



Healthy Living Through Environment  
Policy and Improved Clinical Care (EPICC)



## NURSING SERVICES IN UTAH PUBLIC SCHOOLS 2020-2021

*Annual Report*

*Utah Department of Health*

*Healthy Living Through Environment, Policy, and Improved Clinical Care (EPICC)*

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# School Nursing Highlights

Students are best able to achieve their educational potential when they are healthy. Many students in Utah schools have been diagnosed with chronic health conditions and may need interventions while at school. Nursing services to students are individualized to meet the variety of needs of each student. During the 2002 General Legislative Session, the Utah State Legislature encouraged each school district to provide nursing services equivalent to one registered nurse for every 5,000 students, or in school districts with fewer than 5,000 students, the level of services recommended by the Utah Department of Health, as indicated on page 6.

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, 2016).”*

## SCHOOL NURSING SERVICES IN UTAH

The NASN Board of Directors passed a motion stating:

*“To optimize student health, safety and learning, it is the position of the National Association of School Nursing that a professional registered school nurse is present in every school all day, every day (NASN, 2017).”*

The NASN further states that school nurse workloads should be determined annually, using student and community specific health data (NASN, 2015).

Although data on nursing services in the public schools has been collected for the past several years, data was collected in different ways. It is unclear in the past if ratios included special education students and special education only-school nurses. It is believed the most accurate way to determine school nurse to student ratios for Utah would be to eliminate the special education students and special education only-nurses from the calculations.

## EDUCATION & PROFESSIONAL QUALIFICATIONS

### Required Qualifications

- Registered nurse (RN) licensed by the state board of nursing (BSN or higher preferred)

- Accountable to practice within current state laws, rules and regulations
- Expertise in several areas, including: pediatric, public health and mental health nursing; education and health laws impacting children
- Ability to work independently
- BLS/CPR certification

#### Recommended Qualifications

- School Nurse Certification through the National Board of Certification of School Nurses (recommended)

#### Primary Responsibilities

To strive to advance the well-being of students and staff within the school environment. The school nurse promotes healthcare and safety by handling the daily health issues that arise by providing the following services:

- Ensure compliance with national and state laws
- Illness and injury assessments
- Identification, assessment, planning, intervention and evaluation of student health concerns
- Activities and education to promote health
- Chronic disease management and education
- Participation in Individualized Education Plan and Section 504 Plan development for students with health needs that interfere with learning
- Implementing healthcare plans (Individualized Healthcare Plans and Emergency Action Plans) for students with specific health needs that interfere with learning
- Work with parent/guardian to obtain medication orders and procedure orders
- Pediatric nursing procedures: ventilators, gastrostomy feedings, tracheostomy care, catheterization
- Delegation to lay staff based on student's needs, including supervision and evaluation of delegate
- Medication administration
- Monitor student immunization records
- Screening for health factors impacting student education (i.e. vision, oral health)
- Assessment and interventions for students with mental health needs
- Crisis team participation

#### WHAT CAN SCHOOL NURSES DO FOR YOU?

Based on the Framework for the 21<sup>st</sup> Century School Nursing Practice, the following are things a school nurse can do for children in Utah:

Care Coordination – This involves case management, chronic disease management, direct care, nursing delegation, and student-centered care. The school nurse develops individualized healthcare plans and emergency action plans for those students with chronic health conditions and ensures the staff in the schools are trained on how to care for those students.

Leadership – School nurses are advocates for the students and the health of the communities they serve. They should be involved in policy development and implementation at the district and school level. They should participate on interdisciplinary teams, sharing their knowledge on how to address the individual needs of the students.

Quality Improvement – School nurses submit data each year through the annual School Health Workload Census. This data shows the school nurse what services are provided to students in Utah. This process also allows them to see where improvements could be made. Evaluation is an important part of the nursing process and a standard of school nursing practice.

Community and Public Health – School nurses are often the only healthcare professional in the school, so they must be knowledgeable on how to expand their focus to the entire school community, not just the students. They should be culturally competent and help their community understand the levels of disease prevention in order to reduce risks. These include vision, dental, and hearing screenings (in some districts) as well as follow-up activities in the event a problem is detected. School nurses also support healthy food service programs and promote healthy physical activity, safe sports policies, and other best practices.

Standards of Practice – The school nurse provides the specialized knowledge, skills, decision-making, and standards for school nursing practice. These include clinical competence, critical thinking, evidence-based practice, and practicing in an ethical way. All of these are guided by the Utah Nurse Practice Act and accompanying rules (UCA 58-31b and R156-31b).

