



SHREWSBURY PUBLIC SCHOOLS



Office of Special Education / Pupil Personnel Services

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**Department of Nursing Report to the School Committee
Data from 2015-16 School Year
Presented by Noelle Freeman, Director of Nursing Services
October 5, 2016**

Introduction

The Shrewsbury Public Schools Department of Nursing plays a critical role in the life of the school and as part of the overall team to support student learning. The nurses are integral in supporting the district's strategic priorities, one of which is the promotion of health and wellness. The school nurses support this goal daily as they work to keep students safe, healthy and ready to learn.

In a recent journal article, the American Academy of Pediatrics "recognizes the important role school nurses play in promoting the optimal biopsychosocial health and well-being of school-aged children in the school setting." Shrewsbury Public Schools' nurses promote students' overall health and empower learners each day through collaboration with school staff, families, outside providers, and the students themselves.

The school nurses in Shrewsbury come from a variety of backgrounds and bring with them a wealth of experience and nursing knowledge. The academic achievement of our students is bolstered by the skillful care that they receive when visiting the health office. The consistent return to class rate from our health offices (93.4%) reflects the nurses' focus on education and learning. Their work ensures that the students of Shrewsbury Public Schools are receiving the care and services that they need to optimize their learning potential.

Mission Statement

The mission statement for the Shrewsbury Public Schools Department of Nursing is:

To promote and advocate for the physical and emotional health and well being of the students, families, and staff in a proactive manner, realizing different individuals will be at varying levels on the health spectrum in their pursuit of educational excellence.

School Nursing Staff

During the 2015-16 school year, Shrewsbury Public Schools Nursing Services employed: 1 Director (51% direct student services and 49% Director responsibilities), 10 full-time nurses, two 0.4 FTE nurses, and 1 part-time 2 hour nurse (Floral Street School), providing health care services to 6,045 students and 814 staff in the Shrewsbury Public Schools.

We have approximately 10 substitute nurses who fill in for the regular staff nurses or accompany field trips when necessary.

The Massachusetts Department of Public Health recommends a school nurse to student ratio of 1.0 fulltime equivalent (FTE) certified nurse in each building with 250 to 500 students. In buildings with more than 500 students, there should be 0.1 FTE for each additional 50 students.

Data Management

The school nurses are responsible for maintaining the integrity and confidentiality of the student Health Record. Each student has an electronic Health Record as well as a paper file. The nurse ensures that all required immunizations are up to date, that state physical exam requirements are met, and that mandated screenings are completed, recorded and reported.

The 2015-16 school year was the inaugural year for SNAP Health Center, our new Electronic Health Record (EHR). As we become more familiar with the intricacies of this system, it will allow for improved documentation of student encounters, medication administration, and information exchanges with parents, staff and community providers.

An “encounter” is defined as any contact with an individual during which the school nurse provided counseling, treatment, or aid of any kind. Mandatory screenings (vision, hearing and postural) are not counted as encounters. Screenings are tracked and reported separately.

For the 2015-16 school year there were a total of **58,978** student health encounters and **1,140** staff health encounters documented in SNAP.

SNAP Health Center separates visits into the following categories:

Injury – Includes encounters in which an injury is reported/evaluated for the first time (injuries may have occurred in school, or outside of school)

