

Summary Report

Arkansas School Nursing in Public and Charter Schools

School Year 2012-2013

The demand for school nursing services has grown rapidly in recent years. Nursing personnel who work daily with school children must have the knowledge and expertise to meet increasingly complex health needs of the students. School nurses in all 258 public and charter school districts in the state of Arkansas were asked to complete the Arkansas School Health Nursing Survey developed by the State School Nurse Consultant. The surveys were available as a link on the Coordinated School Health website, www.arkansascsch.org under the tab "Support the Program". Data was entered into a database electronically. This was made available through the services of Leon Brown, IT director at the Crowley's Ridge Educational Service Cooperative located in Harrisburg, AR.

This voluntary survey is in two parts. Part 1 provides demographic data regarding the educational preparation and salaries of school nurses, health related school policies and crisis plans, school nurse office space and components, as well as other duties performed by school nurses. Aggregate student health data is submitted in Part 2 of the survey. Data includes medications, chronic diseases, procedures, injuries, immunizations, teen pregnancy, child maltreatment, as well as other services provided on campus and the various providers.

This report will be provided in two parts, Part 1 survey data and Part 2 survey data.

Part 1 Survey Data

School nurses from one hundred sixty-eight (168) school districts submitted Part 1 of the School Nurse Survey. This represented 397,076 students in public and charter schools. This does not include data from correctional or private schools.

School Nurses

Among the 168 school districts, there were 744 school nurses who listed their license credentials as the following: 608 (82%) were Registered Nurses (RN) and 136 (18%) were Licensed Practical Nurses/Licensed Psychiatric Technical Nurses (LPN/LPTN). The academic credentials of the RNs indicated 242 holding a baccalaureate or higher degree.

Sixteen LPNs indicated they did not have an RN supervisor, while there were 30 RNs who were contracted as supervisors. Twenty-four of these RNs were contracted for 4 hours or less per week.

Wages were reported either as a salary or an hourly wage. One hundred sixty-one (161) nurses reported receiving hourly wages ranging from \$7.00 – greater than \$22.00 per hour.

Number reporting	Hourly Wage range
1	\$7.00 – 9.99
13	\$10.00 – 12.99
31	\$13.00 – 15.99
30	\$16.00 – 18.99
22	\$19.00 – 21.99
64	Greater than \$22.00

Nurses reporting they were paid a salary indicated the following.

Number reporting	Salary Range
12	Less than \$15,000
33	\$15,000 – 19,999
96	\$20,000 – 24,999
78	\$25,000 – 29,999
105	\$30,000 – 34,999
109	\$35,000 – 39,999
109	\$40,000 – 44,999
58	\$45,000 – 49,999
16	\$50,000 – 54,999
26	\$55,000 – 59,999
1	Greater than \$60,000

School Policies

Policies are essential to guide the development and implementation of school programs. School nurses reported the presence of written, school board approved policies that could be found in the student handbook and/or the personnel policy handbook. Six hundred seventy nine (679) school nurses reported having a policy for medication administration while 629 nurses had a policy for Communicable Disease management. Six hundred twenty-eight nurses had policies for reporting an injury, while 550 nurses had a policy requiring staff trained in Cardio-Pulmonary Resuscitation (CPR) and 523 nurses had policies requiring staff trained in First Aid.

Written, school board approved health policies: School Year 2012-2013

Policy	Nurses reporting
Medication Administration	679
Communicable Disease Management	629
Reporting Injuries	628
Staff trained in CPR	550
Staff trained in First Aid	523

The School Nurse's Office

Six hundred sixty-one school nurses reported if they had a designated space or office and those items contained in their office.

Office	Have	Do Not Have
Designated space	649	12
Heat	646	15
Air-conditioning	647	14
Computer	636	25
Internet access	642	19
Privacy	599	62
Telephone	639	22
Toilet facilities	540	121
Shower	292	369
Cot	647	14
Double-locked cabinet	441	220
Secure file cabinet	603	58
Refrigerator (Medication storage)	578	83
Sharps container	631	30
Sink with water	596	65
Hot water	528	133

School Committees and Other Responsibilities

Four hundred eighty school nurses reported being a part of several committees in the school district. Some of these committees include: student handbook (8.8%), emergency preparedness (48.1%), child nutrition/physical activity (15.1%), 504 (41.9%), hometown health improvement (6.5%), crisis team (55.4%) and other (16.3%) to include literacy.

Two hundred forty-five school nurses reported they are also required to fulfill other needs at school. These other needs include: bus duty (9.4%), lunch duty (10.6%), morning duty (7.4%), classroom substitute (5.7%), drug testing coordinator (25.3%), Workman's Compensation (34.3%), emergency preparedness (38%), school secretary substitute (52.2%), attendance clerk (3.7%), Benchmark Testing Monitor (6.1%) and other (42%) including wellness committee chair, testing proctor, car duty, translator, and substitute office secretary.

Part 2 Survey Data

One hundred forty-nine school districts representing 229,742 students were reported by 413 school nurses on Part 2 of the Arkansas School Nurse Survey. The results are as follows.

