

# PASNAP School Health Update 2023

**Pennsylvania Department of Health  
Bureau of Community Health Systems  
Division of School Health  
Colleen Schultz M.Ed., CSN RN**

# Division of School Health

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  - Ed Woods, RN
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  - Christine Weltmer,  
Administrative Officer 1

Professional Caregiver  
Invaluable  
Improves Attendance  
Awesome Educated  
Emergency Disease Manager  
School Nurse  
Listener Compassionate  
Wellness Assessment Skilled  
Healthy Children Learn Better  
Caring Healer Kind

# School Health Consultants

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# Session Overview



- Big Picture – Role of School Health Division
- Describe how school health data can be used to advocate and define a role
- Review Field trip considerations
- Discuss FAQ topics
- Q&A

# School Health Program



Ensure the integrity and continuous improvement of Pennsylvania school health programs to advance the health, safety and academic success of PK-12 school students.



# School Health Website Resources

## School Health

The School Health Program is the oldest program of public health services in Pennsylvania, with responsibilities predating 1895. The program serves all children of school age attending public, private and non-public schools in Pennsylvania and is responsible for providing technical assistance, training and coordination of programs and services to schools, parents and the community at large regarding school health programs and services.

### Coronavirus Information

- [PA Department of Health Coronavirus Resources for Schools](#)
- [CDC Guidance for Schools and Childcare](#) 

[SCHOOL HEALTH  
TOPICS A-Z](#)

[SCHOOL HEALTH  
UPDATES](#)

[SCHOOL HEALTH  
STATISTICS](#)

<https://www.health.pa.gov/topics/school/pages/school%20health.aspx>

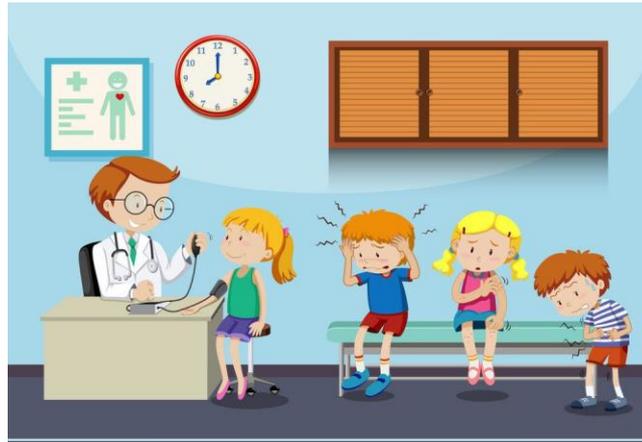
# Data



# Data

How do you use data in everyday school nursing practice?

The image shows two identical 'Nurse's Pass' forms. Each form features a cartoon nurse character on the left. The form includes the following fields: 'Student's Name', 'Teacher', 'Date', 'Time', 'Reason for Visit' (with sub-options for Headache, Stomachache, Injury, Sore Throat, and Asthma), 'Other', and 'Nurse's Comment'.



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**I currently use  
SHARRS data for:**