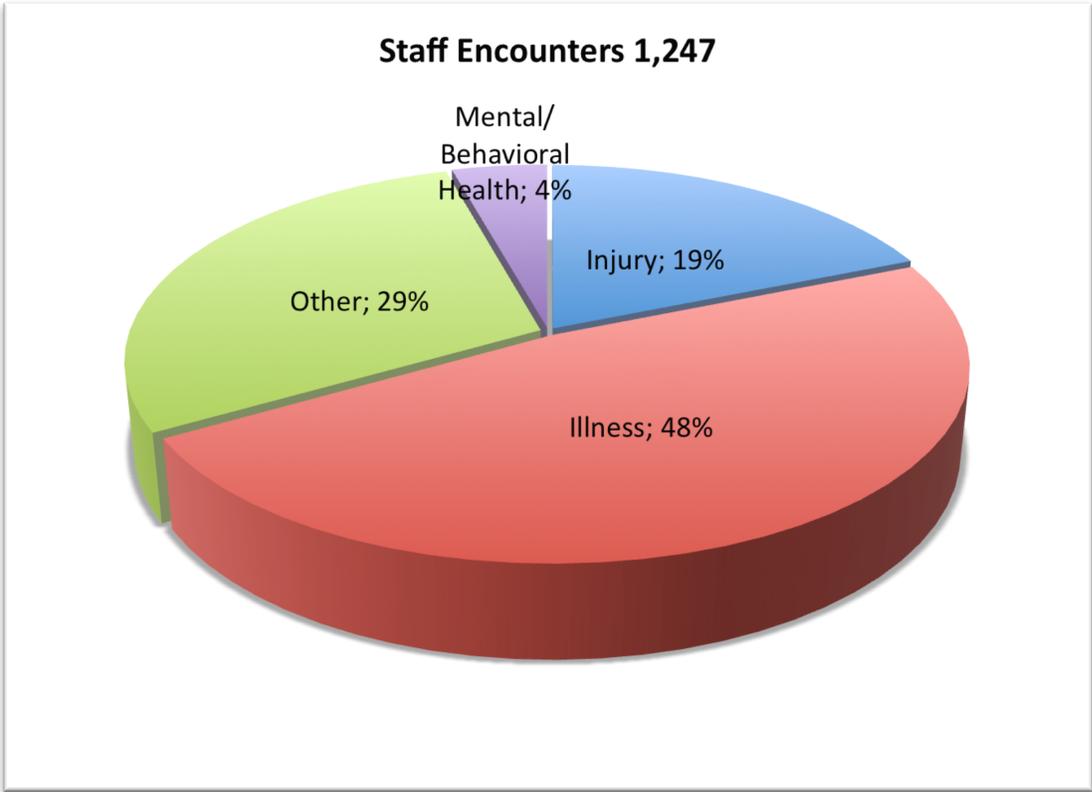
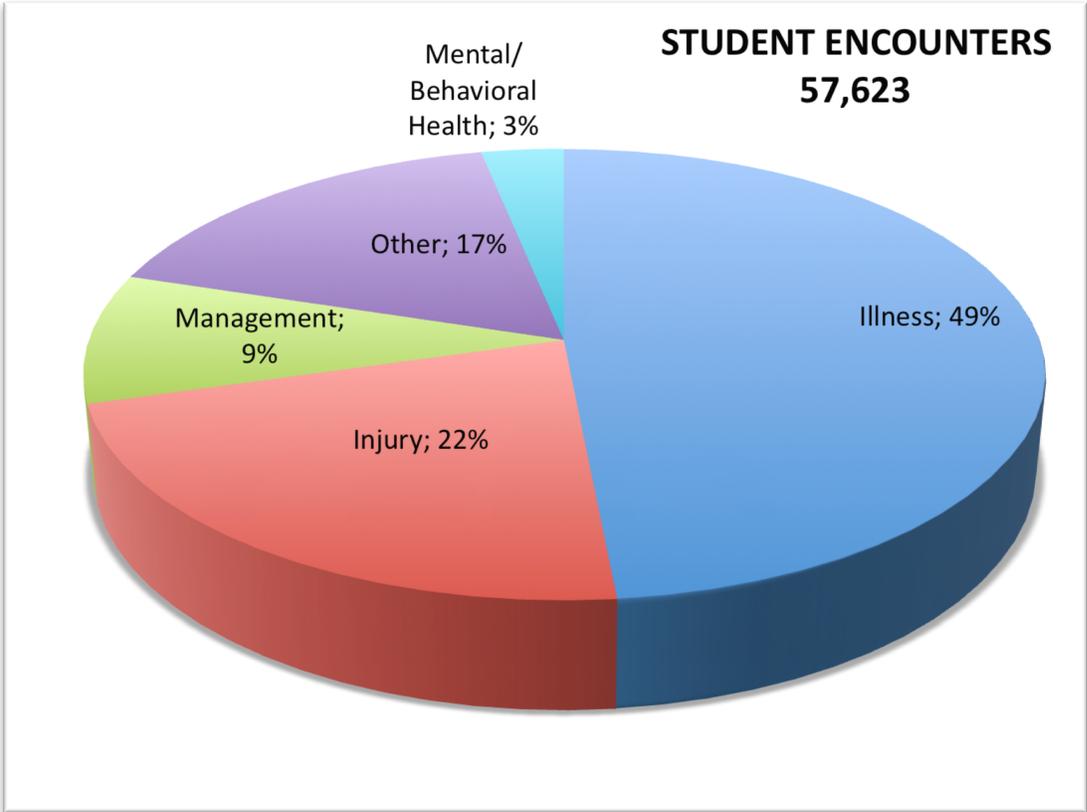
Illness – Includes encounters for chronic and acute illnesses, re-evaluation of injury, and common complaints such as headaches, stomachaches, nosebleeds, fatigue, etc.

