ALA_MD Asthma Testimony - HB 384.pdf
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American Lung Association Testimony House Bill 384
Ways and Means Committee
February 10, 2022
Support

Chair Atterbeary and Members of the Committee:

Thank you for the opportunity to provide comments on House Bill 384, Bronchodilator Rescue Inhaler Law sponsored by Delegate Boyce. The American Lung Association ***strongly supports*** this bill as originally drafted as it will allow schools in Maryland to provide more immediate access to medications for students with asthma or suffering from respiratory distress. Asthma can be a deadly disease if flare-ups are not treated immediately, this bill has the potential to save lives and keep kids safe in schools.

The American Lung Association is the leading organization working to save lives by improving lung health and preventing lung disease, through research, education and advocacy. The work of the American Lung Association is focused on four strategic imperatives: to defeat lung cancer; to improve the air we breathe; to reduce the burden of lung disease on individuals and their families; and to eliminate tobacco use and tobacco-related diseases.

Asthma impacts millions of lives and has a tremendous impact on our nation's healthcare system and economy. In the U.S., close to 25 million Americans, including 6.1 million children have asthma. In Maryland, just over 129,000 children have asthma. Asthma is also responsible for more than $50 billion annually in healthcare costs and causes 7.9 million missed school days and 10.1 million missed days of work nationwide.

Because asthma attacks can occur at any time and often without warning, children with asthma should always have access to medication that can quickly reverse the blockages in their lungs. This life-saving medication, called a short-acting bronchodilator, is easy to administer, inexpensive, and very safe.

Unfortunately, when children do not have asthma medication, which can occur for a variety of reasons such as forgetting it or not being able to afford it, schools have few options. A parent may not be immediately accessible or close enough to respond promptly. Even if they can, there is a delay during which the asthma attack often gets worse. In such cases, the school must call 911. Doing so is likely to lead to an ambulance transport costing $500 or more and an emergency department visit costing thousands more. Such events also take children out of the classroom for days at a time and further impede their learning.

These adverse events are largely avoidable with a simple low-cost solution: stock medication or inhalers. Schools can purchase a single inhaler containing a short-acting bronchodilator along with inexpensive disposable spacers that can be used for **anyone** who experiences the sudden onset of cough, shortness-of-breath, and chest tightness that signals an asthma attack.

It is critical as outlined in the proposed legislation that school staff other than school nurses are trained in the signs and symptoms of asthma and when it is appropriate to administer the rescue medications. In Maryland there is not a school nurse present in every school building and while we recognize that is a significant need and an initiative the Lung Association would be happy to support at this time, we believe that because of the safety of the medication used and the life-threatening implications of an asthma attack it is imperative that we train other staff to assess, access and administer the required medication that would potentially save a student's life.

HB 384 also provides the important liability protections for the prescriber, the school and the person who administers the medication in good faith. As we mentioned the medication used for treatment of asthma attacks is safe and effective. As part of a research project in the Sunnyside Unified School District in Tucson, Arizona that evaluated the stock inhaler project, researchers found that school nurses were afraid that giving the medication could potentially expose them to liability, so it is imperative that the liability protections as outlined in the bill remain.

That is why HB 384 is so important as it allows schools to maintain a stock supply of asthma medication for student use when medication is otherwise unavailable. It represents a simple and low-cost solution to a problem that could save both lives and money. In total, 16 states have passed legislation or have administrative guidelines in place allowing schools to stock asthma medications. However, there are key provisions that should be included in this legislation to ensure it will as effective as possible which are included in HB 384. These include:

- Making sure the legislation applies to all public and nonpublic schools.
- Applying the legislation to both students who have been diagnosed **with asthma and students suffering from respiratory distress** that may not have been diagnosed yet as many kids with asthma are not diagnosed until after their first attack.
- Ensuring that school staff other than school health officials are required to be properly trained in the proper use and administration of the stock asthma medication.
- Making certain that all school staff, officials, or health care providers involved in administration or prescribing of stock asthma medication receive liability protection except in cases of willful or gross negligence.

The Lung Association thanks the Maryland General Assembly for their continued commitment to the health and wellbeing of the residents of Maryland and the desire to protect Maryland students. The Lung Association ***strongly supports*** House Bill 384 as drafted and encourages swift action and favorable report to move the bill out of committee and passage by the General Assembly to protect students in schools across Maryland.

Sincerely,

Aleks Casper
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Testimony
House Committee on Ways and Means Hearing
on
Public and Nonpublic Schools - Bronchodilator Availability and Use - Policy (HB384)
Maryland General Assembly
February 10, 2022

My name is Charmayne Anderson, Director of Advocacy for Allergy & Asthma Network ("Network"), the leading national nonprofit dedicated to ending needless death and suffering due to asthma, allergies and related conditions. I am also a Maryland resident with asthma.

The Network supports bill HB384 *Public and Nonpublic Schools – Bronchodilator Availability and Use*, which authorizes schools in the state of Maryland to purchase, acquire, and possess albuterol inhalers and disposable spacers for use by a trained employee or agent in an emergency for a student experiencing symptoms of respiratory distress. This legislation will help any student who either does not have their own medication available or experiences respiratory distress for the first time.

