

School Nurse Survey 2014 Report

Background Information

Alabama Administrative Code Chapter 610-X-7-.06 (9) specifies, “The School Nurse Consultant or School Nurse Administrator shall submit a report(s) to the Alabama Board of Nursing in a format specified by the Board upon request”. For this report, public school nurses in Alabama completed a School Nurse Survey during the academic year 2013-2014. The purpose of this report is to obtain accurate, current data from public schools regarding medications, health care procedures performed, and/or delegation by nurses to unlicensed school personnel. To obtain the report, the Board has implemented an annual online survey to be completed by each public school district. Trends for this survey’s results will be focused on diabetic and anaphylaxis care to include medications provided and treatments delivered.

According to the 2014 National Diabetes Statistics Report “about 208,000 people younger than 20 years have diagnosed diabetes – type 1 or type 2.” Public schools in the state of Alabama were mandated by the Alabama Safe at Schools Act, Alabama Act No. 2014-437, to implement a training curriculum to teach unlicensed school personnel diabetic management. Alabama Safe at Schools Act: Act 2014-437 Section 3 (a) states that, no later than the beginning of the 2015-1016 school year, the Alabama State Department of Education, in consultation with the Alabama Board of Nursing, shall develop guidelines for the training of school employees in the care needed for students with diabetic medical needs according to the student’s Individualized Health Plan, the medical authorizations of which are limited to permitting the administration of injectable medications specific to his or her diabetes. The curriculum was developed and will be implemented this school year, 2015-2016.

Alabama Act No. 2014-405, Anaphylaxis Preparedness Program, passed in the regular legislative session. The Anaphylaxis Preparedness Program shall incorporate the following three levels of prevention initiated by licensed public school nurses as a part of the health services programs:

- (1) Level I – Primary Prevention: Education programs that address food allergies and anaphylaxis through both classroom and individual instruction for staff and students.
- (2) Level II – Secondary Prevention: Identification and management of chronic illness.
- (3) Level III – Tertiary Prevention: The development of a planned response to anaphylaxis-related emergencies in the school setting.

Sample

1,392 schools participated in the submission of data. 1,392 schools represented both county and city schools in the state of Alabama. Some school nurses failed to complete the entire survey or completed only certain sections of the survey due to missing data from some of the schools within their assigned area.

Information Findings

The data from the reports was analyzed using simple descriptive statistics (counts, means, and sums) for each item. Statistical analysis occurred using the Statistical Package for the Social Science (SPSS) version 22 and Excel 2013. Some items had evidence of discrepancies in the responses, which made this data questionable. Findings are reported based on response per item, since not all respondents chose to answer each question. Limitations were that school system employees, both licensed and unlicensed, self-reported the data; therefore, the accuracy and consistency of the data reported is uncertain.

The 2014 survey separated questions by those pertaining to registered nurses (RNs), licensed practical nurses (LPNs), and unlicensed staff. These results are found in Figure 1 licensed personnel and Figure 2 unlicensed medication assistants.