Management - Includes encounters that do not include physical care, and instead involve information exchanges with students, staff, family members, etc.

Other - Includes mental/behavioral health concerns such as anxiety and stress (see below*), as well as bathroom use, contact lens care, orthodontic care, assistance with medical devices, etc.

*For purposes of this report, we have further analyzed these categories to create a **Mental and Behavioral Health** category. This includes visits for anxiety, stress, emotional issues, etc.

The charts below represent the percent of visits by students and staff for each visit category.



Following a visit to the nurse, 93% of students return to class and learning.

Primary Responsibilities

The school nurses manage a comprehensive, coordinated health service program that includes:

- Providing skilled nursing care to students and staff who present with a broad range of physical and mental health issues
- Implementing mandated health screening programs (vision, hearing, postural, and BMI)
- Managing the school's medication program
- Managing immunization compliance for incoming and existing students
- Coordinating health care needs for students attending field study trips, field day, etc
- Implementing disease management education for children and families with chronic illnesses such as diabetics and asthma
- Coordinating and/or participating in health related community outreach activities
- Providing a safe haven for students needing additional emotional support

MA Department of Public Health Mandated Screenings

The following school screenings are mandated by Massachusetts state law (M.G.L. c.71, s.57 and 105 CMR 200.000) and are conducted according to the following schedule:

- Vision screenings screening: each year for students in grades pre K, K, 1, 2, 3, 4, 5, 7, and 10
- Hearing screening: each year for students in grades K, 1, 2, 3, 4, 5, 7, and 10
- Heights and weights are measured and BMI is calculated for students in grades 1, 4, 7, and 10. Aggregate data reported to the state as mandated. Individual student data is not reported but is recorded in the confidential student health record.
- Postural screenings: each year for all students in grades 5, 6, 7, 8, and 9

Per MA 105 CMR 200.000, the purpose of mandated screenings is to “identify and take appropriate actions with respect to disabilities and medical conditions of school children in public schools as soon as possible so as to enable all children to obtain the fullest benefit of their educational opportunities ...” Screenings are a tool used for referral for further care and are not considered diagnostic. Letters are mailed home if follow-up for vision, hearing, or postural screening is recommended. BMI data is available by parent request to the nurse.

Hearing and vision screenings are conducted in the health office by school nurses and trained personnel.

Postural screenings, height, weight and BMI screenings are done by the Physical Education (PE) teachers, usually during the first 2 weeks of PE class. If the PE teacher has concerns about a particular student, the student is rescreened by the school nurse.

In order for a student to be excused from any screening(s), the parent/guardian must make a request in writing to the school nurse annually. For postural screening exclusion requests, documentation of screening within the past year by a medical professional must also be provided.