The center of this framework is the student, their families, and the community. By working within the Framework of the 21<sup>st</sup> Century School Nursing Practice, school nurses can ensure students are healthy, safe, and ready to learn.

## UTAH SCHOOL HEALTH WORKLOAD REPORT

Each year, student health information is collected by school nurses and compiled as aggregate data. Some data points collected include the number of registered school nurses, licensed practical nurses, and health aides in schools; total number of students; number of students with chronic health conditions; types and amount of medication administered in schools; and

screenings and trainings done by school nurses. The following is a summary of some of the data collected in the 2020-2021 school year.

Utah has 41 school districts, 114 charter schools, and 144 private schools.

School Health Workload Report Participation Rate:

	Number LEA Participation	Total	Participation Rate
Districts	39	41	95%
Charter schools	22	114	19%
Private schools	2	144	1%

Number of Students Represented in School Health Workload Report (enrollment numbers for private schools unavailable):

	Number Students Represented	Total Enrolled	Representation Rate
District	580,145	586,127	99%
Charter	21,399	79,179	27%
TOTAL	601,544	665,306	90%

### COVID-19

During the 2019–2020 school year the world experienced a pandemic which resulted in the closure of all Utah public schools in March 2020. Data submitted for this school year may not reflect actual numbers.

### CHRONIC HEALTH CONDITIONS IN UTAH

In the 2020-2021 school year, Utah school nurses submitted data on the following:

#### Asthma

- 20,018 students were documented to have asthma by a healthcare provider
- Of these, 5,857 students had an individualized healthcare plan or emergency action plan on file

#### Anaphylaxis (to anything)

- 8,068 students were documented to have anaphylaxis by a healthcare provider

- Of these, 4,667 students had an individualized healthcare plan or emergency action plan on file
- 31 doses of epinephrine auto-injector were administered at school

#### Type I Diabetes

- 2,196 students were documented to have type I diabetes by a healthcare provider
- Of these, 1,995 students had an individualized healthcare plan on file
- Four doses of glucagon was administered to students while at school

#### Type II Diabetes

- 78 students were documented to have type II diabetes by a healthcare provider
- Of these, 57 students had an individualized healthcare plan or emergency action plan on file

#### Seizures (all types)

- 3,160 students were documented to have any type of seizure diagnosis by a healthcare provider
- Of these, 2,066 students had an individualized healthcare plan or emergency action plan on file
- 1,013 school employee volunteers were trained to administer emergency seizure rescue medication
- 285 students had physician orders for emergency seizure rescue medication at school
- 27 doses of emergency rescue medication were administered at school

#### Mental Health Conditions in Utah Schools

In the 2020-2021 school year it was reported there were 13,374 students diagnosed with a mental health condition. Mental health conditions include ADD/ADHD, depression, anxiety disorders, oppositional-defiant disorder, mood disorders, schizophrenia, autism spectrum disorder, bipolar disorder, borderline personality disorder, dissociative identity disorder, obsessive-compulsive disorder, post-traumatic stress disorder, separation anxiety disorder, social phobia, Tourette's disorder, and eating disorders, just to name a few.

#### **MEDICATIONS IN UTAH SCHOOLS**

- 2,737 daily scheduled medication orders at school
- 2,879 PRN (as needed) medication orders at school
- 25 students received emergency epinephrine injections at school
- Six staff or visitors received emergency epinephrine injections at school
- Four students received glucagon at school
- 3,502 students received (their own) asthma rescue medication at school
- Four students received stock albuterol at school

- Currently 25 school districts in Utah have a naloxone policy in place and have a supply of naloxone on hand in case of an opioid overdose. One dose of naloxone was administered at school.

### HEALTH SCREENINGS IN UTAH SCHOOLS

School nurses in Utah perform a variety of screenings, including vision screening as required by law (UCA 53A-11-203). They may also provide hearing, oral, and postural (scoliosis) screenings, as determined by district or school policy. The numbers listed below are greatly reduced from a typical year due to precautions taken related to COVID-19.

- 66,125 students received distance vision screening
- 5,474 students received referrals for distance vision screening
- 1,414 students received treatment for vision issues
- 1,631 students received financial help for vision exam/glasses
- 4,864 students received an oral health screening
- 4,883 students received an oral health varnish application
- 150 students received restorative dental services as part of a school-sponsored program

### TRAINING BY SCHOOL NURSES IN UTAH SCHOOLS

Because not every Utah school has a nurse, nurses regularly train school staff to care for the students with chronic health conditions. This is done annually to ensure all staff (with a need to know) are ready to meet the needs of students with certain chronic conditions.