Figure 1

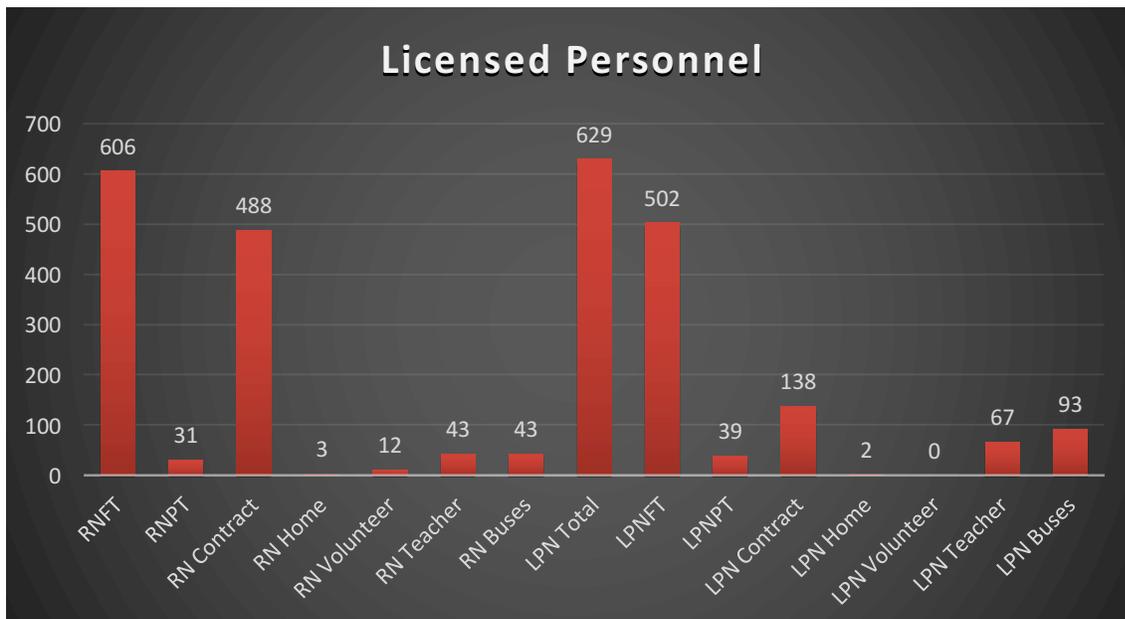
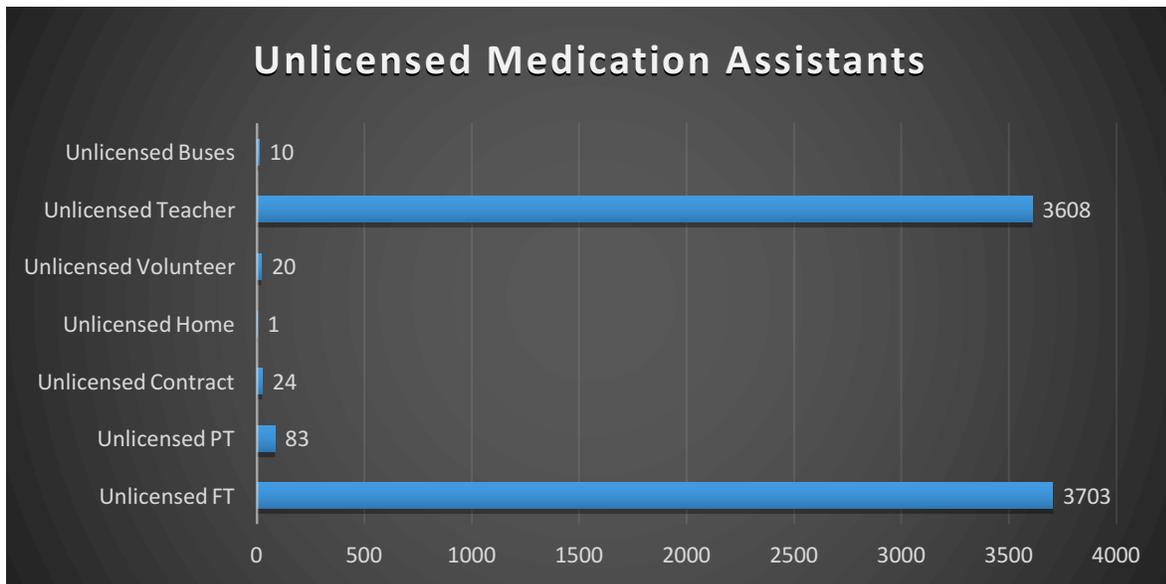


Figure 1 noted an increase in the use of contract staff. Is this high a result of number of times contract staff was used or a combination of schools staffing fulltime positions with

contracted staff or contracted staff being utilized for fulltime staff coverage for personal/sick leave and extracurricular school-related activities? This information will be compared to the next survey to whether there is a trend toward utilizing contract staff as fulltime employees.