Medication Management and Administration

Students require scheduled medications during the school day for various reasons including ADHD, diabetes, behavioral and mental health concerns, etc. Nurses manage the administration of these medications, as well as medications that are prescribed and given on an as needed basis.

We have Standing Orders for over the counter medications such as Ibuprofen, Acetaminophen, Tums, etc., as well as life-saving medications such as an EpiPens or Albuterol nebulizer treatments. Standing Orders are reviewed and signed annually by our school physician, Dr. Timothy Gibson. A parental consent form, which is now in the PowerSchool Parent Portal, must be completed before these medications can be administered.

For the 2015-16 school year, there were 71 prescriptions for scheduled daily medications across the district, totaling 10,745 administrations. 9,174 doses of medication were given on an “as needed” basis for students, and 336 doses were recorded for staff.

Tracking Immunization Compliance

School nurses are responsible for checking the immunization status of all students who enter SPS. The district welcomed over 600 new students to Shrewsbury during the 2015-16 school year (including Preschool and Kindergarten enrollments). For each of these students, immunization records are checked against Massachusetts requirements and parents/guardians are informed if any immunizations are missing. Students are not permitted to begin school until they are fully immunized (or on a catch-up schedule). Referrals are made to area clinics, including St Anne’s Free Medical Clinic, as needed. This process is ongoing throughout the year as families move into the district.

Field Study Preparation

Preparation includes accessing a list of students who will attend a trip, determining the medical needs of those students (allergies requiring EpiPens, asthma, daily medications, anxiety issues, etc) and assessing the need to send a substitute nurse to care for those needs. If a substitute nurse is required, the school nurse informs her of the needs for the day. If a substitute is not needed, the school nurse must review the needs with the teacher who will be responsible for the students during the trip. In either scenario, the nurse prepares a bag of first aid supplies to be sent along with the adult in charge; medications are included as needed if a substitute nurse is in attendance. SPS nurses prepared medical alert information for approximately 195 field studies throughout the 2015-16 school year.

Procedures/Treatments/Nursing Interventions

School nurses perform various procedures and treatments throughout each day. Some of these include:

- Respiratory Procedures (auscultation of lungs, peak flow monitoring, nebulizer treatment, oxygen saturation check)
- Diabetic Procedures (blood glucose testing, insulin pump care, carbohydrate/insulin calculations, monitoring and treatment of ketones)
- Cardiovascular Procedures (blood pressure measurement, central line care, site care, flushing)
- GI/GU Procedures (Ostomy care, gastrostomy or other feeding tube care or usage)
- Orthopedic Procedures (Wheelchair assistance, crutch-walking instruction)
- Wound Care
- Head Checks for Pediculosis

Disposition after Illness/Injury Assessment

By addressing the immediate health needs of students and providing onsite care, school nurses support learning through improved attendance levels. After assessment and treatment by a school nurse, the majority (approximately 93%) of students visiting the nurses' office with an illness or injury complaint returned to the classroom to continue their studies.

Students who are treated by the school nurse can return to the classroom with minimal interruption to their learning, working parents do not have to take time off, and the high cost of treatment in a doctor's office or emergency department may be avoided.

Emergency Calls to 911

When a student presents to the school nurse with a serious injury or acute medical condition, a determination is made whether or not the situation requires activation of Emergency Medical Services (EMS). The following chart summarizes the number of times that calls were made to 911 in the 2015-16 school year.

Student 911 Medical Emergencies*	8
Student 911 Behavior Health Emergencies	2
Student Calls to Mobile Crisis	3
*EpiPens administered prior to 911 call	2
Staff 911 calls	2

Case Management

The Shrewsbury Public School nurses spend a significant portion of their day performing case management duties that include communication with families, school staff, and community health care providers regarding student health issues. The table below reflects the number and type of these communications that were documented in SNAP by nurses this year. While this number is significant, it does not capture every communication that nurses are involved with throughout the day.