With more than 24 million Americans living with asthma, including 6 million children, asthma remains one of the most serious chronic diseases. Asthma is the number one reason that children and youth are absent from school. Approximately 3,600 Americans die each year from asthma and this chronic condition costs the U.S. healthcare system $80 billion annually in direct healthcare expenditures (emergency department visits and hospitalizations) and indirect costs from lost productivity (missed school days and work days).

The U.S. Department of Education and the U.S. Department of Health and Human Services recommend that schools develop and maintain comprehensive management plans to support children with lower airway disorders, such as asthma, and help control their disorders while in school. Most schools, unfortunately, do not maintain such plans and are ill-prepared for emergencies. This type of preparation and management in schools will not only improve a child's health, but also ensure students are able to focus on learning while in school.

When the *Asthmatic Schoolchildren's Treatment and Health Management Act* was signed into law in 2004, it led to legislation in all 50 states ensuring schoolchildren with asthma had the right to self-carry and administer their quick-relief bronchodilator inhaler at school. There is a movement in states across the country to pass laws or guidelines that standardize asthma management plans in schools and permit schools to stock emergency supplies of albuterol inhalers with a prescription and administer to a student believed to be in respiratory distress. Currently 16 states (Arizona, Arkansas, Georgia, Illinois, Indiana, Kentucky, Missouri, Nebraska, New Hampshire, New Mexico, New York, Ohio, Oklahoma, Texas, Utah and Virginia) have laws or guidelines in place.

At the federal level, the *School-Based Allergies and Asthma Management Program Act* sponsored by House Majority Leader Steny Hoyer (Maryland) became law in January 2021 to encourage more schools around the country to put comprehensive asthma and allergy management programs in place by increasing federal grant preferences to states. The grant incentive comes by way of the Centers for Disease Control and Prevention's ("CDC") National Asthma Control Program ("NACP") which supports efforts in the states to track asthma prevalence, promote asthma control and prevention and build capacity in state and local health programs. Maryland was a CDC NACP grant recipient in 2013 and was approved for funding in 2014 but along with 12 other states including DC, it was not funded. Prior to 2013, 40 states were funded. Currently only 23 states including the City of Houston, TX and Puerto Rico are funded. The President's FY22 budget calls for increased funding for NACP and Allergy and Asthma Network, along with other key stakeholders, are working to secure increased funding in Congress to support the program but also to support the ability for more states like Maryland to receive grant funds (*see Asthma Partners 2021 letter requesting to increase funding for NACP by $5million to support 4 or 5 additional states*). With increased funding, the CDC hopes to expand the NACP to ultimately reach all US states and territories. If this bill (HB384) becomes law, it will help position the state of Maryland for NACP funds in future grant rounds.

In closing, Allergy & Asthma Network commends Maryland Delegate Regina Boyce for her leadership on this issue. We appreciate your consideration and hope this legislation becomes law. Thank you.

oral testimony HB0384.pdf
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Position: FAV

Oral Testimony
HB0384
"Public and Nonpublic Schools – Bronchodilator Availability and Use –(Bronchodilator Rescue Inhaler Law)."

Presented by Elaine M. Papp RN MSN COHN-S(R), CM(R), FAOOHN

Chairwoman, Atterbeary, Vice Chair, Washington and committee members:

My Name is Elaine M. Papp. I am a Registered Nurse with a Master's degree.. Retired from my full-time job, I worked part time as a contract school nurse in Baltimore City. I am here before you to share my story and to advocate for passage of bill HB0384. "

In 2018, I saved a student's life, but lost my job! It was a harrowing experience. "While working at Vivien T. Thompson Medical Arts Academy, a student experienced a serious asthma flare. Her inhaler was locked in the gym teacher's office. The gym teacher was not in the building. Although 911 was called, they were very delayed in responding.

While the principal and teachers frantically tried to find the key to the office, the student lost consciousness was gasping for air at a rate of 70 breaths per minute with a pulse of 124. I was helpless. I knew that after loss of consciousness, the student would have a maximum of 15 minutes to live, if untreated. I was watching the student die.

Not knowing when the paramedics would arrive, I gave the unconscious student another's asthma rescue inhaler. .

Within a few minutes she began breathing normally and regained consciousness.

I lost my job because I made a decision to break the rules to save a life. This should not be a decision anyone should have to make. 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 registered nurse. I had access to the Maryland Asthma Guidelines. I had EpiPen for allergic reactions and Narcan for Opiate overdose. Yet, I did not have an emergency medication to treat the most common life-threatening illness amongst Maryland's children, -asthma

I urge you to pass this important life-saving legislation.

Thank you. I am available for questions.

Written Testimony HB0384.pdf
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Position: FAV

Written Testimony for House Bill 0384
"Public and Nonpublic Schools – Bronchodilator Availability and Use (Bronchodilator Rescue Inhaler Law)."
Prepared by: Elaine M. Papp RN MSN COHN-S(R), CM(R) FAAOHN

Dear Chairman Atterbeary, Vice Chairman Washington and Ways and Means Committee members

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

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. 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.