- 13,532 staff were trained by a school nurse on general asthma information
- 18,180 staff were trained by a school nurse on general anaphylaxis information
- 12,837 staff were trained by a school nurse on general diabetes information
- 13,156 staff were trained by a school nurse on general seizure information

In the 2020-2021 school year, students received the following trainings by a school nurse:

- 10,639 students attended a school nurse-led maturation class
- 1,372 students attended a school nurse-led asthma class
- 23,210 students attended a school nurse-led hygiene class
- 42,238 students attended a school nurse-led handwashing class
- 10,751 students attended a school nurse-led dental care class
- School nurses also taught classes/trainings on healthy eating, lifestyle, basic first aid, nutrition, tobacco cessation, HIV/AIDS, STD prevention, hearing loss prevention, bullying, bloodborne pathogens, heart disease, head injury, bike safety, diabetes awareness, food allergy awareness, poison control, lice, sleep, human relationships,

mental illness, body image, media influence, addiction, vaping/chewing tobacco, and alcohol and drug abuse

### UTAH SCHOOL NURSE TO STUDENT RATIOS FOR SCHOOL YEAR 2020-2021

Each school district and charter school is a different community with different needs. Where some school local education agencies (LEAs) may need one nurse for each school, another may have one registered nurse covering several schools, while yet other school districts may have the assistance of health clerks (who must be supervised by a registered nurse). The National Association of School Nurses (NASN) recommends a professional registered school nurse be present in every school all day, every day, to optimize student health, safety, and learning.

2020-2021 School Year	Number of Utah Students Enrolled in School Districts	Number of Utah School Nurse (RN) FTEs in School Districts	Ratio of School Nurses to Students
K-12 students enrolled in school districts <i>Does not include students with disabilities</i>	<b>518,747</b>	<b>186*</b>	<b>1:2,789</b>
K-12 students enrolled in school districts <i>All K-12 students, including those with disabilities</i>	<b>586,127</b>	<b>224**</b>	<b>1:2,617</b>
<p>*School nurses providing services only to students enrolled in general education. Does not include nurses who only provide services to students receiving special education services.</p> <p>**Including school nurses providing services to students in general education and those students receiving special education services. Does not include nurses who only provide services to students in pre-kindergarten.</p>			

### UTAH DEPARTMENT OF HEALTH RECOMMENDATIONS FOR SCHOOL NURSE STAFFING

The Utah Department of Health believes it optimizes student health, safety, and learning when professional registered school nurses are assigned based on the individual needs of the school and community. Factors that must be considered when determining safe school nurse staffing levels are student enrollment numbers, health acuity level of the student population, and social determinants and health disparities of the school and community.

Based on these criteria, the Utah Department of Health recommends:

1. One full-time registered school nurse per school; or
2. Several full-time registered school nurses per school (for schools with high health acuity/social determinants of health/disparity needs); or
3. One full-time registered school nurse to no more than three schools (for schools with lower health acuity/social determinants of health/disparity needs).

## 2020-2021 School Nurse (RN) to Student Ratios by District

District	Student Enrollment (2020 Oct)	Total School Nurse (RN) FTE	Nurse to Student Ratio
Alpine	80,953	29.5	2,744
Beaver	1,519	0.65	2,337
Box Elder	11,832	4	2,958
Cache	18,833	4.25	4,431
Canyons	33,488	19	1,763
Carbon	3,289	0.75	4,385
Daggett	187	0.33	567
Davis	70,643	25.32	2,790
Duchesne	4,987	1	4,987
Emery	2,172	0.4	5,430
Garfield	923	0.2	4,615
Grand	1,379	1	1,379
Granite	61,851	28	2,209
Iron	10,748	6	1,791
Jordan	56,102	20.8	2,697
Juab	2,590	1.25	2,072
Kane	1,287	0.05*	25,740*
Logan	5,484	No RN	0*
Millard	2,973	1	2,973
Morgan	3,201	1.5	2,134
Murray	6,097	3	2,032
Nebo	35,335	10	3,534
North Sanpete	2,445	1.73	1,413
North Summit	1,011	1	1,011
Ogden	10,617	3	3,539
Park City	4,696	5.49	855
Piute	291	0.15	1,940
Provo	13,317	5.5	2,421
Rich	498	0.075*	6,640*
Salt Lake City	20,536	6	3,423
San Juan	2,929	2	1,465
Sevier	4,461	1.3	3,432
South Sanpete	3,127	3	1,042
South Summit	1,635	3.75	436
Tintic	213	.73	292
Tooele	22,004	6	3,667
Uintah	6,668	3	2,223
Wasatch	9,061	3	3,020
Washington	35,346	9.95	3,552
Wayne	429	0.15	2,860
Weber	32,197	12.9	2,496