Chronic Illness/Disabilities

Changes in American society, nursing practice and the nature of youth health services have resulted in an increased demand for expert clinical health services in youth oriented settings, such as schools. Advances in health care and technology have increased the survival rate and life expectancy of low birth weight infants, children with chronic illnesses, congenital anomalies and those who have survived traumatic injuries. Some of these children have special healthcare needs, such as technology assistance, medication and treatment administration, and supplemental nutrition that must be addressed while the child is away from home. An even greater number of children have long-term chronic medical conditions such as diabetes, asthma, anemia, hemophilia, seizures, and childhood cancers just to name a few. Some of these conditions require daily management in a setting outside of the home, while other conditions may require only intermittent management or acute care procedures on an emergency basis.

These changes have also heightened the need for population based health promotion, prevention, and early intervention services. Safe and accountable nursing practice requires adherence to the nursing process (assessment, diagnosis, outcome identification, planning, implementation, and evaluation) and systematic, continuous documentation of the individual care provided to clients (AR State Board of Nursing School Nurse Roles and Responsibilities Practice Guidelines).

As a result, an increasing number of students with chronic health conditions attend school. These conditions can affect attendance, school performance, and the student's level of wellbeing. School nurses work closely with students, their families and health care providers as well as school administrators and staff to reduce the negative impact of illness on learning. Some of the responsibilities nurses have in caring for students with chronic illnesses or disabilities are to serve as case managers, evaluate activities of daily living, and assist with the development of appropriate modifications for the learning environment. In the 2012-2013 school year, 48,851 students in the school districts reported having a chronic illness and/or a disability. This represents 21% of the student population of the elementary, middle and high school campuses in these districts. Six percent (6%) of these students reported having asthma, a major chronic illness among school-age children. The numbers and rankings of the ten most reported conditions in these 149 districts can be found in the table below.

Chronic Health Conditions: School Year 2012-2013

Type of Condition (Rank)	Number of Students with Known Condition	
	TOTAL	
ADD/ADHD (1)		17,016
Allergies (Life-threatening) (3)		3,102
Anorexia/Bulimia		115
Asthma (2)		13,669
Autism (6)		1,772
Blind/Visually impaired (7)		1,701
Cardiovascular		726
Cerebral Palsy		455
Cytomegalovirus		12
Cystic Fibrosis		54
Deaf/Hearing Impaired (10)		823
Depression (5)		1,808
Diabetes, Type I		534
Down's Syndrome		214
Genetic Diseases, other		443
Hemophilia/Bleeding disorder		108
Hepatitis B/C		10
HIV/AIDS		8
Hypertension		415
Malignant Disease		66
Migraine Headaches, with Rx (9)		1,175
Neuromuscular Disease		101
Muscular Dystrophy		34
Multiple Sclerosis		16
Orthopedic disability (permanent)		230
Psychiatric Disorder (4)		2,041
Renal Disease		127
Rheumatoid Arthritis		100
Seizure Disorder (8)		1,290
Sickle Cell Anemia		168
Spina Bifida		85
Substance Abuse (known)		307
Ulcers		176
TOTAL		48,851

Health Care Procedures at School

Some students with chronic illnesses and/or disabilities require health care procedures to be performed during the school day. School nurses from the reporting districts revealed 4,740 students needing specialized care. The following table illustrates the diversity of some of the more commonly performed procedures performed at school.

Children requiring specialized care at school: School Year 2012-2013

Procedure	Number of students
Bladder Program	316
Blood Glucose testing	631
Bowel Program	293
Catheterization by Nurse or Aide	34
Catheterization by Self	46
Dialysis (Peritoneal)	5
Diapering/Personal Toileting	674
Feeding Assistance (oral)	365
Nebulizer	337
Range of Motion Exercises	343
Respiratory Care (i.e. oxygen, postural drainage)	35
Stoma Care	72
Suctioning	29
Tracheostomy Care	16
Tube Feedings	156
Ventilator Assisted Care	1
Sub-cutaneous medications	339
Intramuscular Medications	76
Intravenous Medications	3
Other Procedures	97
TOTAL	4,740

Pregnancy

In the school year 2012-2013, there were 528 known student pregnancies. Of these, 76 received homebound services as a result of complications such as pre-eclampsia and pre-term labor. Fifty-four students quit attending school altogether. Forty-two students were diagnosed as high risk requiring frequent monitoring of blood pressure, contractions and other symptoms indicating an increase in blood pressure.

Students known to be pregnant: School Year 2012-2013

	TOTAL
Total number of known pregnancies	528
Number receiving homebound services	76
Number who dropped out of school	54
Number diagnosed as high risk	42

Abuse/Neglect

In an effort to protect all students, Arkansas Law states “It is the public policy of the State of Arkansas to protect the health, safety, and the welfare of minors within the state.” In addition, among the list of mandated reporters of suspected abuse or neglect are “a licensed nurse, mental health professional, school counselor, school official, social worker, and teacher” (Act 1236 of 2011). In the 2012-2013 school year, school nurses from the 148 school districts indicated there were 1188 reported cases of child abuse, 257 cases of sexual abuse, 868 reported cases of neglect and 445 other cases of abuse for a total of 2,758 cases of abuse.