Recognizing the problem was the system, I began a quest to get emergency rescue inhalers as stock medication in all schools in Maryland.

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. Our ad hoc group also worked

with a school-age asthma researcher from the University of Arizona. In September of 2021, the American Thoracic Society (ATS) published its policy on Asthma in schools. ATS recommends that all schools in the United Staes have asthma rescue inhalers as a stock emergency medicine. They also recommend all the provisions we include in our HB 0384. We are in the forefront of an important movement.

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 at Johns Hopkins (previous ad hoc group member) states, "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 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.

THE PROBLEM AS I SEE IT

I am a registered nurse. 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.

I strongly advocate for passage of this bill HB 384 to remedy this problem. 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

HR0384 contains provision for training non-medical school personnel to administer an albuterol inhaler during an emergency. 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 fro 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 HB0384, 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.

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

K. Babcock written testimony HB384 2_8_22.pdf
Uploaded by: Karen Babcock
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Testimony for House Bill 384
February 10, 2022
Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy (Bronchodilator Rescue Inhaler Law)

Dear Delegate Boyce, members of the Ways and Means Committee, and others:

My name is Karen Babcock, and I am a respiratory therapist at Johns Hopkins. I am testifying today in support of HB384 concerning the use of stock albuterol in Maryland schools. I submit this testimony as a citizen of Maryland, a health professional with the relevant expertise, and a mother. The views I express here are my own and do not necessarily reflect the views of my employer, Johns Hopkins Hospital.

I run the pulmonary function lab associated with the main pediatric pulmonary clinic at our Baltimore location and also have supervisory responsibilities for other respiratory therapists at my institution. Throughout my career, I have had diverse experiences as a respiratory therapist on the inpatient and outpatient side of medicine, which includes a lot of time in pediatric pulmonary clinic, and also a significant amount of time caring for hospitalized or in the intensive care unit (ICU). As a respiratory therapist, I take care of children with all types of airway and lung disorders, and asthma is one of the most common diagnoses I see. My colleagues and I take care of children with asthma on a daily basis between pulmonary clinic and the hospital. Unfortunately, children being hospitalized for severe asthma exacerbations is quite common, so we see the full spectrum of disease and are very familiar with it. When there is an asthma emergency in the hospital, they call on me and my colleagues. In addition to having primary responsibility for administering medications like albuterol in the hospital, we also do a lot of teaching about asthma medications in both inpatient and outpatient settings.

For a reactive airway, such as in the case of asthma, when the airway “reacts” and tightens inappropriately to a stimulus such as a virus, an allergen, or an environmental factor (such as cigarette smoke or air pollution), the mainstay of treatment is albuterol. Inhaled albuterol works quickly to relax the muscles around the small airways by stimulating the beta receptors of these airways. Albuterol is one of the safest and most effective medications we use, and side effects are minimal. Though there are other medications that exist for asthma, including preventative medications, and even others that can offer rapid relief, albuterol is still the mainstay, and the most effective, first line therapy. It is important that the legislation is written in a general way, for “respiratory distress” because the downsides of giving albuterol to someone who is not having an

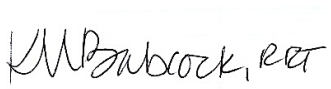
asthma issue are negligible, and the risk of not giving this medicine to an asthmatic in distress are large. The risk/benefit favors giving the medication. If the law is written only for children with confirmed asthma, too many children will fall through the cracks, including children who have their first serious asthma attack at school and children who have not submitted the proper paperwork documenting their asthma diagnosis.

Similar to giving Epi-Pen for a food allergy emergency, giving albuterol promptly could drastically change the trajectory of the child's airway issue in an asthma emergency. I have personally witnessed albuterol stop or significantly lessen a severe asthma situation many times. Similarly, delaying albuterol when an asthmatic needs it can also cause an asthma exacerbation to get out of hand very quickly, resulting in increased severity of the exacerbation, which can lead to emergency department admission, hospitalization, or even death. School is a place where kids spend a lot of time, and therefore a place they should have access to albuterol. I spend a lot of my time in pulmonary clinic educating our patients and their families about this. We ask them to always make sure they have access to albuterol, and encourage them to keep their own supply at school. Though this is the ideal, there are too many examples where kids can fall through the cracks and they will not have their medication when an emergency occurs at school. This legislation would provide for a backup method, and it makes a lot of sense.

As the mother of a school age child, I want my child's school and other schools to have the resources they need to help my child and other children in an asthma emergency. We as a medical team always try and identify prevention, education, and intervention for all issues. This is no exception.

Thank you again for the opportunity to testify, and I ask that you please vote in support of HB 384.

Sincerely,



Karen Babcock, B.S., R.R.T.
Pediatric Respiratory Clinical Coordinator

Written Testimony- Micaela Fritz.pdf
Uploaded by: Micaela Fritz
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Testimony for House Bill 0384
February 10, 2022
Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy
(Bronchodilator Rescue Inhaler Law)

Thank you for the opportunity to provide this testimony today. My name is Micaela Fritz, and I am a pediatric nurse practitioner at Johns Hopkins Hospital. Prior to my role as a nurse practitioner at Johns Hopkins Children's Center, I was a school nurse for Howard County Public School System through December 2021. I am testifying today in support of this bill that would provide emergency albuterol in schools.