Type of Communications		Total # of Students
Communications with Parents or Guardians	< 15 mins	7,444
	> 15 mins	97
Communications with School Staff about health issues	< 15 mins	1,626
	> 15 mins	95
Communications with Community Agencies	< 15 mins	131
	> 15 mins	4
Number of Group Meetings with staff/Parents	< 15 mins	123
	> 15 mins	56
Total		9,576

Students with Special Health Care Needs

There are approximately 1,700 students in Shrewsbury Public Schools with diagnosed conditions that fall into the category of Special Health Care Needs. These conditions include asthma, life threatening allergies, Crohn's disease, seizure disorders, cardiac conditions, cancer, ADHD, autism spectrum disorders, eating disorders, anxiety, depression, etc. School nurses use their clinical knowledge and past experience to care for students with this wide variety of needs daily. As new or unfamiliar situations arise, nurses seek out colleagues and other resources as needed to increase their skills and knowledge base.

Additional School Nurse Responsibilities

All of the Shrewsbury nurses are involved with the following activities in their respective buildings:

- Individualized Educational Program (IEP) and 504 meetings
- Child Abuse Prevention (CAP) Team
- Building Crisis Team
- Medical Emergency Team (MERT)
- Student Support Team (SST) or Early Intervening Team (EIT)
- Building Leadership Teams
- Clinical rounds with consulting psychiatrist
- Creating and updating evacuation plans for our students with physical impairments
- Maintenance of Automated Electronic Defibrillators (AED's)
- Collection of monthly report data required by Essential School Health Service (ESHS) Program

The following are examples of additional teams/activities that include school nurse involvement in various buildings:

- Classroom presentations on health related subjects
- School Wellness Advisory Committee (SWAC)
- Shrewsbury Educators Association (SEA) Health and Safety Committee
- Shrewsbury Board of Health Emergency Preparedness Team - provide Emergency Shelter staffing as needed
- Responsible for completion of MA Department of Public Health mandated surveys re: Immunizations, Diabetes, Asthma
- Shrewsbury Coalition for Addiction Prevention and Education (SCAPE)
- Coordinating Flu Shot Clinics available to all school and town employees
- Teaching CPR/AED certification classes for school staff
- Partnering with Assabet Valley Collaborative Evolution Program at SHS to ensure the Health and Safety of their students
- Mentoring SHS students who are considering nursing as a career through the Advanced Career Exploration (ACE) Program
- Serving as preceptor for RN-BSN students in their Community Health practicum
- Coordinating food drives, winter coat and hat/mitten, holiday giving collection and distribution in conjunction with school based groups and community organizations (St. Anne's Human Services, Worcester County Food Bank, etc)

- Acting as SHS Class Advisor
- Teaching first aid to local Brownie Girls Scout troops

Essential School Health Service Program

Shrewsbury Public Schools participates as a mentored school district and receives consultation on school health services from the Northbridge School District (funded ESHS program) based on the requirements of the Essential School Health Grant. The grant provides opportunities for consultation in the areas of policy development, programming and interdisciplinary collaboration.

Some of the responsibilities inherent with the grant are to provide data to MDPH. This data is utilized for published studies, statewide reports and strategic planning. The types of information included are:

- Health Service activities
- Incident reports
- Emergency referrals
- Number of diagnosed or suspected head injuries
- Medication management for students
- Epinephrine and naloxone administrations
- Nursing assessments/interventions/procedures/treatments
- Behavioral Health intervention tracking
- Wellness management
- Program development
- Professional development

In return, we receive a stipend of \$3,000 per year. These monies are used for such things as medical equipment and professional development opportunities for nursing staff.

Emergency Equipment

EpiPens

In accordance with new district policy, we are now stocking a supply of EpiPens in each health office. This supply is sufficient to cover the unlikely event of 2 simultaneous anaphylactic reactions in any given health office, along with an additional supply sufficient to send on field studies as needed. Parents have been notified of this practice and given the option to not send an EpiPen from home for use during the school day. Response to this new practice has been positive, and parent choice has varied. Most parents at the high school level have chosen not to send an EpiPen from home, and more parents at the elementary level have chosen to continue to send the medication in to school. (See chart below for details.) Some parents have noted that they may choose not to purchase another EpiPen for school when the current dose expires.

