



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

NURSING SERVICES IN UTAH PUBLIC SCHOOLS

2017-2018

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 that 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 recently passed a motion stating that:

“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).”

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 in Utah included special education students and special education only-school nurses. It is believed that 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.

What Can School Nurses Do for You?

Based on the Framework for the 21st 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 (IHP) and emergency action plans (EAP) 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 21st Century School Nursing Practice, school nurses can ensure that students are healthy, safe, and ready to learn.

Utah School Health Workload Census

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 aids 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 2017-2018 school year.

CHRONIC HEALTH CONDITIONS IN UTAH

In the 2017-2018 school year, Utah school nurses submitted data on the following:

Asthma

- 16,914 students were documented to have asthma by a healthcare provider
- Of these, 8,935 students had an individualized healthcare plan (IHP) or emergency action plan (EAP) at school for asthma

Anaphylaxis (to anything)

- 8,645 students were documented to have anaphylaxis by a healthcare provider
- Of these, 5,455 students had an individualized healthcare plan or emergency action plan at school for anaphylaxis
- 27 doses of epinephrine auto-injector were administered at school

Type I Diabetes

- 2,399 students were documented to have type I diabetes by a healthcare provider
- Of these, 2,195 students with an individualized healthcare plan on file
- 1 dose of glucagon was administered to a student while at school

Type II Diabetes

- 128 students had type II diabetes
- Of these, 78 students had an individualized healthcare plan or emergency action plan at school

Seizures (all types)

- 3,054 students were documented to have any type of seizure diagnosis by a healthcare provider
- Of these, 2,281 students had an individualized healthcare plan or emergency action plan at school
- 605 school employee volunteers were trained to administer emergency seizure rescue medication
- 270 students had physician orders for emergency seizure rescue medication at school
- 43 doses of emergency rescue medication were administered while at school

MEDICATIONS IN UTAH SCHOOLS

- 26 students received emergency epinephrine injections while at school
- 1 staff/visitor received a stock epinephrine injection while at a school
- 1 student received glucagon while at school
- Currently 32 school districts in Utah have a naloxone policy in place and have a supply of naloxone on hand in case of an opioid overdose

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.

- 298,744 students received distance vision screening
- 19,352 students received referrals for distance vision screening
- 5,377 students were receiving treatment for vision issues
- 4,336 students were offered financial help for vision exam/glasses
- 18,410 students received an oral health screening
- 11,975 students received an oral health varnish application
- 489 students received restorative dental services as part of a school-sponsored program

TRAINING BY SCHOOL NURSES IN UTAH SCHOOLS

Because there is not a nurse in every Utah school, 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.

- 17,209 staff were trained by a school nurse on general asthma information
- 20,566 staff were trained by a school nurse on general anaphylaxis information
- 13,878 staff were trained by a school nurse on general diabetes information
- 14,587 staff were trained by a school nurse on general seizure information

In the 2017-2018 school year, students received the following trainings by a school nurse:

- 36,337 students attended a school nurse led maturation class
- 1,590 students attended a school nurse led asthma class
- 36,676 students attended a school nurse led hygiene class
- 32,395 students attended a school nurse led handwashing class
- 21,583 students attended a school nurse led dental care class
- School nurses also taught classes/trainings on healthy eating, lifestyle, health, nursing careers, basic first aid, nutrition, tobacco cessation, HIV/AIDS, STD prevention, hearing loss prevention, bullying, abstinence, adoption, 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 2017-2018

While a ratio of one school nurse to 750 students has been widely recommended and was acknowledged in Healthy People 2020 (U.S. Department of Health and Human Services [USDHHS], 2014) and by the American Academy of Pediatrics [AAP] (2008), a one-size-fits-all workload determination is inadequate to fill the increasingly complex health needs of students and school communities (AAP, 2008; ANA/NASN, 2011). Each school district is a different community, with different needs. Where some school districts may need one nurse for each school, another may have one registered nurse covering several schools, and some 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.

School nurses consistently return more students to class than other school personnel. This keeps students in school and ready to learn. Of the 178,543 documented visits to the health office in the 2017-2018 school year, if the student saw the school nurse they were returned to class 89% of the time. If the student saw someone other than the school nurse (health clerk or secretary) only 70% were returned to class.

2017-2018 School Year	Number of Utah Students Enrolled in School Districts	Number of Utah School District School Nurse (RN) FTE	Ratio of School Nurses to Students
Typical Students Typical school nurses and students only, no special education included	533,552	129	1:4,136

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 included 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 five schools (for schools with lower health acuity/social determinants of health/disparity needs). This permits the school nurse to visit each school one day per week for supervision and evaluation of delegated tasks to unlicensed assistive personnel.