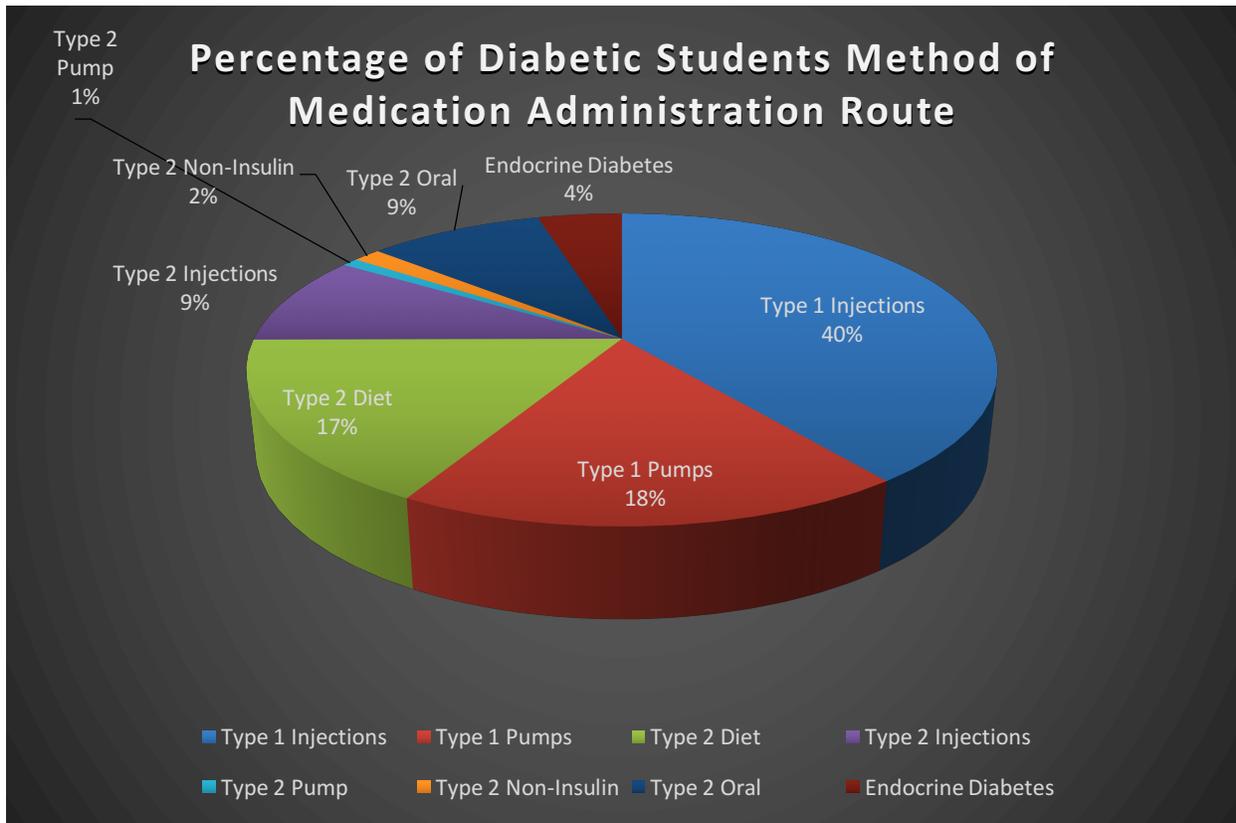
Figure 2 identifies 2014 school year unlicensed personnel who assist with medication administration in public schools.

Figure 2



Prior to this survey, personnel categories were reported as the numbers of RNs and LPNs combined who were functioning in the public school systems; unlicensed medication assistants were not reported separately. The current survey will request this data and the data will be analyzed to determine the Safe at Schools Act has had an appreciable effect on the delegation of administration of insulin and glucagon to unlicensed school personnel.

Figure 3



Schools were also surveyed regarding the route of administration for diabetic medications. 85% of the students diagnosed with diabetes required insulin administration and 32% had glucagon orders (Figure 4).