Due to a very recent change in the “EpiPens for Schools” program offered by the company that manufactures EpiPens, our stock supply for this school year was obtained at no cost to the district. In the past the company has supplied 2 2-packs of EpiPens for each building. Through the new program we were able to obtain an additional 34 2-packs at no cost.

School	# Students with Known Allergy	# Students with EpiPen from Home
Shrewsbury High School	100	5
Oak Middle School	51	18
Sherwood Middle School	64	15
Coolidge School	15	9
Floral St School	46	32
Paton School	18	9
Spring St School	31	17
Beal School	17	5
Parker Rd Preschool	6	5
Total	348	115

Naloxone (Narcan)

Each health office stocks 2 doses of naloxone for treatment of opioid overdose. A state-wide effort is underway to address the opioid epidemic. Schools are encouraged by the MA Department of Public Health to stock naloxone for treatment of possible opioid overdose by students, staff or visitors. All nursing staff are trained in the administration of nasal naloxone. Naloxone was purchased at CVS at a cost of approximately \$20 per dose.

AEDs

An automatic external defibrillator is a portable device used to restore normal heart rhythm to a patient in cardiac arrest. Shrewsbury Public Schools has a total of 16 AEDs with at least one AED in every preschool and elementary school (Floral and Coolidge have 2), 2 at Sherwood Middle School, 2 at Oak Middle School (one belonging to Parks and Recreation) and 4 at Shrewsbury High School, one designated for the athletic trainer.

The SPS nurses are responsible for checking the AED status on a regular basis and the Director of Nursing works with the Town's Emergency Management Coordinator to facilitate the updates and maintenance of the equipment. Several of our devices are nearing the end of their predicted "lifespan" and will need to be replaced. A plan to replace these devices over the next few years is currently being developed.

Health and Wellness Initiatives

"Taking Root at Parker Road Preschool" *Project leader Kristin Stewich, BSN, RN, NCSN*

The school garden at Parker Road continues to expand. This project is a collaborative effort with Home Depot of Shrewsbury, and has received additional funding from the Kohl's Associates in Action grant program. This year, a fence with a gate that connects the garden area to the playground was added at Parker Rd and raised beds were installed at Wesleyan. Outdoor speakers were added to enhance the students' sensory experience. Once again, the garden includes vegetables, herbs, and

flowers. Volunteers from the SHS Robotics team participated in the construction of the fence, linking our preschool students with our high school students.

“Healthy Snack Challenge” – *Facilitated by Lisa Smith, BSN, RN, NCSN*

Our district wellness policy encourages students to make healthy food choices. In order to promote this idea, Lisa Smith piloted a healthy snack challenge for one week in February with the students at Paton School. Lisa worked with teachers to create a list of suggested “healthy snacks” and then sent information home to families via letters and the principals list serv message. She created a simple tracking system in which students put a sticker next to their name on a chart for each day that they brought a healthy snack during the challenge week. At the end of the week, Lisa tallied the information and the winning classroom at each grade level was rewarded with a fruit tray provided by our Food Services department.

“Strategies for Building Emotional Resilience in Middle School Students” *Facilitated by Noelle Freeman, BSN, RN, NCSN in collaboration with Kristin Minio, LMHC, and Jenni Lencioni, LMHC OMS School Adjustment Counselors*

The need is great for resources and strategies for students who struggle with anxiety in school. The Oak Middle School program that began with using a breathing app on iPads as a strategy for students in the nurses’ and counselors’ offices has expanded to include a “tool kit” of sensory resources. Because there is not one strategy that works for every student, tool kits include options such as a weighted blanket, coloring pages, journals, thera-putty, bubble tumblers, scented cotton balls, etc. Having seen success with the students at Oak Middle School, we presented our strategies and data to nurses, counselors and other Special Education staff in Shrewsbury, as well as to nurses and counselors in Hudson, nurse leaders from across the state, and at the New England League of Middle Schools’ Annual Conference.