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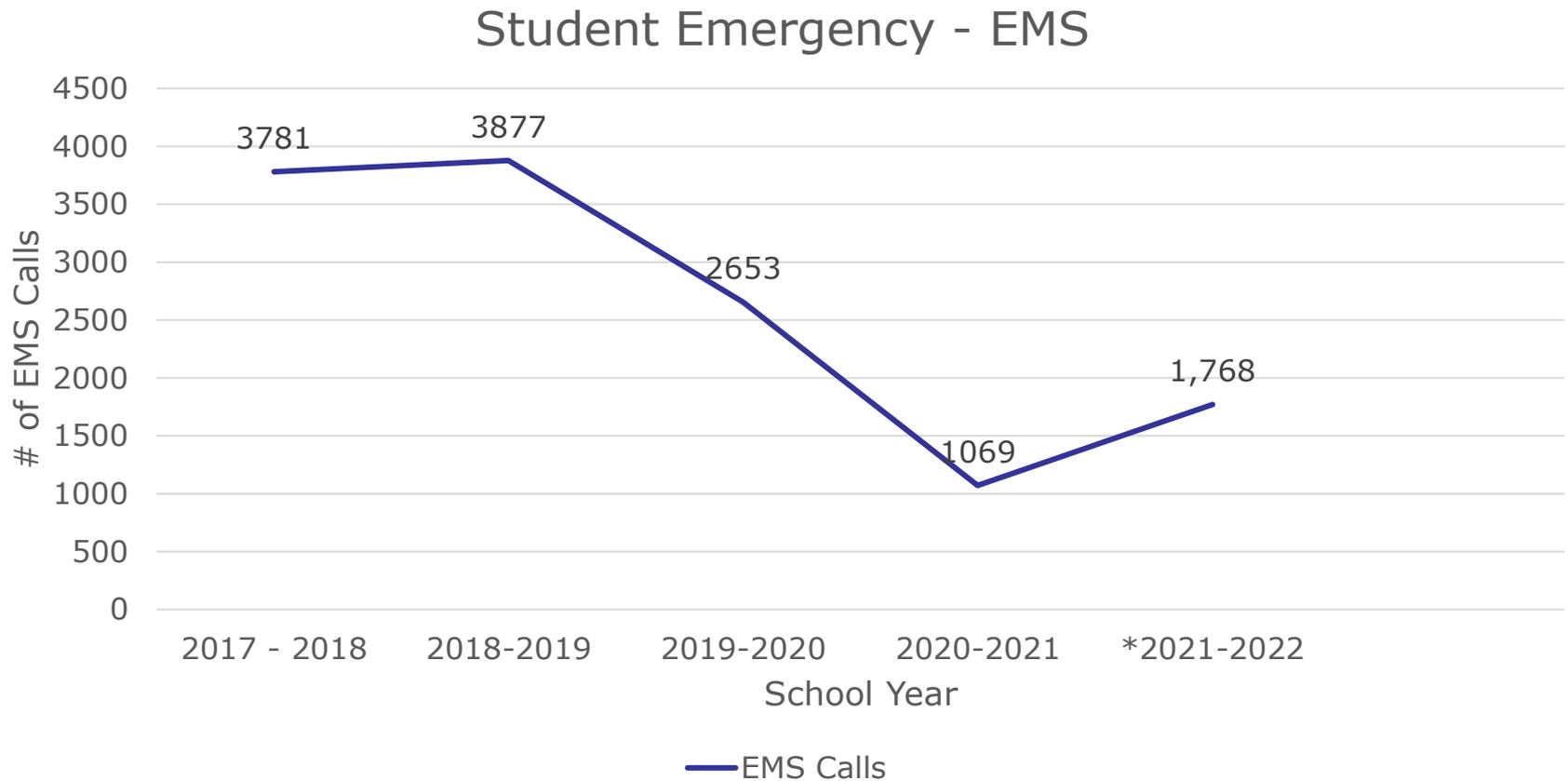
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**In a couple words name  
a reason you have called  
EMS to your school for a  
student**

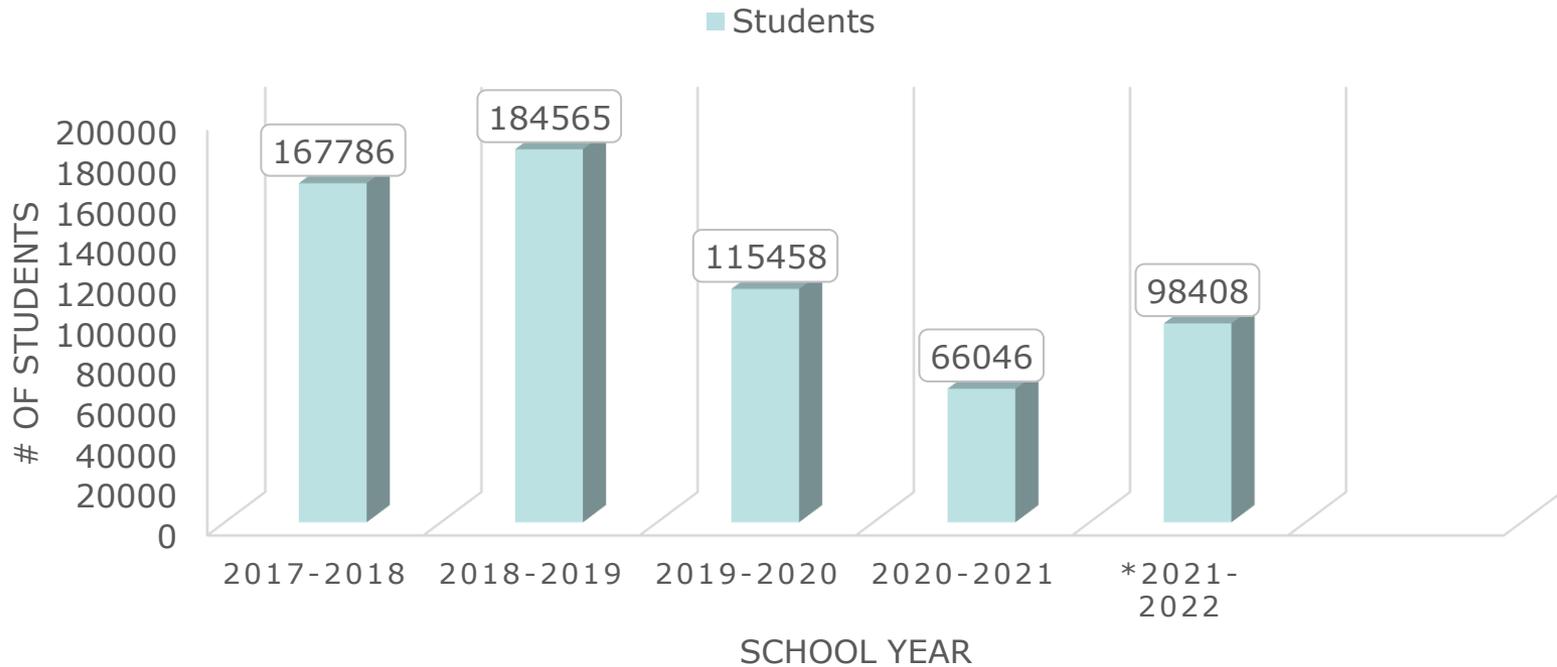
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# Student Emergencies Requiring EMS