Figure 4- School Year 2013-2014 Glucagon Orders

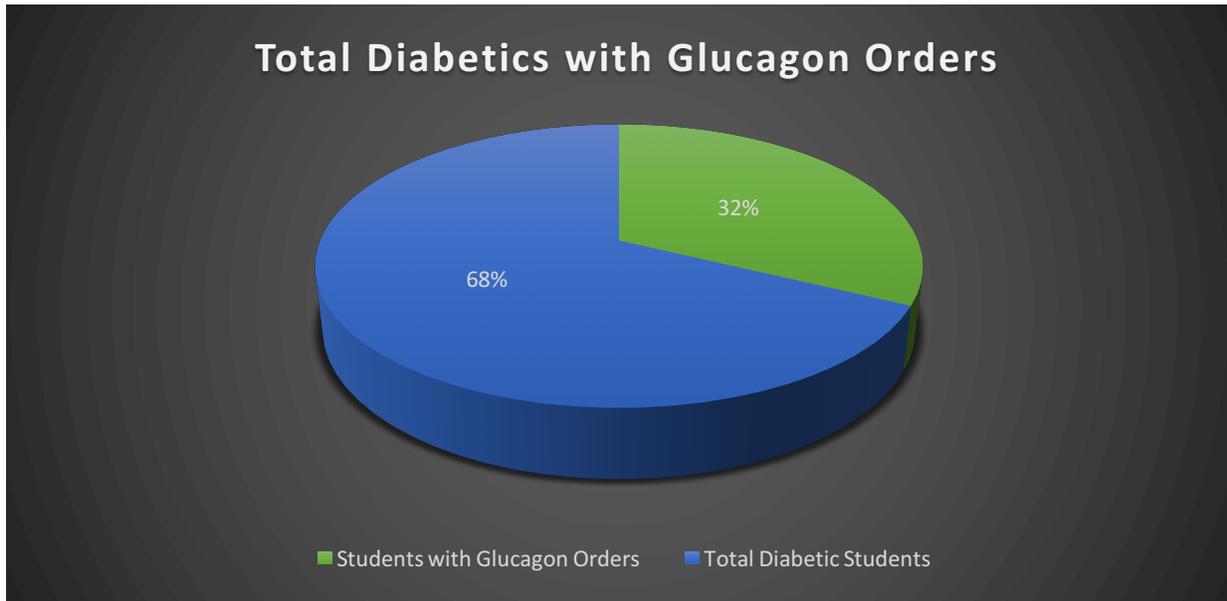
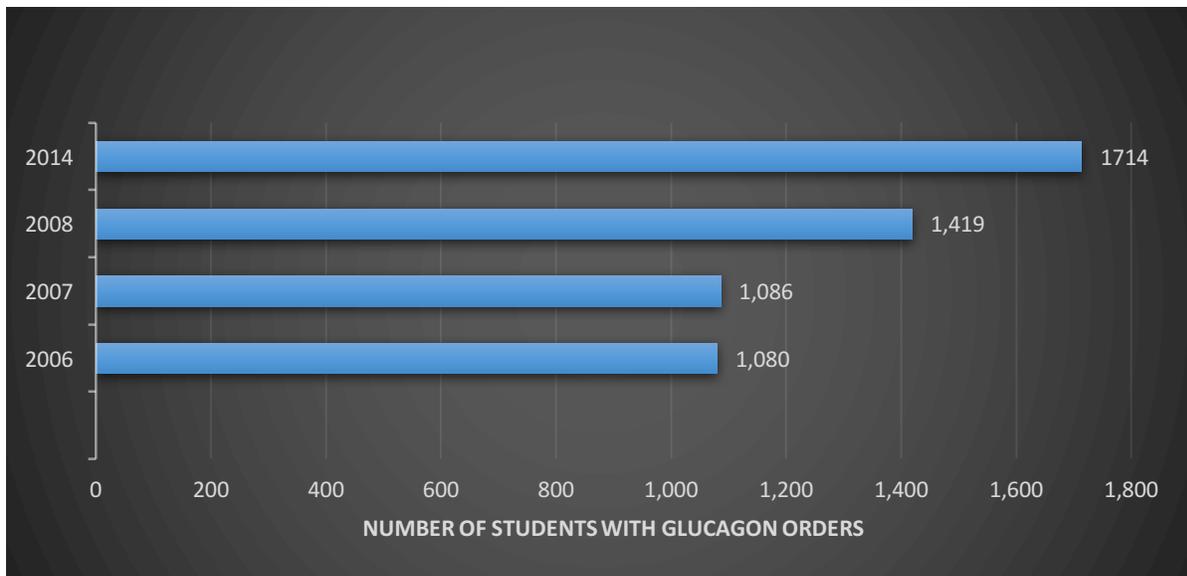


Figure 5

History of Students with Glucagon Orders



Data in Figure 5 shows an increase in the number of students with glucagon orders in the school setting from 2008 to 2014. Data, however, is not available for several years to note whether there was an increasing or decreasing trend in the number of students with glucagon orders.

