

Nursing Services in Utah Public Schools 2022–2023

Annual report

Utah Department of Health and Human Services (DHHS)

Division of Population Health
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School nursing highlights

Healthy students can best achieve their educational potential. Students with diagnosed health conditions may need interventions while at school. Nursing services provide individualized care to meet each student's needs. During the 2022 general legislative session, the Utah state legislature encouraged each school district to provide nursing services equivalent to 1 registered nurse (RN) for every 2,000 students. Schools with fewer than 2,000 students were encouraged to meet the level of services recommended by the Utah Department of Health and Human Services (DHHS), as indicated on page 10.

The National Association of School Nurses (NASN) defines school nursing as follows: "School nursing: a specialized practice of public health nursing, protects and promotes student health, facilitates normal development, and advances academic success. School nurses, grounded in ethical and evidence-based practice, are the leaders that bridge health care and education, provide care coordination, advocate for quality student-centered care, and collaborate to design systems that allow individuals and communities to develop their full potentials" (NASN, 2017).

Utah school nursing services

During the 2022 general legislative session, the following definition for school nurses passed: "School nurse means a registered nurse ... whose primary role is the care of a defined group of students" (<u>Utah code</u>, 2022).

This definition was passed in the 2022 general legislative session.

The following Utah licensed professionals may provide school nursing services:

- 1. Registered nurses (RN): Utah law allows school districts to hire RNs to provide school nursing services.
- 2. Licensed practical nurses (LPN): Under Utah law, LPNs must practice under the supervision of a registered nurse or licensed physician (<u>Utah Code</u>, <u>2023</u>).



Education and professional qualifications

Required qualifications

- RN licensed by the state board of nursing.
- Accountable to practice within current state laws, rules, and regulations.
- Expertise in several areas, including pediatric, public health and mental health nursing; education, and child health laws.
- Ability to work independently.
- Basic life skills (BLS)/CPR certification.

Recommended qualifications

- Bachelor's degree in nursing (BSN).
- School nurse certification through the National Board of Certification of School Nurses.

Primary responsibilities

To strive to advance the well-being of students and staff within the school environment. The school nurses promote student health and safety by providing the following services:

- Ensure compliance with national and state laws.
- Assess illness and injury.
- Identify, assess, plan, intervene, and evaluate student health concerns.
- Provides activities and education about health as needed.
- Manage chronic disease.
- Participates in developing and implementing Individualized Education Plan (IEPs) and Section 504 Plans for students whose health needs interfere with learning.
- Implement Individualized Healthcare Plans (IHPs) and Emergency Action Plans (EAPs).
- Obtain medication and procedure orders from parents/guardians.



- Provide pediatric nursing procedures, such as ventilators, gastrostomy feedings, tracheostomy care, and catheterization.
- Delegate, supervise, and evaluate lay staff.
- Administer medication.
- Monitor student immunization records.
- Complete vision screenings and provide other screenings as needed.
- Assess and provide intervention for student mental health needs.
- Participate on crisis teams.

As of the 2022-23 school year, school nurses have the following education:

School nurse education levels in 2022-23 school year							
	Training Associate's Bachelor's Master's Doctorate National degree degree degree						
Nursing	4	94	194	36	1	32	
Education	0	0	0	2	0	0	
Public Health	0	0	0	1	0	0	
Other	0	2	8	1	0	0	
Total	4	96	202	40	1	32	

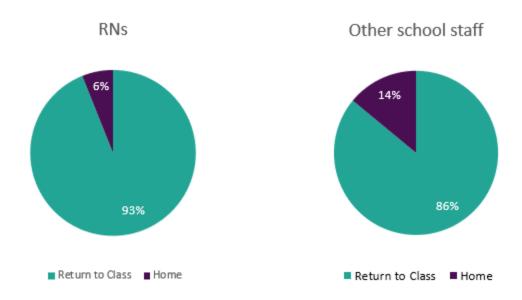


Benefits of school nurses

Dispositions

School nurses consistently return more students to class instead of sending them home after a health room visit. This keeps students in school and ready to learn.

The following charts show the percentages of RNs and other school staff who sent students back to class after health room visits compared to sending them home during the 2022-2023 school year.



Framework for the 21st century school nursing practice

In 2016, the National Association for School Nurses (NASN) published the framework for the 21st century school nursing practice. The framework centers students, families, and communities to make sure students are healthy, safe, and ready to learn.