I would like to note that the views expressed here are my own and do not necessarily reflect the policies or positions of my employer, Johns Hopkins Hospital.

In my previous experience as a school nurse, I was responsible for the medical care of over 800 middle school students at a public school. Many of the students I cared for had chronic medical conditions, including asthma. Parents were required to submit an emergency preparedness form and any medications a student may require at the beginning of the school year. However, oftentimes parents would either forget to submit this information or more often, simply send their child to school with their medication in their backpack without providing the school with medication or submitting the proper paperwork for the school to be able to provide the medication.

If a student was caught with a medication (such as albuterol) that did not have appropriate documentation, the medication would be confiscated and held until the parent came to pick the student up. Even if the student had an asthma attack, I would not be allowed to administer the medication they had on hand. Instead, I would be required to dial 911 and expected to wait. This would lead to a delay in care, exacerbation of symptoms and without treatment with albuterol, even death may occur.

I had an incident this past fall where a student who was a known asthmatic needed albuterol. He was sent to the health room for a cough and was noted to have bilateral wheezing on exam- there was no question that this was an asthma attack. I administered albuterol as prescribed, his cough subsided and he returned to class. Approximately 4 hours later, he returned with audible wheezing and a violent cough that caused him to vomit continuously. I tried to administer his albuterol inhaler again, however, the pump (which was not empty), stopped working. There seemed to be something wrong with the device. The student had an extra albuterol inhaler in his pocket that his mom had given him that morning. Under the guidelines, I should have confiscated this medication and not allowed him to use it. Instead, he

self-administered the albuterol from home and 911 was called. Fortunately- the medicine helped. By the time EMS arrived, his vomiting and wheezing had subsided.

This experience had a profound impact on me professionally and personally. I was thankful that his mother had enough foresight to have him carry another albuterol inhaler just in case, even though he was not supposed to have it. The implications for what would have happened to this student are vast. What would have helped me in this case would be a law like this one. Not only would I have had my own albuterol inhaler supply, I would have had permission to use it in emergency situations. Some nurses in my shoes who have done something similar have lost their jobs. Fortunately, I did not, and medically, I know it was the right thing to do. Now imagine a scenario where the child didn't have a backup inhaler in his pocket- I am not sure what would have happened, but the situation could have been dire, even life-threatening to the student. This is actually quite a scary thing to consider for this child, who could have had a bad outcome, and for healthcare professionals like myself, working in a school environment and knowing they may not have access to a common lifesaving drug when we need to use it.

I strongly urge you to consider supporting this bill, which will help to ensure that all children with asthma have access to life-saving medication at school. Thank you.

ATS stock albuterol.pdf
Uploaded by: Regina T. Boyce
Position: FAV

AMERICAN THORACIC SOCIETY DOCUMENTS

Ensuring Access to Albuterol in Schools: From Policy to Implementation

An Official ATS/AANMA/ALA/NASN Policy Statement

Anna Volerman, Ashley A. Lowe, Andrea A. Pappalardo, Charmayne M. C. Anderson, Kathryn V. Blake, Tyra Bryant-Stephens, Thomas Carr, Heather Carter, Lisa Cicutto, Joe K. Gerald, Tina Miller, Nuala S. Moore, Hanna Phan, S. Christy Sadreameli, Andrea Tanner, Tonya A. Winders, and Lynn B. Gerald; on behalf of the American Thoracic Society Assembly on Behavioral Science and Health Services Research

This official policy statement was approved by the American Thoracic Society and Allergy and Asthma Network May 2021 and by the American Lung Association and National Association of School Nurses June 2021

Abstract

Rationale: For children with asthma, access to quick-relief medications is critical to minimizing morbidity and mortality. An innovative and practical approach to ensure access at school is to maintain a supply of stock albuterol that can be used by any student who experiences respiratory distress. To make this possible, state laws allowing for stock albuterol are needed to improve medication access.

Objectives: To provide policy recommendations and outline steps for passing and implementing stock albuterol laws.

Methods: We assembled a diverse stakeholder group and reviewed guidelines, literature, statutes, regulations, and implementation documents related to school-based medication access. Stakeholders were divided into two groups—legislation and implementation—on the basis of expertise. Each group met virtually to review documents and draft recommendations. Recommendations were compiled and revised in iterative remote meetings with all stakeholders.

Main Results: We offer several recommendations for crafting state legislation and facilitating program implementation. *1*) Create a coalition of stakeholders to champion legislation and implement stock albuterol programs. The coalition should include school administrators, school nurses and health personnel, parents, or caregivers of children with asthma, pediatric primary care and subspecialty providers (e.g., pulmonologists/allergists), pharmacists, health department staff, and local/regional/national advocacy organizations. *2*) Legislative components critical for effective implementation of stock albuterol programs include specifying that medication can be administered in good faith to any child in respiratory distress, establishing training requirements for school staff, providing immunity from civil liability for staff and prescribers, ensuring pharmacy laws allow prescriptions to be dispensed to schools, and suggesting inhalers with valved holding chambers/spacers for administration. *3*) Select an experienced and committed legislator to sponsor legislation and guide revisions as needed during passage and implementation. This person should be from the majority party and serve on the legislature's health or education committee. *4*) Develop plans to disseminate legislation and regulations/policies to affected groups, including school administrators, school nurses, pharmacists, emergency responders, and primary/subspecialty clinicians. Periodically evaluate implementation effectiveness and need for adjustments.