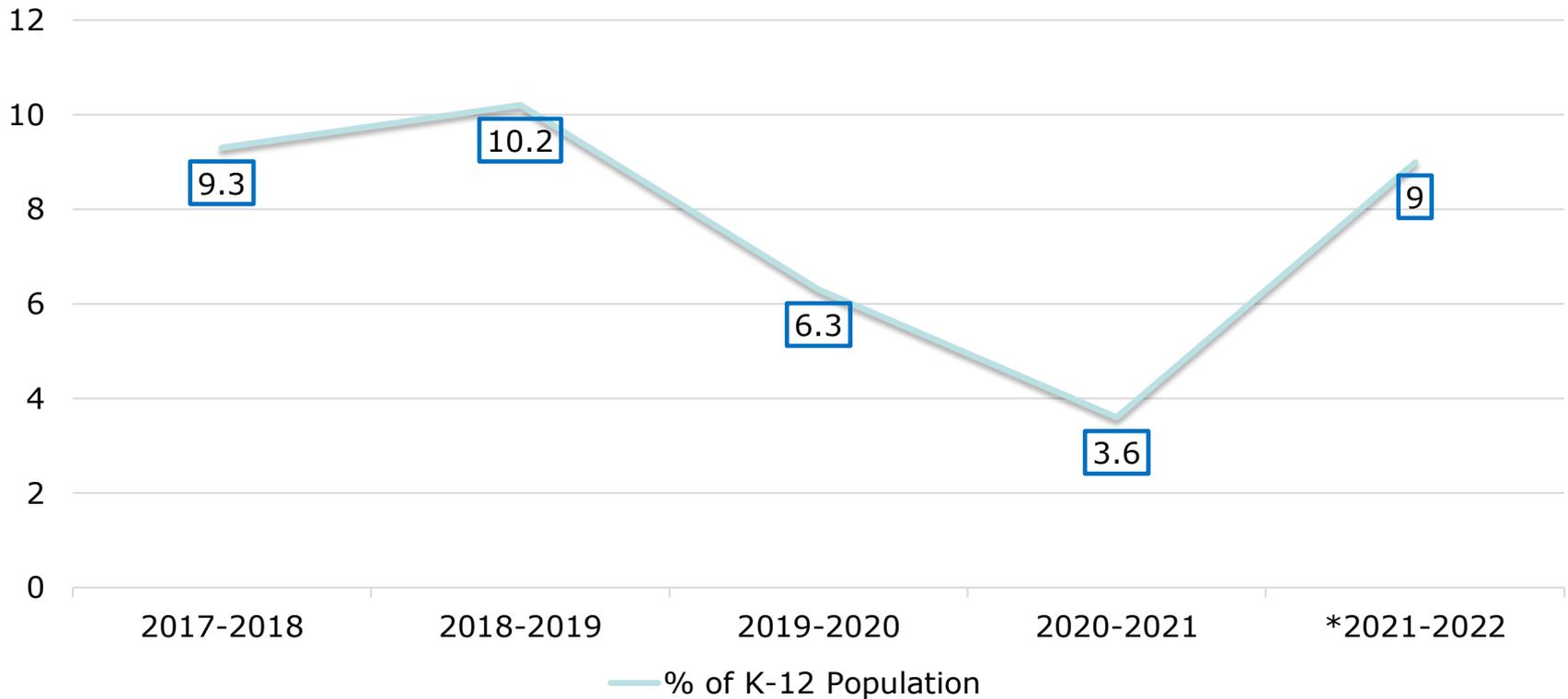
# Students Requiring Skilled Nursing

## STUDENTS REQUIRING SKILLED NURSING PK-12



# Students Requiring Skilled Nursing

## % of K-12 Population



# Data – YOU make a Difference



- For every \$1 spent on school nursing, society saves \$2.20 in terms of increased attendance, decreased health costs including emergency room expenses, and reducing parents lost wages (Wang et al.2014; CDC High Impact Prevention [HIP], (2019)
- “School nurses assist students in learning to manage their health conditions, increasing time in the classroom and decreasing absenteeism. This saves costs to the school district and increases students’ academic success” (National Center for Chronic Disease Prevention and Health Promotion [NCCDPHP], 2017a)

# Field Trips



**Hooray**  
**for**  
**Field Trips**

# Field Trips

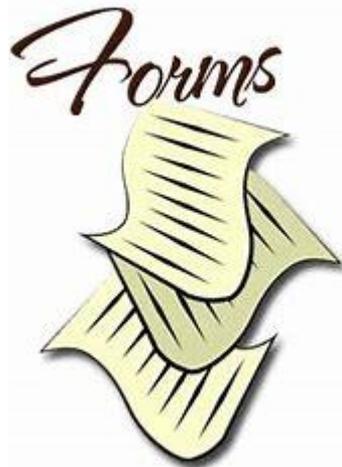
The collaboration of school personnel including school nurses, administrators, teachers, other school staff, parents, and students results in successful field trips.