The framework outlines the following tasks school nurses can do for children in Utah:



Care coordination

Care coordination includes case management, chronic disease management, direct care, nursing delegation, and student-centered care. School nurses develop IHPs and EAPs for students with chronic health conditions and train other school staff on the plans.

Leadership

School nurses advocate for student and community health. They should be involved in policy development and implementation at the district and school level. Additionally, school nurses should participate on interdisciplinary teams and share their knowledge about addressing student needs.

Quality improvement

School nurses collect and submit data about the services they provide each year through the annual school health workload census. Data collection allows them to evaluate their services and conduct quality improvement.

Community and public health

School nurses are often the only healthcare professional in the school and should expand their focus to the entire school community, not just the students. This can include providing vision, dental, and hearing screenings, supporting healthy food service programs, and promoting physical activity and safe sports policies.

Standards of practice

School nurses provide specialized knowledge, skills, decision-making, and standards for school nursing practice. These include clinical competence, critical thinking, evidence-based practice, and ethical practice. The Utah Nurse Practice Act guides the school nurse standards of practice (<u>Utah Code</u>, 2023).



Utah school health workload report

Each year, school nurses compile aggregate data about their schools and districts. Data points include the number of RNs and LPNs, the number of health aides, the total number of students in schools, the number of students with chronic health conditions, the types and amounts of medications administered in schools, screenings conducted by school nurses, and trainings conducted by school nurses. The following tables show data summaries for the 2022-2023 school year.

School health workload report participation rates					
	Number of local education agencies (LEAs) that participated	Total local education agencies (LEAs)	Participation rate		
Districts	38	41	93%		
Charter schools	27	115	23%		

Number of students represented in school health workload report*

Number of students represented in the school health workload report*					
	Number of students represented	Total enrolled	Representation rate		
District	590,087	595,918	99%		
Charter	24,334	78,732	31%		
Total	614,421	674,650	91%		

^{*}This table only shows data for public schools.



Chronic health conditions

School nurses submitted data about the following chronic health conditions for the 2022-2023 school year.

The number of students with diagnoses and IHPs/EAPs for chronic health
conditions in the 2022-2023 school year

	Asthma	Anaphylaxis	Type I diabetes	Type II diabetes	Seizures
Healthcare provider diagnosis	18,141	9,819	2,442	95	3,582
IHP or EAP on file	7,461	6,003	2,298	74	2,639

Mental health conditions

25,048 students were diagnosed with a mental health condition in the 2022-2023 school year. This is a 40% increase from the previous school year, when 15,148 students had a mental health diagnosis.

Mental health conditions may include, but are not limited to, the following:

- Autism spectrum disorder
- Attention deficit hyperactivity disorder (ADHD)
- Anxiety disorders
- Bipolar disorder
- Borderline personality disorder
- Depression
- Eating disorders
- Mood disorders
- Obsessive-compulsive disorder (OCD)
- Oppositional-defiant disorder
- Post-traumatic stress disorder (PTSD)



- Separation anxiety disorder
- Social phobia
- Tourette's disorder

Medications

Some students require medication administration in school. In the 2022-2023 school year, the following data about medication administration was collected:

- 2,890 daily scheduled medication orders.
- 4,049 as needed medication orders.
- 45 student emergency epinephrine injections.
- Five staff or visitor emergency epinephrine injections.
- 10 glucagon injections.
- 7,719 student asthma rescue medication administrations.
- 47 student stock albuterol administrations.
- 385 physician orders for emergency seizure rescue medication.
- 101 seizure rescue medication administrations.
- 1,422 school volunteers trained to administer emergency seizure rescue medication.
- 33 school districts with naloxone policies naloxone supplies.

Health screenings

School nurses perform a variety of health screenings, such as vision, hearing, oral, and scoliosis screenings. Vision screening are required by law (<u>Utah Code, 2023</u>). Other health screenings are determined by district or school policy.

During the 2022-2023 school year, the following data about health screenings and their impacts was collected:

- 320,149 distance vision screenings.
- 27,329 referrals for distance vision screening.
- 5,851 students received treatment for vision issues.
- 3,736 students received financial help for vision exam/glasses.
- 7,401 oral health screenings.



- 7,291 oral health varnish applications.
- 782 restorative dental services through school-sponsored programs.