Figure 6

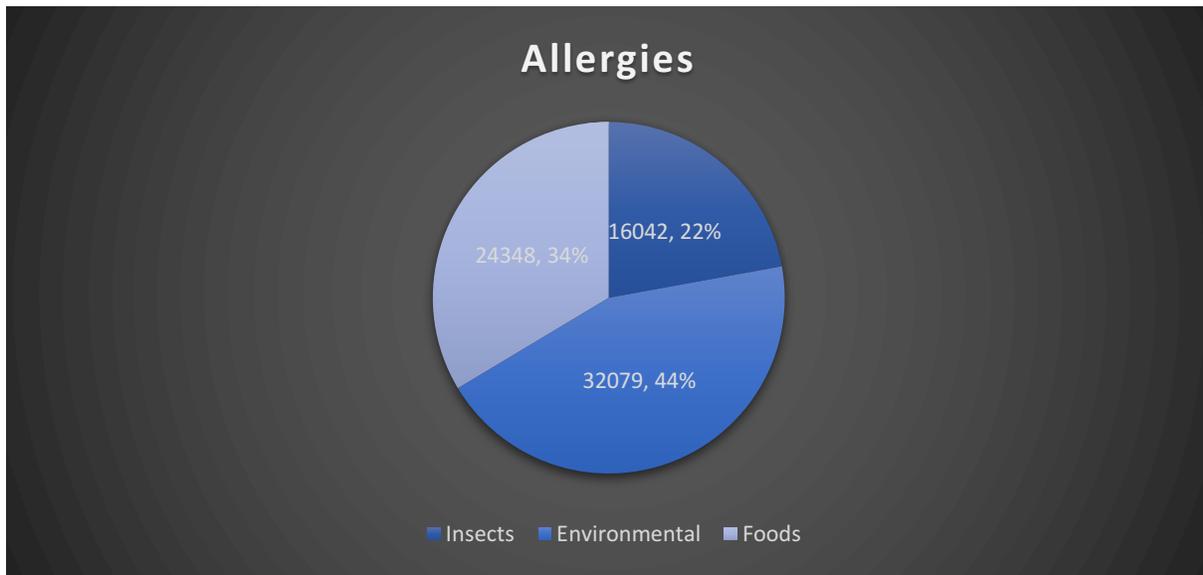
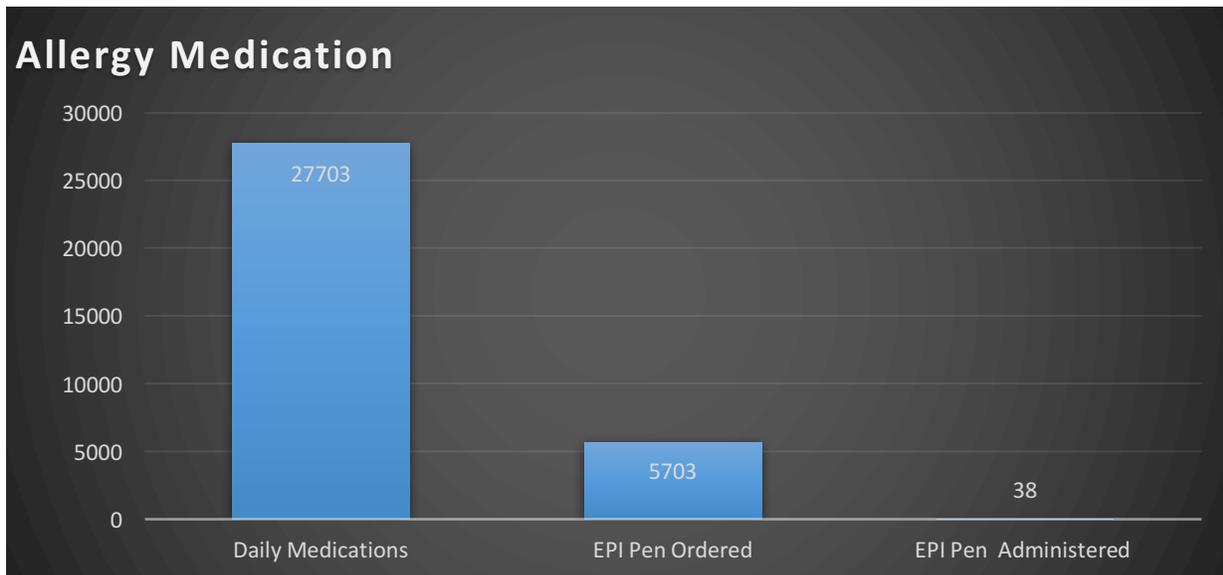


Figure 6 Allergies and breakdown of identified allergies by type of causation.