# Field Trips

- Students on field trips are entitled to the same health services, including medication administration, to which they are entitled while attending school.
- Field Trips (Section VIII in medication guidelines)
  - Can't refuse student attendance on field trip because nurse not available (IDEA/504)
  - May not request waiver of liability from parent in relation to medication administration (Berlin Brothers Valley SD-1988)
  - Advance notice to nurse for planning
  - Limit # of field trips from building per day

# Field Trips

Does your school have a field trip notification form for the school nurse?



# Field Trips

## Consideration:

- School Nurse Field Trip Notification Form
- Timeline for notifying school nurse

What does this look like?

In State - 10 days

Out of State – 20 days

Out of Country – 30 days

# Field Trips

## **School nurses are the healthcare experts.**

- Identify the health needs of the students
- Preparation in state, out of state, overnight, out of country
- Obtaining orders/parental permissions
- Medications in properly labeled pharmacy container with only the amount of medication needed for field trip
- Medications, usually taken at home, but required for overnight field trips shall meet the same requirements for safe medication administration within the school setting

# Field Trips

## Does your school have a policy?

The Administration of Medications  
During Field Trips and Other School-  
Sponsored Activities



# Field Trips

- Field Trips
  - ▣ Invite parent or parent designee
  - ▣ Utilize licensed nurse from sub list
  - ▣ Licensed volunteer
    - ▣ Need clearances
    - ▣ Approval as district volunteer
  - ▣ Provider permission required to change dosage time or skip a dose of medication
  - ▣ Pennsylvania licensed prescriber order and written parental consent are required for all medications, including OTC's

# Field Trips

## Parental Designee:

- The parent must provide the supplies and training if the parent delegates treatments or medication administration to a responsible adult.
- The school nurse may not provide training, supplies, or medications, and must not be involved in the delegation process per the Pennsylvania Nurse Practice Act.
- The parent may not delegate responsibility for administering treatments or medications to any school staff member, school-designated trip chaperone or secondary student.
- The parent may not prescribe or alter treatments or medication administration orders for the school nurse or other licensed professional unless the parent is a Pa. licensed prescriber.

# Field Trips

- Consider: orientation to district, CPR, first aid, TB test if > 10 hours per week in direct contact with students.
- EMTs and paramedics function under EMS medical command only, so they may not be utilized.

# Field Trips

- Delegation to student by parent not allowed
  - ▣ Student under school jurisdiction
  - ▣ Zero tolerance drug policies
- Self-administration by student
  - ▣ Emergency medications only

# Field Trips

- Self-administration and/or self-carrying may be permitted for certain medications: rescue inhaler, epinephrine auto-injector, and diabetes medications (Glucagon/insulin).
- School policy should clearly outline all the guidelines that need to be in place for a student to self-carry and self-administer only those specific medications.

# Field Trips

- If self administration or unlicensed staff are permitted, it requires at a minimum:
  - ▣ School policies and procedures.
  - ▣ Provider order and permission.
  - ▣ Parent/guardian permission.
- CSN determines staff designation based on a student's health needs.
  - ▣ CSN assures staff training is completed.
  - ▣ CSN assesses staff/student annual competency.
  - ▣ CSN assures student acknowledgement.

# Field Trips

- The following emergency medications may be administered by school staff (licensed and non-licensed with proper training and school policy):
- [Epinephrine Auto-injectors](#)
- [Narcan \(naloxone\)](#)
- [Rescue Asthma Inhalers](#)
- Glucagon (per Act 86 of 2016)

Diabetes care and medications ONLY if the school (district, charter, private/non-public) fully implements **ALL** requirements of Act 86.