2017-2018 School Nurse (RN) to Student Ratios by District

District	Student Enrollment	Typical School Nurse (RN) FTE (excluding Special Ed/PK only)	Ratio
Alpine	78,853	13	1:6,066
Beaver	1,540	0.27	1:5,704
Box Elder	11,671	2.7	1:4,323
Cache	17,895	3.5	1:5,139
Canyons	33,097	8	1:4,137
Carbon	3,364	0.75	1:4,485
Daggett	163	Unknown	Unknown
Davis	71,908	9.66	1:7,444
Duchesne	5,103	Unknown	Unknown
Emery	2,184	0.4	1:5,460
Garfield	909	0.5	1:1,818
Grand	1,451	Unknown	Unknown
Granite	66,024	12	1:5,502
Iron	9,169	4	1:2,292
Jordan	53,519	8	1:6,690
Juab	2,510	0.72	1:3,486
Kane	1,250	Unknown	Unknown
Logan	5,555	0 (LPN)	1:5,555
Millard	2,884	0.7	1:4,120
Morgan	3,069	0.5	1:6,138
Murray	6,416	2.38	1:2,696
Nebo	32,809	7.75	1:4,233
North Sanpete	2,438	0.6	1:4,063
North Summit	1,048	0.5	1:2,096
Ogden	11,736	3	1:3,912
Park City	4,816	5.47	1:880
Piute	274	0.1	1:2,740
Provo	15,991	3.5	1:4,569
Rich	494	Unknown	Unknown
Salt Lake	22,845	5	1:4,569
San Juan	2,889	2	1:1,445
Sevier	4,560	1.25	1:3,648
South Sanpete	3,263	0.6	1:5,438
South Summit	1,650	2.1	1:786
Tintic	239	0	0
Tooele	16,154	4	1:4,039
Uintah	6,986	2.87	1:2,434
Wasatch	6,826	1	1:6,986
Washington	30,015	8	1:3,752
Wayne	447	0.15	1:2,980
Weber	31,957	11.05	1:2,892

Students with Chronic Health Conditions

Utah Nurse Practice Act (58-31b-101) and Rules (R156-31b-701a) allow school nurses to train and delegate nursing responsibilities to non-health professionals or unlicensed assistive personnel (UAP) to meet the needs of medically complex students under certain circumstances. In Utah, it is common for one nurse to train and oversee many UAPs who then perform the medically 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 2017-2018 school year.

Students are 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 IHP or EAP. 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 IHP or EAP. Examples of chronic health conditions these students may have 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 less 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 IHP. Examples of chronic health conditions these students may have include, but are not limited to:
 - Unstable or newly diagnosed diabetes (needs supervision)
 - SpinaBifida 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 on-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 2017-2018 school year it was reported that in Utah public schools there were 52,336 students with health concerns (level 2), 17,122 students with a medically complex health condition (level 3), 1,326 students are medically fragile (level 4), and 164 students considered nursing dependent (level 5).

School Nurse Funding

Funding sources vary across the country for school nurses. 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 is a Request for Proposal (RFP) which local education agencies (LEA) can apply for through the Utah State Board of Education (USB E) to provide matching funds for the LEA to hire school nursing services.

WHAT WOULD IT TAKE TO FULLY FUND NURSES?

- There were 652,348 students in Utah public schools in the 2017-2018 school year
- 1,055 total public schools in Utah (charter and school district)
- 213 total school nurses in Utah (including part-time, charter schools, typical, and special education nurses)
- 134 school nurse full-time employee (FTE) equivalent (not including special education nurses)
- For each school in Utah to have a full-time nurse, an additional 921 school nurses would need to be hired
- \$95,000 estimated additional cost for one FTE school nurse (including benefits, Bachelor's degree prepared registered nurse)
- \$87,495,000 estimated additional cost to have one full-time school nurse for every Utah school¹

SUMMARY

As school nurse staffing is determined there are many factors to consider. 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.

¹1,055 schools minus 134 current FTE = 921 x \$95,000

References

- American Academy of Pediatrics (AAP), (2008). The role of the school nurse. *Pediatrics*, 121(5), 1052-1056.
- American Nurses Association (ANA) & National Association of School Nurses (NASN), (2011). *School nursing: scope and standards of practice* (2nd ed.). Silver Spring, MD: nursebooks.org.
- National Association of School Nurses, (2015). *School nurse workload: Staffing for safe care* (Position Statement). Silver Spring, MD: Author.
- Oregon Department of Education, (2015). 2015 Nursing Services in Oregon Public Schools.
- U.S. Department of Health and Human Services (USDHHS), (2014). *Healthy People 2020, educational and community-based programs*. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/educational-and-community-based-programs/objectives?topicId=11>.
- Utah Department of Health, (2017). Recommendations for school nurse workload (staffing).