School nurse trainings

School nurses regularly provide training and education to students and other school staff.

Student education covers a variety of topics, including alcohol and drug use, bloodborne pathogens, chronic health conditions, dental health, first aid, food allergies, hearing loss, mental illness, nutrition, sexual health and maturation, and tobacco cessation.

In the 2022-2023 school year, students received the following education by school nurses:

Students who attended a school nurse education class in the 2022-2023 school year						
Maturation Asthma Hygiene Handwashing Oral health						
Number of students 1,907 37,611 39,929 31,391						

Additionally, school nurses regularly train other school staff to care for students with chronic health conditions. Chronic health trainings are completed annually.

In the 2022-2023 school year, school nurses provided the following trainings to school staff:

School staff who attended a chronic health training in the 2022-2023 school year					
Asthma Anaphylaxis Diabetes Seizures					
Number of staff 17,292 22,632 14,008 17,972					



2022-2023 school nurse to student ratios

Each school district and charter school are different communities with unique needs. Where some LEAs may use 1 RN for each school, others may have 1 RN covering several schools or may use health clerks or LPNs under RN supervision.

NASN recommends at least 1 RN is in every school to optimize student health, safety, and learning (NASN, 2022).

School nurse to student ratios in the 2022-2023 school year						
Number of Utah Number of Utah school Ratio of school nurses to students enrolled in school districts* Number of Utah school Ratio of school nurses to students districts						
595,918	281	2,120				

^{*}All K-12 students enrolled in school districts, including those with disabilities

2022-2023 school nurse (RN) to student ratios by district					
District	Student enrollment (2022 Oct)	Total school nurse (RN) FTE	Nurse to student ratio		
Alpine	84,666	33.75	2,509		
Beaver	1,507	0.6	2,512		
Box Elder	12,338	5.4	2,285		
Cache	19,731	5.99	3,294		
Canyons	32,933	23	1,432		
Carbon	3,334	1.5	2,223		
Daggett	177	Unknown*	Unknown*		
Davis	71,564	25.82	2,772		



2022-2	2022-2023 school nurse (RN) to student ratios by district				
District	Student enrollment (2022 Oct)	Total school nurse (RN) FTE	Nurse to student ratio		
Duchesne	5,224	0.75	6,965		
Emery	2,085	0.4	5,212		
Garfield	1,243	0.5	2,486		
Grand	1,435	1	1,435		
Granite	59,121	25	2,365		
Iron	12,421	8	1,553		
Jordan	57,829	25.8	2,241		
Juab	2,705	2.75	984		
Kane	1,424	0.5	2,848		
Logan	5,143	Unknown*	Unknown*		
Millard	3,120	0.875	3,566		
Morgan	3,290	1.5	2,193		
Murray	5,768	2.7	2,136		
Nebo	36,229	14	2,588		
North Sanpete	2,534	2.75	921		
North Summit	1,026	0.75	1,368		
Ogden	10,246	5	2,049		
Park City	4,350	6.475	672		
Piute	260	0.15	1,733		
Provo	13,612	6.75	2,017		
Rich	511	Unknown*	Unknown*		



2022-2023 school nurse (RN) to student ratios by district					
District	Student enrollment (2022 Oct)	Total school nurse (RN) FTE	Nurse to student ratio		
Salt Lake City	19,449	8	2,431		
San Juan	2,881	4	720		
Sevier	4,563	1.33	3,431		
South Sanpete	3,189	2	1,595		
South Summit	1,669	3.75	445		
Tintic	254	0.75	339		
Tooele	23,828	6	3,971		
Uintah	6,829	3	2,276		
Wasatch	8,793	4	2,198		
Washington	36,623	13.95	2,625		
Wayne	438	0.25	1,752		
Weber	32,557	14.8	2,200		

^{*}Data not submitted

DHHS school nurse staffing recommendations

DHHS believes when school nurses are assigned based on the school's and community's needs, that better health, safety, and learning outcomes are achieved. Student enrollment numbers, student health acuity levels, social determinants of health, and community health disparities should be considered when determining school nurse staffing levels.

Based on these criteria, DHHS recommends using 1 of the following staffing models:



- One full-time RN per school.
- For schools with high health acuity, social determinants of health, or health disparities, several full-time RNs per school.
- For schools with low health acuity, social determinants of health, or health disparities, 1 full-time RN for no more than 3 schools.