Total of 72,469 students reported having an allergy. Data identified environmental as the highest percentage causation factor to produce allergic symptoms.

Figure 7



38% (27,703) had an order to administer non-emergency medications at school. Epi-pen for emergency reactions was ordered for 5,703 students. The emergency administration of the EPI was 38 dosages.

Table 1 Other Medical Conditions

Conditions Experienced by Students	2006 Year	2007 Year	2008 Year	2014 Year
Asthma	35,025	36,933	31,436	70,417
Attention deficit disorders/attention deficit hyperactivity disorder	18,381	20,655	30,552	122,712
Seizure Disorders	4,240	4,693	4, 827	4,993

Schools were also surveyed on the numbers of students with physician's orders for specific medications or treatments. **Table 1** provides data for the top 3 medical conditions, based on the number of students with the condition. It was found that the number of students with the condition of attention deficit disorders showed a significant increase from year 2008 to academic year 2013-2014.

ABN Administrative Code 160-X-7-.02(6) identifies specific tasks that shall be delegated by the school nurse. A task cannot require the exercise of independent nursing judgment or intervention. **Table 2** shows the data that is currently identified as skilled care or a task that cannot be delegated.

Table 2 Skilled Nursing Care

Treatment/Condition	2008 Year	2014 Year
Ventilator Care	1	8
Gastric Tube feeding/stoma care	341	422
Conditions requiring 1:1 nursing care	Question not asked	338

Table 3 Medication Administration

Type of Medication	Student with Physician Order	Emergency Medication Administered
Medication to treat Attention Deficit disorders	4000	Non-applicable
Inhalation Therapy	21,465	Non-applicable
Diastat®	860	183

The previous medication administration data survey was based on how many doses were given versus how many students had orders for the medication to be given in the schools. One school reported 720 students with orders for attention deficit disorders medications. It is unknown whether this school system had 720 students with orders for the attention deficit disorders medications or it was dispensed 720 times.

In the 2008 survey it was noted 1,702 students had orders for Diastat®, but the 2014 survey noted a decrease in the order (**Table 3**). Diastat® is an emergency medication used primarily to treat seizures lasting over a specific time (usually five minutes).

The State of Alabama passed the Automated External Defibrillator (AED) Act in April 2009. This act required that an automated external defibrillator be placed in each public K-12 school in Alabama. 2008 data survey results show availability of AEDs based on the written physician order. The 2014 data captures the placement after the Act. Data shows 1,783 AEDs are in place in the public schools; this data does not indicate whether one AED is in every school that provided the data, because some schools have more than one AED and some schools failed to provide an answer.

Implications

The ABN's legal mandate is protection of the public's health, safety, and welfare. The ABN collaborates with the State Department of Education and other stakeholders to revise and develop rules regarding school nurse practice with the intent to provide better student protection. With the collection of this health service data, the ABN has a better understanding of the school nurse's role and the health procedures and medications commonly provided for Alabama public school students.

Recommendations

The data collection tool used for the 2013-2014 academic year proved too labor-intensive for the schools, especially since a majority of the schools do not maintain adequate data for the services they perform. The feedback received from lead nurses suggested that they need an easier method by which to collect the data and maintain it throughout the school year.

Changes and information pertaining to the 2015-2016 survey are:

- Will continue to be an online survey that can be exported to Excel format.
- Personnel section has been simplified to identify the lead nurse and the school nurse completing the survey. The selection will appear from a drop down menu instead of by typing in the nurse's name.
- Only one sign-in required for a nurse completing the survey who is assigned to multiple schools.
- Questions clarified to simplify the number of procedures as opposed to the number of students requiring the procedure.
- Beta testing by Blount County School System before being rolled out for all school systems to complete.
- The tentative plan is to release the survey on November 1st and allow 6 weeks for completion, with a deadline of December 17, 2015. We are looking at the possibility of utilizing the schools current system INOW health documentation record, if the information can be captured and uploaded to our system. This would allow for ease of use of the school nurse.
- Instructions were presented by the writer at the Summer 2015 School Nurse MEGA conference.

Conclusion

The ABN's IT department continues to develop the school nurse survey. The goal is to share meaningful data with stakeholders in nursing, school superintendents, legislators, and other contacts to demonstrate the growing demands of student health service provision on schools. The ABN will continue to use the results from future data collection to guide regulatory needs in school nurse practice and to revise the administrative rules as needed to protect the public.