Conclusions: Stock albuterol in schools is a safe, practical, and potentially life-saving option for children with asthma, whether asthma is diagnosed or undiagnosed, who lack access to their personal quick-relief medication. Legislation is imperative for aiding in the adoption and implementation of school stock albuterol policies, and key policy inclusions can lay the groundwork for success. Future work should focus on passing legislation in all states, implementing policy in schools, and evaluating the impact of such programs on academic and health outcomes.

Keywords: asthma; children; health policy; inhaler; medication

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Contents

Introduction

Asthma affects approximately 10% of school-aged children in the United States, with higher prevalence and morbidity being demonstrated among low-income and minority populations (1–4). Sixty percent of children experience an asthma exacerbation, leading to approximately 767,000 emergency department visits and 74,000 hospitalizations annually (1, 5). Compared with their peers, children with asthma miss more school days per year (6, 7), totaling 13.8 million absences annually (8).

School-aged children spend a majority of their day in school; therefore, evidence-based asthma care practices are important for guiding school asthma management (9–13). Guidelines recommend that all children with asthma have access to quick-relief medications. All 50 states and the District of Columbia permit children with asthma to self-carry and self-administer personal inhalers (14). However, access to emergency albuterol remains low, with studies suggesting that as few as 14% of children have quick-relief medication at school (15–17). Common barriers include difficulty accessing health care (18), challenges with obtaining asthma action plans and inhalers/valved holding chambers (VHCs) (15, 19–23), and the potential for lost or expired inhalers.

Because children with asthma may experience a sudden, unexpected, and life-threatening exacerbation at any time, access to albuterol can be life-saving. Although they are rare, there were a total of 192 asthma-related deaths among children in 2018 (1), and 38 asthma-related deaths occurred at school between 1990 and 2003 (24). Delays in albuterol administration were reported in one-third of these deaths, and a third of the delays were attributed to a lack of medication. Asthma-related deaths have also occurred among athletes on school sports teams, and up to 10% of high school athletes have undiagnosed asthma (25).

An innovative and practical mechanism exists to ensure that students with asthma have access to potentially life-saving quick-relief medication while at school. Schools, with the assistance of a medical consultant and appropriate training for staff (26), can make albuterol available to all students with, for example, a single albuterol inhaler that is used with a different VHC/spacer for each child. Although 88% of schools are willing to store students' personal inhalers (27), few schools stock quick-relief medicine. A stock albuterol program ensures that a school has albuterol that can be used by any child experiencing respiratory distress. Expanding schools' capacity to acquire and maintain stock albuterol may help maintain the safety of students with asthma when personal quick-relief medicines are unavailable, expired, or empty. Furthermore, when children lack a documented asthma diagnosis in school, access to quick-relief medicine may provide ready access to treatment for a student who has an established diagnosis but no documentation at school or a student with a first-time asthma episode.

Over the past decade, stock albuterol policies have increased across the United States, with at least 15 states passing such legislation and a few states with experience implementing such policies. One state reports that 84% of respiratory events treated with a stock inhaler resulted in the child returning to class (28, 29). Because these policies are relatively new, further data are not available on the impact of stock albuterol. Notably, the evidence shows that quick-relief medications are effective for respiratory distress and safe for children, thus demonstrating that access at school is important for improving outcomes. In light of students' limited access to albuterol and the positive outcomes with stock albuterol, the goal of this statement is to advocate for stock albuterol legislation in all states and for wide-scale implementation to improve access to emergency asthma medications in schools.

Methods

We assembled a diverse group of stakeholders, including clinicians, pharmacists, researchers, policy experts, school nurses, and parents. Stakeholders included representatives from major organizations, including the American Thoracic Society, Allergy and Asthma Network, American Lung Association, and National Association of School Nurses. Conflicts of interest were collected from each stakeholder and vetted at the start of the project. Updates were requested throughout the project. No stakeholders had conflicts that required management during meetings and discussions. We applied our collective experience and expertise to develop this policy statement on stock albuterol legislation and implementation.

We first identified and reviewed guidelines, literature, statutes, and implementation documents related to school-based medication access. A literature search was conducted in the PubMed and Education Resources Information Center databases to identify existing literature about stock albuterol. Specific search terms included "albuterol," "medicine," "inhaler," "nebulizer," "stock," "school," "class," "child," and "student." We examined relevant abstracts and conference programs to supplement this search. Our search focused specifically on the United States, given the differences among countries in terms of pharmaceutical and school-related regulation and legislation as well as the processes for passing and implementing policy. Because research in this area is limited, most information came from state statutes and

implementation guides. Consideration was given to specific components of current policies, including the school type, medication indications, standing medical authority, training requirements, good faith use, and medical devices.