Reported Cases of Abuse: School Year 2008-2009

	TOTAL
Reported cases of child abuse	1188
Reported cases of sexual abuse	257
Reported cases of neglect	868
Reported cases of other abuses	445
TOTAL CASES OF REPORTED ABUSE	2,758

Medication Administration

During the 2012-2013 school year, school nurses reported that 48,931 students received medication while at school. Of these, 6,191 students received prescribed medications on a long-term basis, that is, longer than three weeks. Another 7,912 students received prescribed medications on a short-term basis, less than three weeks. Eleven thousand five hundred sixty-four students were given medications on a PRN (as-needed) basis. These PRN medications were prescribed by the student’s health care provider (HCP) and sometimes include Over the counter (OTC) medications include but are not limited to acetaminophen, ibuprofen and benadryl. The largest number of students receiving PRN medications (23,264) are OTC medications without a health care provider’s order.

Number of students receiving medications at school: School Year 2012-2013

	TOTAL
Students on long-term medicine (>3 weeks)	6,191
Students on short-term medicine (<3 weeks)	7,912
Students on PRN medicines with a HCP’s order	11,564
Students receiving PRN meds without a HCP’s order	23,264
TOTAL	48,931

Rescue medications include rescue asthma inhalers, glucagon, rectal Diastat (valium), Versed (midazolam), Ativan (lorazepam) and epinephrine auto-injectors.

Rescue Medication	# Students with a prescription for medication	# Students receiving medication	# Students with condition specific emergency action plan	# Doses administered by a licensed nurse	# Doses administered by an Unlicensed Assistive Personnel (UAP)	# Times 911 was called during episode
Epinephrine	2137	55	2076	27	1	17
Glucagon	457	10	446	20	0	1
Fast acting beta agonist (Albuterol)	8640	8175	7121	59,507	5328	30
Rectal Valium	334	41	321	46	0	17
Nasal Midazolam	26	16	27	93	4	2
Buccal Lorazepam	8	11	7	17	1	0

Injuries/Emergency Care

Injuries are common occurrences in the school-aged population. Many minor incidents occur to students and staff during the course of the school day. School nurses reported 397,125 at-school minor injuries requiring first-aid and 21,244 major injuries requiring EMS or immediate care by a physician or dentist and loss of at least ½ school day.

Injuries requiring EMS or immediate care by a MD or dentist AND loss of at least ½ school day(s)

Type of injury (give # in each category)	Bus	Hall	Class-room	Play-ground	Athletics	PE Class	Agri Shop	Rest-room	Lunch-room	Other	Total
Respiratory emergencies	41	123	285	568	297	196	0	10	19	68	1607
Head Injury	22	125	278	1164	439	223	4	18	8	95	2376
Back Injury	208	37	28	133	123	39	1	10	4	20	603
Eye Injury	16	113	277	352	105	83	33	11	7	53	1050
Fracture	21	66	56	642	284	182	5	2	5	170	1433
Sprain or Strain	25	103	122	2124	1712	552	6	9	7	260	4920
Laceration	23	153	334	2652	421	232	90	11	18	331	4265
Dental Injury	4	13	88	282	58	62	0	1	7	84	599
Anaphylaxis	0	1	29	14	0	0	0	0	6	8	58
Psychiatric Emergencies	14	84	298	92	12	3	0	6	12	72	593
Heat Related Emergencies	3	17	89	58	43	55	2	0	0	10	277
Other	43	1048	1159	1094	21	6	0	0	11	81	3463
TOTALS	420	1883	3043	9175	3515	1633	141	78	104	1252	21,244

There were adverse outcomes for some of the students with serious injuries occurring at school. Sixty-four serious injuries resulted in a permanent disability. Two hundred thirty-six injuries occurred as a result from an incident requiring law enforcement intervention.

Other Services

It is important to note that the 413 school nurses also reported the number of vaccines provided at their school through the collaboration between their district and local health unit(s). Three hundred seventy-six nurses reported holding the immunization clinic during school hours, another 24 nurses held the clinic after school hours and 39 reported they did not hold an immunization clinic.

Presently, there are 21 school based health centers in Arkansas. With this opportunity, several districts reported other health care professionals providing services for their students. These professionals included physicians, advanced practice nurses (APNs), physician's assistants (PA), Audiologist, eye doctor, registered dietician, mental health professional, certified diabetes educator, dentist, and dental hygienist.

School nurses also are involved in health care coordination. These activities include parent/guardian conferences, 504/Individual Education plan (IEP) conferences with special education personnel, home visits, consultations with health care providers, meetings with support staff, and community partners.

Special Considerations

It is important to note that in the 148 reporting school districts there were 5 students with a Do Not Resuscitate (DNR) order. Of these five, 3 nurses reported their administrator was in agreement with the DNR orders for the students, one administrator was not and one did not indicate agreement or disagreement.