<https://www.health.pa.gov/topics/school/Pages/Diabetes.aspx>

# Field Trips

## **Out-of-state field trips**

- For an out-of-state field trip, the school should ensure the nurse and/or licensed volunteer is permitted to practice in the state. Contact information for the Boards of Nursing can be located at:

<https://www.ncsbn.org/contact-bon.htm>

## **Out-of-country field trips**

- For an out-of-country field trip, the school should contact that country's consulate to ensure the nurse and/or licensed volunteer is permitted to practice in the country under their Pa. license. The United States Department of State may be of assistance in reaching a consulate or US Embassies at:

[International Travel \(state.gov\)](#)

[Official list of embassies from the U.S. Department of State \(usembassy.gov\)](#)

# Field Trip Considerations

- Full document located on School Health website under Field trips:

<https://www.health.pa.gov/topics/Documents/School%20Health/Field%20Trip%20Considerations%20updated%20April%202018.pdf>

# Field Trips

## **Nurse Licensure Compact**

- Act 68 of 2021, signed into law in 2021, started the process of adding Pennsylvania to the Nurse Licensure Compact (NLC).
- State Board of nursing needs FBI approval (regarding background checks and transmitting info to the interstate commission of NLC Administrators).
- State Board of nursing is awaiting FBI approval and is working on draft regulations.

# Homeschooled Students

- School districts are responsible to ensure all students living within their district borders comply with compulsory school attendance ([PDE Home Education and Private Tutoring Guide – School District Responsibilities](#))
- Charter, cyber charter, private, and nonpublic schools are responsible to provide the school district with a list of the students enrolled in their schools; private tutors also are responsible to provide the list of their students (24 P.S. § 13-1332).
- Homeschooled students are reported to the school district via an affidavit submitted each year by the supervisor of the program (24 P.S. § 13-1327.1(b))

# Homeschooled Students



- School district Records
- Age vs. Grade

# Homeschooled Students: Affidavit

- Home education programs are to submit yearly affidavits to the school district for each student in a home education program. These are due to the district at the commencement of any new home education program or by August 1 for subsequent years of a home education program (24 P.S. § 13-1327.1 (b)).
- Through submission of homeschool affidavits, school districts ensure students of compulsory school age are enrolled in a legally-recognized educational program.
- The Dept of Education has two ways for parent/guardian to provide information: Affidavit or Unsworn Declaration

# Homeschool: Affidavit vs Unsworn Declaratio



- Affidavit - must be notarized
- Unsworn Declaration - may also be used by a homeschool supervisor, but does not need notarized
  - [Affidavit - Elementary Sample \(grades K-6\)](#) (Word)
  - [Affidavit - Secondary Sample \(grades 7-12\)](#) (Word)
  - [Affidavit - Elementary Unsworn Declaration](#) (Word)
  - [Affidavit - Secondary Unsworn Declaration](#) (Word)

# Homeschooled Students

- PA Public School Code of 1949, § 1327.1 states these students must have:
  - Evidence of Immunizations in accordance with Article XIV 1303 (a)
  - Evidence of Health & Medical services required for students of the child's age or grade level per Article XIV

# Homeschooled Students

- According to PDE's Basic Education Circular (BEC) on Home Education Programs, students must receive the same health tests as public school students
- According to the affidavit form available as part of the BEC, the affidavit is to include attached evidence of immunizations, physical & dental exams & mandated screens

# PDE Basic Education Circular (BEC)

## Enrollment of students

- Date of Issue: January 22, 2009
- Documents which may be requested but not as a condition of enrollment:
  - ▾ Picture identification,
  - ▾ Health or physical examination records,
  - ▾ Academic records,
  - ▾ Attendance records,
  - ▾ Individualized Education Program, and other special education records

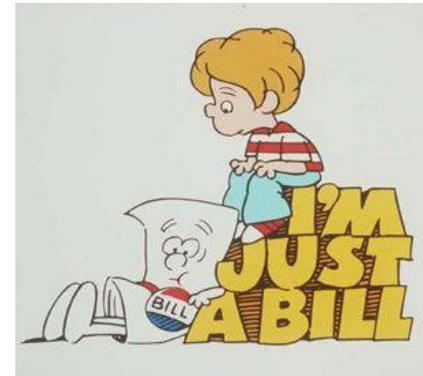
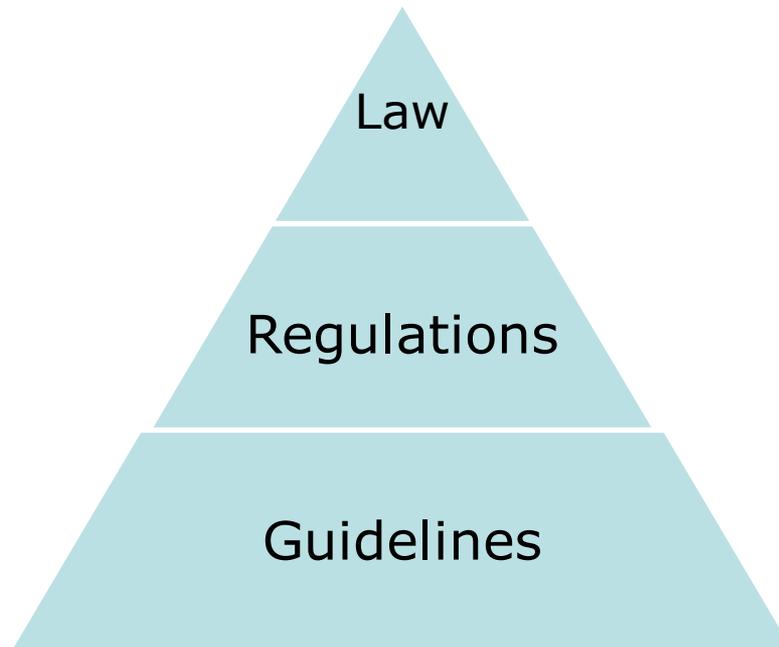
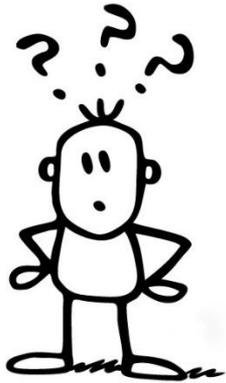
**Although schools may ask for any of this information, they may not require it as a condition of enrolling or admitting a child & they may not delay a child's enrollment or attendance until these documents are provided.**