Stakeholders were divided into two groups—legislation and implementation—on the basis of expertise. Each group met two to three times virtually to review documents and draft recommendations. These recommendations were compiled and revised in iterative remote meetings with all stakeholders. On the basis of multiple data sources and expert opinions, we developed policy recommendations and outlined steps for passing and implementing stock albuterol laws.

Steps to Pass Stock Albuterol Legislation

Medical licensing, pharmaceutical drugs, and education are largely regulated at the state level; thus, legislation for programs like stock albuterol must occur within individual states. It is crucial to understand legislative processes and necessary steps to pass stock albuterol legislation within a state (Figure 1) (30, 31). The overall process is similar across states, and we review the basic steps below.

Build Stakeholder Coalition

The first step in passing stock albuterol legislation is to form a coalition of stakeholders (Table 1). Key stakeholders include healthcare professionals, school nurses, parents/guardians of children with asthma, pharmacy organizations, managed care organizations, advocacy groups, and legal groups, as well as health and education departments. Several key questions and pitfalls should be considered when building a stakeholder coalition (Table 2).

Create Issue Brief and Factsheets

Next, an issue brief and factsheets should be developed and disseminated to summarize key asthma facts and policy considerations to help advocates garner support. These documents provide a framework and consistent message for discussions with legislators and testimony.

An issue brief is a two- to four-page summary of an identified problem with recommendations for solutions (*see* online supplement) (32).In the case of stock albuterol, this brief provides a concise summary of asthma prevalence, morbidity, and mortality; highlights state asthma-related policy; and describes similar legislation in other states. The brief also emphasizes how existing asthma state policies have affected change. If seeking an amendment to existing legislation (e.g., stock epinephrine for anaphylaxis), it is helpful to include any positive outcomes from that legislation.

A factsheet is a one-page document with a bulleted summary of facts relevant to the issue. This document provides a set of talking points for testimony and discussion; it can also be shared with legislators. Several organizations (e.g., the American Public Health Association) provide examples of pertinent factsheets for health-related policy issues, and states with existing stock albuterol policies have created topic relevant factsheets (*see* online supplement) (33).

Find a Legislative Sponsor

Concurrently, a legislator must be identified to sponsor the legislation. The sponsor's background, experience, committee assignments, and political party can be critical to success. An ideal sponsor would have experience with education or public health issues (e.g., asthma, health disparities, health policy, school health), have sufficient time to devote to the issue, be a member of the majority party in the legislature (or House if control is split), and ideally be a member of a committee in which the bill could be introduced (e.g., the Health, Education, or Appropriations Committees). Lobbyists or coalition partners who advocate in the legislature have relationships with legislators and their staff and are important to include.

The first step is to connect with key staff of the legislator or committee through direct outreach via phone/e-mail or working through existing relationships of partners. Once a legislator agrees to sponsor stock albuterol legislation, it is critical to remain engaged to advance the process. Although staffing structures differ in every state's legislature, staff must be treated with the same level of respect as the sponsor, given that staff remain in that role longer than some lawmakers are in office and are key to moving legislation forward. Regularly scheduled meetings and/or calls can be helpful, and frequency may depend on the legislative session length. Meetings may be held during an interim period between legislative sessions (often summer and/or fall) when preparatory writing occurs for the next session. The sponsor and staff can help advocates understand preliminary processes, which may include study sessions (to consider long-term issues), informational hearings (to introduce potential legislative topics), or sunrise processes (to outline the costs and benefits of proposed legislation) (34).

Address Opposition

To secure bill passage, it is essential to understand the arguments opposing part or all of the bill and effectively respond. Because opposition may emerge at various times, the understanding of opposition arguments and the development of responses need to be undertaken iteratively, starting as early as sponsor identification, as they may impact sponsorship decisions. The sponsor will need this information to effectively advocate for the bill. Policy staff on health and education committees in both legislative chambers (the House and Senate), advocacy organizations with legislative experience, and provider organizations can provide context about opposition and ways to overcome issues. Federal legislation can also support efforts to pass state legislation (*see* online supplement), and national stakeholders (e.g., healthcare and education associations) can influence state policy-makers. For stock albuterol, opposition may be raised regarding prescriptions for stock albuterol, persons who can receive stock albuterol (e.g., students vs. nonstudents, asthma diagnosis vs. no diagnosis), training personnel to deliver stock albuterol, and the safety of albuterol.

Draft Legislation

Before the legislative session, stakeholder meetings should occur to discuss key components to include in the legislation. Stakeholder organizations may assist with drafting or choose to use existing model policies (*see* online supplement) (32, 33). All 50 states have school stock epinephrine laws to treat anaphylaxis, and one strategy is to amend those laws to include stock albuterol. It is important to review how stock epinephrine laws have functioned and how stock albuterol may mirror or differ from epinephrine.