“From Drug Task Force to Community Outreach” *Pam Johnson, BSN, RN, NCSN and Brenda Filiere, BSN, RN, NCSN in collaboration with Jessica Rice, SHS Guidance Counselor*

Addiction and the opioid crisis have touched communities across the state and the country, and Shrewsbury is not immune to these issues. The nurses, counselors and administrators at Shrewsbury High School see first hand the effect that addiction has on our students and have been moved to action. What started as a conversation about creating a high school “task force” to look at the scope of the problem and bring in programming to help address the issues, quickly expanded to include community members. From the grassroots efforts of SHS staff, and collaboration with staff from Shrewsbury Youth and Family Services (SYFS) and various community stakeholders, a community coalition has now formed. Shrewsbury Coalition for Addiction Prevention and Education (SCAPE), organized a panel discussion regarding opioid addiction in April 2016, and will host screenings of the Jim Wahlberg film, “*If Only*” at Shrewsbury High School and Oak Middle School in October 2016. High School staff are currently working to increase student and family involvement in SCAPE.

EpiPen Training for Staff – *All School Nurses, District Wide*

All professional teaching staff and administrators were trained during faculty meetings regarding anaphylaxis and the use of EpiPens for students with known life-threatening allergies. Staff who complete the training, which includes a post test and demonstration of skills, are then permitted to administer an EpiPen as needed to a student with a known allergy. This increases our capacity to respond to students’ needs in case of emergency.

CPR/AED Training for Staff – *Instructors: Lisa Smith, BSN, RN, NCSN, Kristin Stewich, BSN, RN, NCSN, Noelle Freeman, BSN, RN, NCSN*

58 staff members across various buildings were trained in CPR and AED skills in order to be more prepared to respond to emergency situations. Three of the nurses are American Heart Association Heartsaver and Basic Life Support Instructors and will continue to offer trainings throughout the coming year.

Implementation of Narcan (naloxone) in all SPS schools – All School Nurses, District Wide

As noted above, we now stock naloxone in all of our health offices, and all nurses are trained in its administration.

Flu Shot Clinics for Staff – Noelle Freeman, BSN, RN, NCSN

Flu shot clinics were organized with Osco Pharmacy and held at all school buildings and town hall. Participants were able to use health insurance to pay for flu shots, with no out of pocket expense in the vast majority of cases. Clinics were open to all school and town employees. 348 people received flu shots.

Goals for the 2016 -17 School Year

Screening, Brief Intervention and Referral to Treatment (SBIRT) Training – One of the requirements of the Opioid law (bill H.4056) that was passed in January is, “subject to appropriation, each city, town, regional school district, charter school or vocational school district shall utilize a verbal screening tool to screen pupils for substance use disorders. Screenings shall occur on an annual basis and occur at 2 different grade levels as recommended by the department of elementary and secondary education, in consultation with the department of public health.” This screening process must be implemented by the end of the 2017-18 school year. School staff (nurses, guidance counselors, adjustment counselors) who will be conducting the screenings must be trained in the specific motivational interviewing technique known as SBIRT. We are in the process of creating a plan to send staff to DPH sponsored SBIRT trainings this year so that we will be prepared to implement screenings next year.

Students Helping Students: A Collaboration with National Art Honor Society – Coloring is making a comeback! “Adult Coloring Books” are very popular due to the relaxing nature of this activity. Coloring mandalas and other designs is thought to promote a feeling of well-being and reduce anxiety. A joint project with the Departments of Nursing and Visual Arts involves students in the National Art Honor Society working to create coloring pages that can be used in Nurses’ Offices as a strategy for students who are struggling with anxiety. We are currently in the process of applying for a grant from the Shrewsbury Education Foundation (SEF) that would allow us to create binders of the original artwork and purchase coloring supplies for each office. The originals could then be reproduced and given to students as an option for a sensory break as needed.