# Homeschool Resources



- [PDE Home Education and Private Tutoring Guide](#)
- [Basic Education Circular \(BEC\) Home Education Program](#)

# Laws and Regulations



- PA Commonwealth's official publication for rules and regulations: [PA Code and Bulletin](#)

# Laws and Regulations

- School nurses function under multiple laws and regulations:
  - ▣ Nurse Practice Act [Chapter 21, State Board of Nursing](#)
  - ▣ Public School Code [Article XIV](#) (School Health Services)
  - ▣ Federal accommodation laws
    - ▣ IDEA, 504 Service Agreement, ADA
- Licensure requirements in effect regardless of the nurse's practice setting

# Nursing Practice Guides

- The Board cannot, by law, pre-approve a specific practice.
- It is the responsibility of the nurse to practice in accordance with the nurse practice acts and regulations.
- The Board's authority is in context of a disciplinary action.

# School Nurse Duties/Coverage

- The duties of the school nurse are listed at 28 Pa. Code §§ 23.71 to 23.79, and include:

[Chapter 23 School Health, Sections 23.1 - 23.87 School Health Services](#)

- Assist in health program and examining.
- Maintenance of records.
- Advise pupils, teachers and parents.
- Assist in interpreting health needs.
- Provide information.
- Plan for environmental needs.
- Assist in budget preparation.
- Coordinate the school health program with community programs.
- Provide first aid services.



# School Nurse Duties/Coverage

- CSN
  - ▣ Manages caseload
  - ▣ Oversees supplemental staff
  - ▣ If CSN is absent, the caseload must be temporarily redistributed so that supplemental staff have a CSN to report to.

# School Nurse Duties/Coverage

- Supplemental Staff
  - ▣ RN
  - ▣ LPN
  - ▣ Unlicensed Personnel
  - ▣ Agency Nurses



# Supplemental Staff - RN



- Practice of Professional Nursing
  - ▣ Function under own licensure in school setting
  - ▣ Fully responsible for all actions as licensed nurse and accountable to clients for quality of care delivered
  - ▣ Function as part of collaborative team with CSN

Professional Nursing Law

<https://www.legis.state.pa.us/WU01/LI/LI/US/PDF/1951/0/0069..PDF>

# Supplemental Staff - LPN

- Practice of Practical Nursing

- ▣ Function under own licensure
- ▣ Supplemental staff under the direction of the CSN
- ▣ Examples: Provide emergency care to students/staff, administer medications, assist with mandated screenings, assist with health room data entry/clerical duties



## Practical Nursing Law

<https://www.dos.pa.gov/ProfessionalLicensing/BoardsCommissions/Nursing/Documents/Board%20Documents/Practical-Nursing-Law-2022.PDF>

# Unlicensed Personnel

- Medical Assistant



- ❖ Cannot perform any health related activities reserved exclusively for licensed professionals
- ❖ No delegation language in PA Nursing Regulations
- ❖ In school setting: Clerical/administrative functions
- ❖ [CSPG 101](#)

# Agency Nurses

- CSN maintains caseload at all times when student is under school jurisdiction.
- Agency nurse functions as supplemental staff.
- Agency must share most current provider orders and plans of care.
- School nurses should be included in care conferences and receive all updated info.

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**If you cover multiple schools and utilize supplemental staff, how do supplemental staff provide you with updates on student/staff issues?**

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# Screenings and Exams (cont.)

- Parent/Guardian refuses Screen/Exams
  - ❖ Document in chart and try to obtain written refusal.
  - ❖ Educate parent on benefits of screen/exams.
  - ❖ Encourage parent/guardian to have screens/exams done at private provider and to provide the results.
  - ❖ Same guidance would be provided to student who is a legal adult.