Key implementation principles should be considered early and incorporated into legislation to avoid future pitfalls. For example, consider the implementation burden on school nurses, such as staff training requirements for recognizing symptoms and administering medicine. School nurses champion the health and safety of students, and it is part of their duties to instruct in care for emergencies. Depending on state nurse practice acts, nursing delegation may be key, thus making direct training by the school nurse essential. Although we advocate for full-

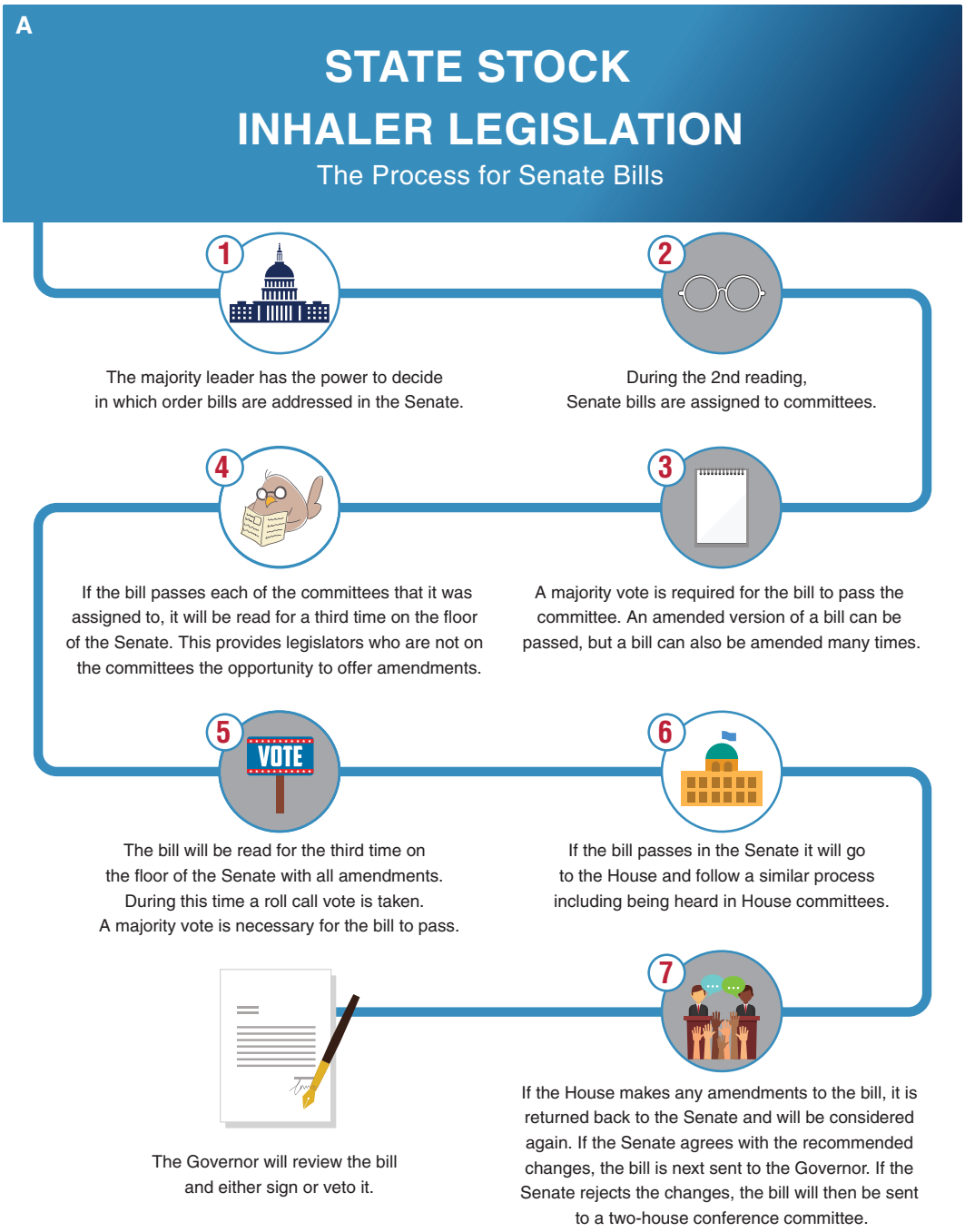

Figure 1. Stock albuterol legislative steps. (*A*) The process for Senate bills. (*B*) The process for House bills. The process of passing a bill may differ across states and within the legislative chambers of a particular state (House and Senate). It is important to understand the process within your own state.

time nurses in every school, it is important to recognize that many schools do not have nurses or that nurses have limited time in the school building. Thus, legislation can incorporate online platforms or alternative mechanisms for training by school nurses, asthma educators, or other trained individuals; alternatively, this language can be included in committee reports or regulations developed after bill passage.

On the basis of states' experiences to date, we created a list of essential and recommended components for stock albuterol legislation (Table 3). For example, schools should be allowed to use albuterol in respiratory emergencies, even when a child lacks a documented asthma diagnosis. Albuterol is a safe drug to administer to any child in respiratory distress (35–38). To obtain stock medication for schools/districts, pharmacy dispensing law(s) should also be addressed.

