Written Testimony for House Bill 0266
"Public and Nonpublic Schools – Bronchodilator and Epinephrine Availability and Use (Bronchodilator Rescue Inhaler Law)."
Prepared by: Elaine M. Papp RN MSN COHN-S(R), CM(R) FAAOHN

Dear Chairman Feldman and members of the Education, Energy and Environment Committee,

Thank you for the opportunity to provide written testimony on this bill HB 0266.

My Name is Elaine M. Papp. I am a Master's prepared Registered Nurse. I retired from my full-time job in 2015. In 2017, through a contracting agency, I began working as a school health nurse in Baltimore City Schools, two to three days per week. After a serious asthma emergency at a high school in Baltimore City, I began advocating to place stock albuterol inhalers (bronchodilator rescue inhalers) in all Maryland schools as emergency medication, particularly for those students who do not have doctor's orders on file in the school's student health unit. I have advocated for this issue for four years. In 2002, the bill, as originally written, was passed unanimously by the House of Delegate. The exact same language was offered, again, this year. However it was drastically amended during a subcommittee meeting to which the advocates were not invited nor formally notified. .

HB266 had important provisions that were removed during the Ways and Means Subcommittee meeting. The only testimony heard at that subcommittee meeting was from the opposition. The advocates had no opportunity to present important , relevant testimony about the latest scientific information and statistics from various states who have already enacted legislation to protect children with asthma. The opposition offered amendments that literally gutted almost all of our provisions and drastically changed the original bill.

Thus, I am writing to support the HB 266, but only, with amendments to: 1) give albuterol rescue inhalers to all children experiencing respiratory distress from asthma whether or not the child has a doctor's order on file in the student health unit; 2) include a pediatric pulmonologist specializing in treatment of childhood asthma to help write the Maryland Asthma Guidelines for Schools.; 3) to train non-medical personnel to administer albuterol inhalers when the nurse is not available. Just as Naarcan, AED's and CPR, non-medical personnel can learn to administer the important life-saving medication to a child suffering an asthma flare/attack.

Below, I share the circumstances that led to my advocacy, provide information on how our advocacy group developed, and our rationale. I also include my perspective as a nurse

advocate about training non-medical personnel to administer the bronchodilator rescue inhaler in an emergency and potential program costs.

CIRCUMSTANCES LEADING TO MY ADVOCACY FOR PLACING EMERGENCY ASTHMA INHALERS IN ALL MARYLAND SCHOOLS

In 2018, I saved a student's life, but lost my job! I was working as a school nurse, at Vivien T. Thompson Medical Arts Academy, a Baltimore City High School. A student with exercise-induced asthma experienced a serious asthma flare/attack. She had an albuterol inhaler at school, but it was locked in the gym teacher's desk and the gym teacher was not in the building. Although 911 was called, they were very delayed in responding. I assessed the situation quickly, as I have been trained to do. I didn't know the student. I didn't have medication for her. And, I had no doctor's order for an inhaler for her in the school health clinic, even though she had a prescribed albuterol inhaler on the school premises.

While the principal, teachers and other staff tried valiantly to find the keys to the gym teacher's office and desk, the student lost consciousness. I, without an asthma inhaler to administer, watched the unconscious student as she gasped for air at a rate of 70 breaths per minute and her heart raced at 124 beats per minute. I believed that the student was dying. I believed she would have a maximum of 15 minutes to live now that she had lost consciousness, unless she was treated with an albuterol inhaler.

I knew the situation was quickly becoming life threatening. As a school nurse, I had to act. The ambulance had not yet arrived. Waiting for it could have cost this student her life. I requested that the principal find me any student's rescue inhaler (albuterol inhaler).

Albuterol Inhalers are universally used as rescue inhalers for people with asthma. In fact, albuterol inhalers are the first line therapy for emergency relief of bronchospasm and are given in a standard dose. The student in crisis had an albuterol inhaler that was provided by her physician. It was inaccessible. Using another student's albuterol for this student was the best choice at the time. The other student's inhaler contained the same medication as had been prescribed for the distressed student. Thus, I gave the unconscious student another student's albuterol inhaler.

Within a few minutes of administering the albuterol, her respiratory rate lessened, and her heart rate came down. Her mother arrived, and I told her what I had done. She was grateful. Soon, the student regained consciousness. By the time the ambulance arrived, the student was sitting in a chair, talking to her mother. The paramedic said, "I guess it was more important for the dispatcher to get a cup of coffee than to tell us where we needed to go."

I saved the student's life but lost my job. I made a choice. I broke the rules to save the student's life. The rules:

1) Never give a student another's medication.
2) Never give a medication if you do not have doctor's orders in the student health file.

As a school health nurse, I had Maryland's guidelines for Asthma in schools, I had Narcan I had Epipen. But, I could not use Epipen to treat asthma since it is not FDA approved for treating asthma. I did not have a medication for treating the most common life-threatening illness among Maryland's children - asthma. I did not have an emergency rescue inhaler.

At the time of my employment at Vivian T Thompson Medical Arts Academy, there were 480 students enrolled in the school. The community from which the school draws its population has a high prevalence of childhood asthma. Approximately 15-20% of the children hare diagnosed with asthma. Based on that statistic, I should have had 72 doctor's orders on file in the health unit. I had none—-Zero— doctors orders on file in the health unit. Yet. I saw students carrying inhalers in the school all the time. I gave those students the papers necessary for doctors orders. I called parents. Yet I had no doctors orders on file.

Recognizing the problem was the system, I began a quest to get emergency rescue inhalers as stock medication in all schools in Maryland specifically to address situations like the one I just described- — a student who does not have a doctor's order on file in the student health unit.

OTHER ORGANIZATIONS WHO SUPPORT PLACING ASTHMA INHALERS IN ALL MARYLAND SCHOOLS AS AN EMERGENCY MEDICATION

I began this grassroots effort as a political novice with an informal, ad hoc group of advocates. I began working with a pediatric pulmonologist from Johns Hopkins University (JHU), a pediatrician from JHU, and an emergency pharmacist from JHU. We obtained support from the Allergy Asthma Network and The American Lung Association, a nurse practitioner who has worked as a school health nurse, a PhD prepared pharmacist who specialized in emergency

medication for children. Our ad hoc group also worked with a school-age asthma researcher from the University of Arizona.

NATIONAL ORGANIZATIONS SUPPORTING PLACING ALBUTEROL INHALERS IN ALL OUR NATION'S SCHOOLS

In September of 2021, **the American Thoracic Society (ATS), the Allergy Asthma Network (AAN) the National School Health Nurse Association (NSHNA), and the American Lung Association (ALA)** published a policy on Asthma in schools. This policy paper was researched for 2.5 years by over 20 specialists across the nation including school health nurses, pulmonologists, respiratory therapists and other child health specialists. The policy recommends that all schools in the United Staes have asthma rescue inhalers as a stock emergency medicine. Their recommendations contain all the provisions we include in HB 0266. The policy recommends that all children suffering from respiratory distress be giving an albuterol rescue inhaler as the first line of treatment and recommends that non-medical personnel be trained to administer emergency asthma inhalers when a school health nurse is not present.

OUR RATIONALE

Children cannot be diagnosed with asthma until they have had their first asthma flare, commonly called an "asthma attack."As Dr. Ben Wormser (previous ad hoc group member) stated, "We do not have a test that can predict if a child will have asthma. A child is diagnosed with asthma based on their physical exam and any history of asthma symptoms or asthma attacks. This means that they need to have already had symptoms to be diagnosed. Since children spend the majority of their awake time at school, it is very likely that this first asthma attack will occur during the school day. We need to make sure our schools are ready to treat them when this occurs."

Our advocates are dedicated to the idea of helping students, families, school personnel and school health staff cope with asthma emergencies in school to:

- reduce number of lost days from school,
- reduce number of 911 calls,

- reduce the number of hospitalizations and the length of hospital stay by providing effective and efficient emergency care at the moment of an asthma flare.

We believe that instituting a stock albuterol inhaler program in schools for all children, whether they have doctors orders on file in the health unit or not, will lead to better health outcomes for school age children and adolescents who suffer from asthma flares in school. In addition, we believe that the reductions listed above will lead to reduction in costs to the school system, the EMS system, families, and the schools.

Seventeen other states have already instated these laws. Statistics from those states are showing positive gains in medical outcomes, costs and lost days from school. Maryland will not be the first to begin a program like this. Do we, a state that prides itself on being in the forefront of cutting issues, want to be the last?

THE PROBLEM AS I SEE IT

I am a registered nurse. As mentioned above, I had access to Maryland's guidelines on how to manage asthma in school age children. I had expertise in recognizing asthma emergencies and treating them. However, without albuterol to use in an asthma emergency, I was handicapped.

I am not the only nurse that has experienced this, though I may be one of the few who has reported it. I base this on the results of a study conducted in Pima County, Arizona where school health nurses were asked, anonymously, if they had ever given one student another's inhaler. Many said, "yes." However, they stated that they had not reported it. When asked, "why," they replied, "fear of losing my job."

School health nurses are placed in a position of responsibility without authority. I had no way to enforce the requirement to bring in a doctor's order. I was the only health care professional on site. But I had no emergency medications to administer for asthma exacerbations. I had an EpiPen for allergic reactions. I had Narcan for opiate overdoses. Yet, I did not have a medication to administer for the most common life-threatening illness among Maryland's children.

To remedy this problem, I strongly advocate for passage of this bill HB 0266 with amendments. I offer an amendment to allow asthma inhalers to be administered to children

who are suffering .from respiratory distress whether or not they have doctors orders on file in the student health unit.

Individual doctor's orders for a student's food allergy or insect bites when a student suffers anaphylaxis not required to administer Epipen.

Why are we treating asthma emergencies differently? Why was this bill amended to require an individual child have a doctor's order to administer a rescue inhaler in an emergency? During a medical emergency, should the school health nurse have to check the student's files for a doctor's order before treating the student with an asthma inhaler?

Please give nurses and others in the school system a way to cope with a serious life-threatening emergency.

TRAINING NON-MEDICAL SCHOOL PERSONNEL TO ADMINISTER ASTHMA EMERGENCY INHALERS

As originally written, HR0266 contains provision for training non-medical school personnel to administer an albuterol inhaler during an emergency. This provisions was removed during the subcommittee meeting to which the advocates for HB 266 were not invited Although some have expressed concern over this provision, I believe it is important. First, training non-medical personnel to administer albuterol inhalers is not new to Maryland schools. When I worked as a school nurse, it was routine to train a teacher or a coach to use an albuterol inhaler, if a student with asthma was going on a field trip or to a sporting event off campus. In fact, the Maryland State School Health Services Guideline for Management of Students with Asthma, has specific procedures for training non-medical personnel in administering rescue inhalers when the student is on a field trip. Thus, the concept of non-medical school personnel being trained to administer and, then, possibly, administering a rescue inhaler in an emergency situation, is not new.

Second, medical personnel are not always available. The health clinic closes at the end of the school day. Yet, many children stay after school for extra curricular activities such as, sports practices and events. It is vital to have a coach trained to administer an albuterol in haler in asa of respiratory distress when the school health nurse is unavailable.

In the case of HB0266, this training would be extended to designated staff. It would focus on recognizing respiratory distress in a child and administering albuterol while calling emergency medical personnel and avoiding adverse outcomes, including worsening asthma and even death. As you will hear from other advocates, albuterol is essential to treat asthma, yet, is a very safe medication to administer with only few and minor side effects.

We have proposed updating the existing EpiPen legislation, as others have in many states that have successfully passed stock albuterol legislation, because the two drugs are so similar: they are both used in life-threatening emergency situations, simple to administer, safe and effective.

COST CONCERNS

As we are all aware, the COVID-19 pandemic has wreaked havoc with budgets. Some have expressed concern about the cost of this program. But, we expect the cost to be minimal for the following reasons.

1) Each school needs only one inhaler per school year.
   Small inhalers hold 60 puffs or 30 doses (2 puffs per doses). Thus, 30 students could be treated per year with one albuterol sulfate inhaler. Inhalers have a shelf life of one year.
2) Disposable spacers with one-way valves can be attached to the emergency inhaler for each use and then discarded. The one-way valve prevents the inhaler from being contaminated. The inhaler can be safely and effectively used another time. In fact, many hospitals carry "universal inhalers" in their pharmacy department for unexpected asthma flares.
3) Forms for reporting the use of the inhaler and programs to train for non-medical school personnel in the emergency use of asthma inhalers in a one-time start-up cost. Similar resources exist in other states and have been shared with us.
4) Total cost of supplies per year: $60.00 per school
   - Average cost of an albuterol inhaler is $40.00.
   - The cost of a package of 25 disposable spacers is $18.95.
   - I suspect that bulk ordering through the school purchasing plan may reduce the cost per package.

In addition, we have included a provision to allow schools to receive donations to successfully administer the emergency bronchodilator program. I intend to offer oral testimony as well as this written testimony. I am available for questions. I encourage you to vote yes on HB 384 . Thank you for your consideration.

SAFETY OF ALBUTEROL SULFATE INHALERS

According to pharmacologists, physicians and FDA guidelines, albuterol inhalers are one of the safest mediations to use for children. Our specialists, Dr. Sara Choi, a PhD prepared pharmacist whose specialty is emergency medications in children, vouches for the safety of using albuterol as HB0266 provides. Dr Christy Saderameali, a pediatric pulmonologists who treats children with asthma daily, attests to the safety of this medication as the bill provides. These specialists who dedicate their lives to the treatment of children would not advocate for provisions that would harm children. Albuterol is safe even if given to a child who has respiratory distress from a cause other than asthma. Albuterol would not harm the child. It might not be effective against pneumonia but it would not harm the child. It would not mask symptoms of another disease. Albuterol opens the airway in cases of bronchial spasms. Thus, it is effective for children with asthma whether diagnosed or not.

I advocate for passage of this important life saving bill with the amendments I recommend .

Elaine M. Papp, RN MSN COHN-S(R), CM(R) FAAOHN