# Medication Administration

- [Guidelines for Pennsylvania Schools for the Administration of Medications and Emergency Care](#)
- Schools are accountable to provide safe, legal, and appropriate care for students. This includes the administration of medications necessary while the student is under school jurisdiction.
- School jurisdiction includes but is not limited to:
  - On the way to and from school while in school furnished transportation
  - Class time (including lunch, recess, physical education)
  - School sponsored extracurricular activities, field trips and camps
  - Non PIAA sports/athletic activities (such as intramural activities)

# Medication Administration

The following emergency medications may be administered by school staff (licensed and non-licensed with proper training and school policy):

- ▣ Asthma rescue inhalers;
- ▣ Epinephrine auto-injectors;
- ▣ Diabetes meds (Act 86); and
- ▣ Naloxone (Narcan).



# Medication Administration

- If self administration or unlicensed staff are permitted, it requires at a minimum:
  - School policies and procedures.
  - Provider order and permission.
  - Parent/guardian permission.
- Students may only self carry/self administer:
  - Asthma rescue inhalers;
  - Epinephrine auto-injectors;
  - Diabetes meds (Act 86);



# Medication Administration Asthma

- [Asthma Inhalers in Schools \(Act 187 of 2004\)](#)

Development of plans of care are a standard of nursing practice. Below are template plans which schools may adapt:

- [Asthma Action Plan \(English\)](#)

- [Asthma Action Plan \(Spanish\)](#)

- <https://www.health.pa.gov/topics/school/Pages/Asthma.aspx>



# Medication Administration Epi

- [Pennsylvania School Code, Section 1414.1 Possession and Use of Asthma Inhalers and Epinephrine Auto-injectors](#)
- [Act 195 of 2014 School Access to Emergency Epinephrine](#)
- [Act 2 of 2017-School Bus Drivers and School Crossing Guards](#)
- **Approved Courses and Training**  
Individuals responsible for the storage and administration of Epinephrine must successfully complete a [training approved by the Department of Health](#).



# Medication Administration Diabetes

- Management of Students with Diabetes
- Act 86 of 2016
  - ▣ Voluntary.
  - ▣ If opt in, school must comply with all requirements.
  - ▣ Appropriate policies, permissions, agreements, and orders.
  - ▣ Individual plan in place specific to their diabetes needs.



# Medication Administration Diabetes

- Training and Resources
- [Diabetes in School Children: Recommendations and Resource Guide for School Personnel](#)
- [DIABETES LEVEL 1 TRAINING](#)
- [DIABETES LEVEL 2 TRAINING](#)
- [DIABETES LEVEL 3 TRAINING](#)



# Medication Administration Naloxone

- Naloxone

- ▣ [Act 139 of 2014](#)

- <https://www.health.pa.gov/topics/school/Pages/Naloxone%20Program.aspx>

## Training:

[www.getnaloxonenow.org](http://www.getnaloxonenow.org)

<https://www.pavtn.net/act-139-training>

# Medical Orders

- Prescribed orders are good for one year.
  - Renew orders at the start of each school year.
  - School year officially begins July 1 per the Department of Education.
  - OTC/CAM (complementary and alternative meds) medications require an order.
- Parent/guardian provides orders from the student's licensed prescriber for all medications and treatments.
  - Parent/guardian provides all medications and treatment equipment/supplies for use in school.
- Parent/guardian without prescriptive authority may not direct medical care and treatments.

# Medical Orders (cont.)

- Refer to the medication manual for further guidance.
  - <https://www.health.pa.gov/topics/school/Pages/Medications.aspx>
- Orders should contain student name; name/signature and phone number of licensed prescriber; name and dosage of medication; frequency; route and time of administration; effective start and end dates; and specific directions if needed.
  - Orders may not state, “per package or parental instructions.”

# Medical Orders – Student Name Change

Q: What is guidance for transgender student that requests name and gender change?

## Considerations:

- ▣ Does school district have existing board policy
- ▣ Possible suggestion –medical file/health record listed as the preferred name and gender, but then an indication that they may also be identified by the non-preferred name and gender, *Jane “Ethan” Doe*

[U.S. Dept of Education OCR Resources for LGBTQI+ students](#)

# Plans of Care

- Emergency Care Plan (ECP)
- Individualized Health Care Plan (IHP)
- Individualized Education Plan (IEP) with medical component
- 504 Service Agreement
- Individualized Transportation Plan (ITP)



# Plans of Care

- **ECP** (Emergency Care Plan)
  - Required by professional standards of practice (ANA, NASN)
  - *"Written school nursing management plan to direct actions that should be taken when a student displays signs and symptoms suggestive of a life threatening or seriously harmful health situation."* (Schwab, 2001).
  - Can be part of IHP, IEP with medical component or 504 Plan.
  - Initiated by Certified School Nurse.
  - Does not require parental involvement.

 **Emergency Care Plan** 

# Plans of Care

- **IHP** (Individualized Healthcare Plan)
  - Required by professional standards of practice (ANA, NASN).
  - Initiated by Certified School Nurse.
  - Does not require parental involvement.