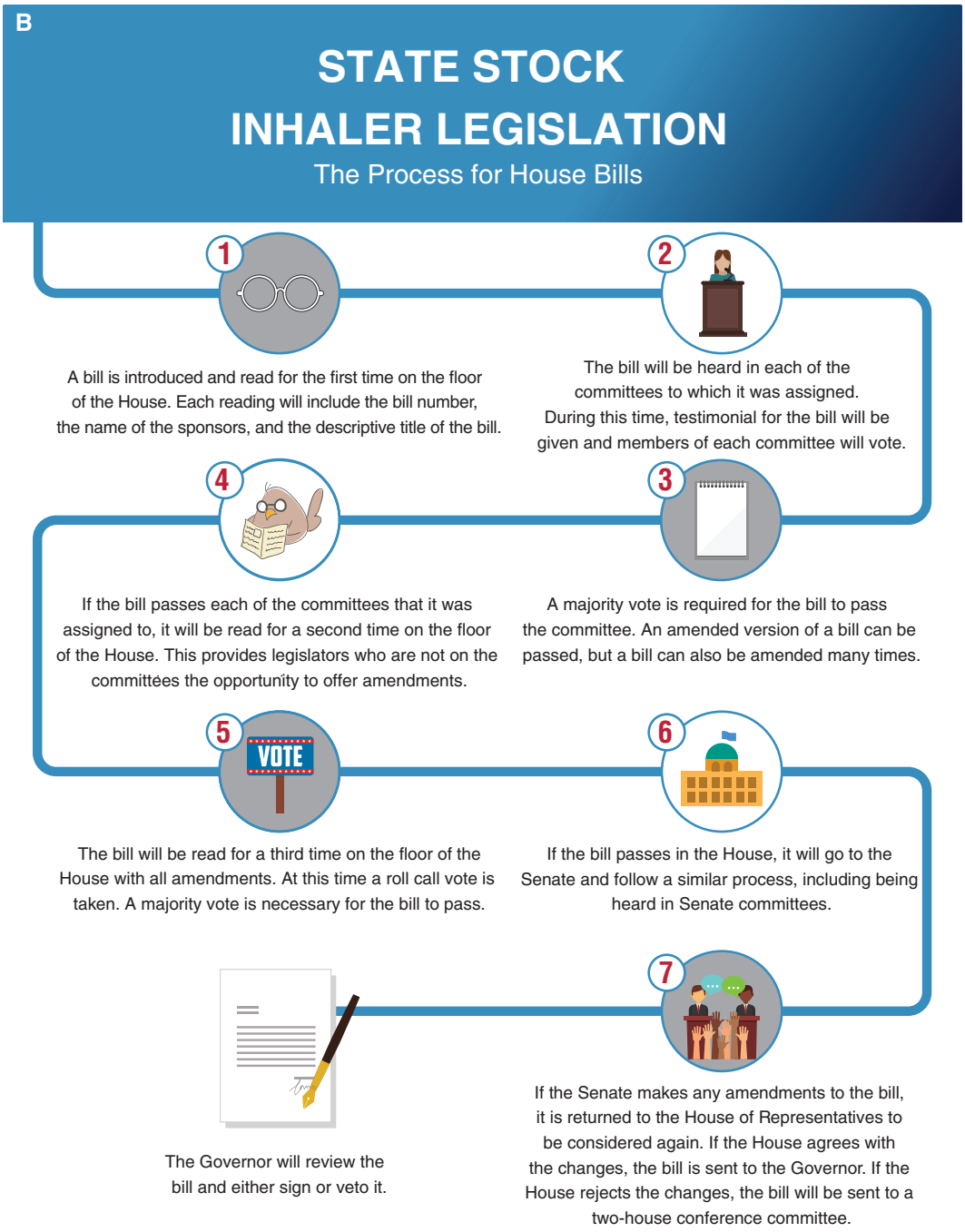

Figure 1. (*Continued*).

Legislation drafts should be shared with stakeholders to negotiate compromises to any key concerns. It also may be important to reach out to the state governor's office while drafting legislation, as this office may provide feedback to incorporate into the bill. Engaging these groups early to discuss concerns helps move the bill smoothly toward passage and minimize the potential of a delay or veto.

Before bill introduction, costs incurred by the state must be estimated through a fiscal note produced by the legislature. Most state legislation has allowed, but not required, schools to stock albuterol. The reason is that funding for such policies is difficult to obtain, and as such, legislation is less likely to be passed if funding is required. Many stakeholders are not supportive of unfunded school mandates because it puts undue burden on already underfunded schools.

Introduce Legislation

Each state has different processes for introducing and passing legislation. The state legislature's website provides legislative session details, including the state's processes and timelines for introducing legislation. Formal

Table 1. Key Stakeholders and Their Role in Stock Albuterol Legislation and Implementation

Stakeholder Group	Examples	Expertise/Role in Legislation	Expertise/Role in Implementation
Nonprofit health organizations	• Allergy and Asthma Foundation of America • Allergy and Asthma Network • American Academy of Pediatrics • American Lung Association • American Thoracic Society • National Association of School Nurses • Asthma coalitions • National professional medical, nursing, and pharmacy organizations • State medical societies	• Experience with legislative process • State-specific knowledge • Relationships with specific legislators and stakeholders	• Experience with implementation • Knowledge about legislation passed and relevant issues • