT	Office Personnel	Parapro	Teacher	Contractor	Volunteer	Other
Administering medications - Inhalers	144	71	47	19	4	133	44	22	7	0	28
Administering medications - Oral	173	75	55	21	7	166	57	37	12	1	17
Administering medications - Other	62	47	28	9	0	26	22	10	4	0	10
Central Venous Line Care	14	10	3	0	0	0	2	1	2	0	1
CIC	56	37	14	8	1	4	31	9	4	0	12
Gastrostomy Feedings	60	37	22	12	0	1	52	32	3	0	2
Nasogastric Feedings	3	2	5	1	0	0	2	2	0	0	1
Glucose Testing	94	56	30	12	2	45	24	11	3	1	30
Stoma Care	24	11	10	4	1	1	8	4	0	0	1
Suctioning-Oral	24	11	5	5	0	1	12	12	1	0	1
Suctioning-Tracheal	16	10	5	5	0	0	3	4	2	0	3

As the table demonstrates, non-nursing school district personnel perform and assist with these activities, particularly with the administration of medications. Some concern has arisen surrounding the performance of these procedures in the school setting and the adequacy of the supervision and training provided to unlicensed staff. Our survey did not directly address this issue, and thus the responses do not provide a clear answer. However, they do provide new information on the frequency with which these activities are performed throughout the K-12 system, and the range of district personnel assisting with their provision.

Non medically-licensed staff performing nursing activities

Adequacy of supervision and training is a concern

STUDENT ILLNESSES AND CONDITIONS — SURVEY FINDINGS

Asthma, ADD, and drug/alcohol abuse are most common

In addition to data on the activities of school district health workers, our survey also requested information on the number of students with certain illnesses and conditions. Among the sample students, the most frequently reported were serious cases of asthma (requiring medication), attention deficit disorder, and drug and alcohol abuse. A list of the top 15 are included in Exhibit 7 below, in order of their frequency.³

Exhibit 7

Student Illnesses and Conditions

Class I		Class II	
Most frequent illnesses/conditions	Avg # students/district	Most frequent illnesses/conditions	Avg # students/district
Asthma - on medication	248.9	Asthma - on medication	17.7
Attention deficit disorder	226.2	attention deficit disorder	16.2
Other severe ailments	165.1	Drug/alcohol abuse	14.8
Drug/alcohol abuse	107.8	Allergies - life threatening	6.8
Allergies - life threatening	54.0	Psychiatric disorder	4.4
Migraine headaches	49.7	Orthopedic disability - temporary	4.1
Seizure disorder	46.5	Other severe ailments	3.8
Psychiatric disorder	37.4	Seizure disorder	3.5
Genetic disorder	27.0	Migraine headaches	3.5
Orthopedic disability - temporary	26.6	Eating disorder	3.4
Orthopedic disability - permanent	26.5	Pregnancy	2.8
Heart disease	26.1	Neuromuscular disorder - progressive	2.7
Severe sensory deficits	25.2	Genetic disorder	2.5
Neuromuscular disorder - progressive	22.2	Diabetes	2.4
Diabetes	16.8	Heart disease	2.3

Large and small districts share similar health problems

As the table demonstrates, Class I and Class II districts appear to share many of the same student health problems: of the 15 most frequently reported conditions, both district types have 12 of them in common. Please see Appendix 5 for a complete list of student illnesses and conditions, their reported frequency, and an identification of the district personnel responsible for caring for these students.

³ Although OSPI and the School Nurses Association of Washington believe the list of Illnesses and Conditions provided in the survey was very complete, "Other Severe Ailments" was still selected by a large enough number of districts to place it among the top 15.

FUNDING — SURVEY FINDINGS

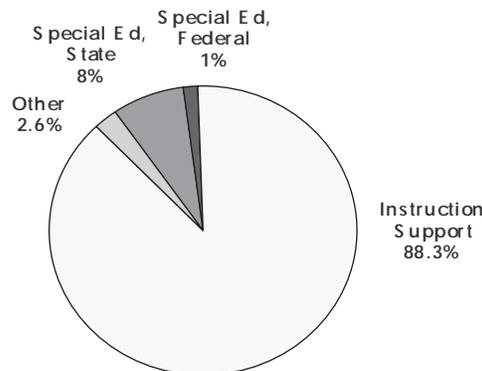
Certificated Nurses (RN-ESAs)

To answer the question of how school nurses are funded, we first looked at OSPI data on district-employed RN-ESAs. This information identifies the district expenditures for each RN-ESA, and shows the FTE allocation by program (Instruction Support, Special Education, etc.), as reported by the district. However, because local dollars may fund these positions, this data did not enable us to determine actual state expenditures on school nurses. School districts can use their apportioned funds at their discretion, and are not required to track or report their expenditures by funding source.

OSPI's data shows that most RN-ESA personnel are reported under the Instruction Support Program, and a much smaller percentage under Special Education programs (state and federal). Exhibit 8 shows the proportion of RN-ESAs reported under each program for 1996-1997 school year. These are very preliminary figures; however, the proportions are almost identical to those reported for the previous school year.⁴ Please see Appendix 6 for a complete list of programs.

Exhibit 8

**Certificated Nurses by Program
(preliminary 1996-1997 data)**



Discrete funding sources unidentifiable

Most certificated nurses reported under state *Instruction Support* program

⁴ Note: These are *preliminary* 1996-1997 OSPI figures based on February 1997 district reports, and have not yet been finalized.

Classified nurses have multiple funding sources, including local levies

Classified Nurses (RNs or LPNs)

Nurses employed by districts as classified staff are reported to OSPI under the general category of “all classified staff”; and, therefore, OSPI has no detailed information on the number or funding sources of non-certificated nurses. To obtain an understanding of how these positions are funded, we contacted several school districts of different sizes and geographic locations. The results of this limited survey show that the program categories in which classified nurses are reported are similar to those of certificated nurses, with most in Instruction Support and Special Education. One key difference is that many districts reported that their classified nurses are either partially or entirely funded through local levy funds. However, nearly all the districts we spoke to reiterated that the assignment of nurses to various programs is only for reporting purposes, and that the funds actually supporting them could come from multiple sources. State funding formulas for schools do not specifically fund nursing positions. Rather, they fund salary dollars for certificated and classified staff (separately). Local school districts decide how they will use these appropriated funds for nursing staff.

OTHER SURVEY DATA

Following consultation with SNOW, OSPI, and legislative staff, our survey also collected information on:

- Number and type of school district staff with CPR training
- Numbers and causes of student deaths
- District use of computers for health care administration activities

Detailed results of these questions can be found in Appendix 7 of this report.