# Plans of Care

- Individualized Education Plan (IEP) with medical component.
  - *"Written plan, developed by the IEP team, specifying services for a student (aged 3 – 21 years) in need of special education for a school year or less, as specified in IDEA and state law."* (Schwab, 2001).
  - IDEA- *"Federal legislation that provides access to school and a free appropriate education in the least restrictive environment for children with disabling conditions that interfere with learning."* (Schwab, 2001)
  - Usually initiated by teacher or administrator
  - Requires parental involvement as part of IEP team

# Plans of Care

- IEP (cont.)

- The student must meet one of the 13 disability categories defined by the Individuals with Disabilities Education Act, 2004.
- The student must need special education; that is, the child requires specifically designed instruction to receive educational benefits.
- PDE Special Education Website has helpful resources:  
<https://www.education.pa.gov/K-12/Special%20Education/Pages/default.aspx>

# Plans of Care

- 504 Accommodation Plan

Required by Section 504 of the Rehabilitation Act of 1973 and [22 PA Code, Chapter 15, Protected Handicapped Students](#)

- Section 504- *"The civil rights provision of the Rehabilitation Act of 1973 that bans discrimination on the basis of disability in programs and services receiving federal financial assistance."* (Schwab, 2001)
- School must provide aides, services or accommodations needed for the student to have an equal opportunity to participate in and benefit from school programs.(Selekman, 2006).
- Usually initiated by teacher or administrator.
- Requires parental involvement.

# Plans of Care

- IEP and 504 comparison:
  - IEP – eligible only to students with certain types of disabilities that may need special education.
  - 504 – protects all handicapped students with any physical or mental impairment that limits 1 or more major life activities.



# Plans of Care

- Questions about CSN being case manager of a 504.

- ▣ PA school Code:

- <http://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/022/chapter15/s15.2.html&d=reduce>

*Service agreement*—A written agreement executed by a student's parents and a school official setting forth the specific related aids, services or accommodations to be provided to a protected handicapped student.

**§ 23.34. School nurses.** The duties of school nurses shall be those assigned by the school district or joint school board which are **exclusively connected with medical and dental school health activities.**

# Plans of Care

- **ITP** (Individual Transportation Plan)
  - Standardize assessment of transportation needs for every student.
  - Part of the process of developing an IEP or 504 plan.
  - Sample ITP: [Department of Health Individualized Transportation Plan](#)



# Seizure

- The following medications must be administered by licensed medical professional:
  - Diastat and Versed
- The ONLY meds that an unlicensed staff can administer are:
- Epi auto-injectors, Narcan/Naloxone, Asthma inhalers, and Diabetes meds per Act 86.



# Seizure

- New nasal delivery forms of rescue medications



- ▣ Nayzilam (midazolam) – nasal form of Versed
- ▣ Valtoco (diazepam)- same as Diastat only in nasal delivery
- ▣ Additional information – [Epilepsy Foundation](#)

# Seizure Training (Act 84)

- Act 84 went into effect for the 2022-2023 school year.
  - DOH and the Dept. of Education approved online or in person courses.  
<https://www.health.pa.gov/topics/school/Pages/Act-84.aspx>
  - The training is for school nurses and staff that have direct contact with students.
  - The training is not mandatory, and it does not permit unlicensed staff to administer meds.



# PIAA

- PIAA (Pennsylvania Interscholastic Athletic Association)
- Guidance/regs make no mention of school nurses at PIAA events.
- Coverage for healthcare services during PIAA activities would need to be at the discretion of PIAA and the school.
- 2022-2023 SPORTS MEDICINE GUIDELINES (handbook):
  - [SPORTS MEDICINE \(piaa.org\)](https://www.piaa.org/sports-medicine)
  - [Sports - PIAA](#)



# Puberty Education

- Puberty education falls under the Health/PE educator realm.
- No state requirement to provide puberty education.
- It is included in the [Health/Health and PE CSPG 47](#)
- Special Considerations: School Nurses may supplement instruction on a non-assigned basis in health classes.



# References

- National Center for Chronic Disease Prevention and Health Promotion (2017a). Managing Chronic Health Conditions in Schools: The Role of the School Nurse. Centers for Disease Control and Prevention.  
[https://www.cdc.gov/healthyschools/chronic\\_conditions/pdfs/2017\\_02\\_15-FactSheet-RoleOfSchoolNurses\\_FINAL\\_508.pdf](https://www.cdc.gov/healthyschools/chronic_conditions/pdfs/2017_02_15-FactSheet-RoleOfSchoolNurses_FINAL_508.pdf)
- Wang, L.Y., Vernon-Smiley, M., Gapinski, M.A., Desisto, M., Maughan, E., & Sheetz, A. (2014). Cost benefit student of school nursing services. JAMA Pediatrics, 168(7), 642-648.  
<https://jamanetwork.com/journals/jamapediatrics/fullarticle/1872779>