\*Previous year's data, no data submitted this school year

## STUDENTS WITH CHRONIC HEALTH CONDITIONS

Utah Nurse Practice Act (58-31b-101) and Rules (R156-31b-701a) allows school nurses to train and delegate nursing responsibilities to non-health professionals or unlicensed assistive personnel to meet the needs of medically complex students under certain circumstances. In Utah, it is common for one nurse to train and oversee many unlicensed assistive personnel who then perform the medical related tasks delegated by the school nurse.

Specific numbers of students with health concerns, medically complex students, medically fragile students, and nursing-dependent students were collected for the first time during the 2020-2021 school year.

Students were classified into five levels:

- **Level 1: No/minimal occasional healthcare concerns:** The student's physical and/or social-emotional condition is stable and they see the school nurse only once a year for screening and 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 individualized healthcare plan or emergency action plan. Examples of chronic health conditions these students may have include, but are not limited to:
  - Attention Deficit Disorder (ADD) or Attention Deficit with Hyperactivity Disorder (ADHD)
  - Mild asthma
  - Mild allergies
  - A condition which requires administration of medication
- **Level 3 – Medically complex:** The medically complex student has a complex and/or unstable physical and/or social-emotional condition that requires daily treatments and close monitoring by the school nurse. These students should have an individualized healthcare plan or emergency action plan. Examples of chronic health conditions these students may include, but are not limited to:
  - Anaphylaxis potential (requires epinephrine)
  - Cancer
  - Diabetes without complications
  - Moderate to severe asthma (requires use of an inhaler)
  - Mild to moderate seizure disorder (may or may not need to have emergency seizure rescue medication)
  - Spina Bifida who self-catheterize

- Students requiring fewer than 15 minutes of daily care (such as catheterizing, supervising diabetes care, tube feeding, etc.)
- **Level 4 – Medically fragile:** These students live with the daily possibility of a life-threatening emergency. These students must have an individualized healthcare plan. Examples of chronic health conditions these students may have include, but are not limited to:
  - Unstable or newly diagnosed diabetes (needs supervision)
  - 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 – Nursing dependent:** Nursing dependent students require 24 hours/day, frequently one-to-one, skilled nursing care for their survival. Many are dependent on technological devices for breathing. These students must have an IHP. Examples of chronic health conditions these students may have include, but are not limited to:
  - Students with a trach requiring suctioning

During the 2020-2021 school year, there were 64,724 students with health concerns (level 2), 17,592 students with a medically complex health condition (level 3), 1,767 students who were medically fragile (level 4), and 167 students considered nursing dependent (level 5) in Utah public schools.

### SCHOOL NURSE FUNDING

Funding sources for school nurses vary across the country. Most school nurses in Utah are hired by the school or school district, with about one-third of school nurses being funded through a local health department. In one school district, the school nurse is hired through the local medical center and their home health division.

There are two grants which LEAs can apply for through the Utah State Board of Education to provide matching funds for the LEA to hire school nursing services.

### WHAT WOULD IT TAKE TO FULLY FUND NURSES?

- There were 665,306 students in Utah public schools in the 2020-2021 school year
- 1,046 total public schools in Utah (charter and school district)
- 293 total school nurses in Utah (including part-time, charter schools, typical, and special education nurses)

- 202 school nurse full-time employee (FTE) equivalent (not including special education or pre-kindergarten nurses)
- For each school in Utah to have a full-time nurse, an additional 844 school nurses would need to be hired
- \$100,000 estimated additional cost for one FTE school nurse (**including benefits**, Bachelor’s degree prepared registered nurse)
- \$84,400,000 estimated additional cost to have one full-time school nurse for every Utah school<sup>1</sup>

## SUMMARY

There are many factors to consider when determining the appropriate school nurse staffing level in each school or school district. While total student enrollment has been used primarily in the past, student needs should also be addressed, such as specific healthcare needs of the population and social determinants of health (poverty, language barriers, etc.). As a result, there is no “one size fits all” number that will work in all cases.

<sup>1</sup>1,046 schools minus 202 current FTE = 844 x \$100,000

## REFERENCES

National Association of School Nurses, (2020). *School nurse workload* (Position Statement). Author.

Utah Department of Health, (2021). Recommendations for school nurse workload (staffing).

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