For LEAs with less than 2,000 students DHHS recommends the following school nurse staffing levels:

DHHS recommended FTE RN staffing for local education agencies (LEAs) with less than 2,000 students						
LEA size	One school nurse per 2,000 students	One school nurse per 750 students	Description			
<500	0.1 – 0.25 FTE	0.1 - 0.7 FTE	Depending on health acuity/social determinants of health/disparities			
500-1000	0.25 - 0.5 FTE	0.7 – 1.3 FTE	Depending on health acuity/social determinants of health/disparities			
1000-1500	0.5 – 0.75 FTE	1.3 - 2.0 FTE	Depending on health acuity/social determinants of health/disparities			
1500-2000	0.75 - 1.0 FTE	2.0 - 2.7 FTE	Depending on health acuity/social determinants of health/disparities			

Students with chronic health conditions

The Utah Nurse Practice Act allows school nurses to train and delegate nursing responsibilities to non-health professionals to meet the needs of medically complex students (<u>Utah Code</u>, <u>2023</u>). In Utah, it is common for 1 nurse to train and oversee many unlicensed assistive personnel who perform the medical tasks.

Data on the number of students with health concerns who are medically complex, medically fragile, or nursing dependent were collected during the 2022-2023 school year. Students were classified into five levels:



Level 1

• Minimal or occasional healthcare concerns: The student's physical and/or social-emotional condition is stable, and they see the school nurse once a year for screening or occasionally as needed.

Level 2

- Health concerns: The student's physical and/or social emotional condition is currently uncomplicated and predictable. Occasional monitoring by the school nurse varies from biweekly to annually. These students may require an IHP or EAP. Examples of chronic health conditions these students may have include, but are not limited to:
 - o ADHD
 - Mild asthma
 - Mild allergies
 - Medication administration

Level 3

- Medically complex: The student's physical and/or social emotional condition is complex and/or unstable. They may require daily treatments and close monitoring by the school nurse. These students should have an IHP or EAP. Examples of chronic health conditions these students may include, but are not limited to:
 - o Anaphylaxis
 - Cancer
 - o Diabetes without complications
 - Moderate to severe asthma
 - Mild to moderate seizure disorder
 - Spina bifida with self-catheterization
 - Students with less than 15 minutes of daily care (such as catheterizing, supervising diabetes care, tube feeding, etc.)



Level 4

- Medically fragile: The student lives with the daily possibility of a lifethreatening emergency. They must have an IHP. Examples of chronic health conditions these students may have include, but are not limited to:
 - Unstable or newly diagnosed diabetes that needs supervision
 - o Spina bifida that requires assistance with catheterization
 - Frequent, severe seizure disorder requiring emergency seizure rescue medication
 - Students requiring more than 15 minutes of daily care such as catheterizing, supervising diabetes, tube feeding, etc.

Level 5

- <u>Nursing dependent</u>: The student requires 24 hours/day, one-to-one, skilled nursing care for their survival. They may be dependent on breathing devices. These students must have an IHP. Examples of chronic health conditions these students may have include, but are not limited to:
 - o Tracheostomy-requiring suctioning

Students classified as each health concern level during the 2022-2023 school								
year								
	Level 2	Level 3	Level 4	Level 5				
Number of students	72,510	14,792	1,996	118				

School nurse funding

School nurse funding sources vary across the country. Most school nurses in Utah are hired by the school or school district, but approximately 33% are funded through a local health department. The Utah State Board of Education currently has grants available to help pay for school nursing services.



School nurse funding estimates

The current data on Utah school nursing services shows that to best meet the DHHS and NASN recommendations, additional school nurses need to be hired throughout the state. For each school to have 1 full-time nurse, an additional 748 school nurses are needed. Estimated costs for hiring additional school nurses are as follows:

- Conservatively, the estimated cost for 1 FTE RN with a bachelor's degree is \$100,000 per year (salary plus benefits).
- The estimated additional cost for 1 FTE RN in every school is \$74,800,000 per year.

Summary

In the past, total student enrollment has been the primary factor for determining the appropriate school nurse staffing level. However, in addition to student enrollment, other factors such as student healthcare needs, social determinants of health, and health disparities should be considered. These additional factors indicate that a simple equation or single number is not an effective tool to determine appropriate school nurse staffing in Utah.



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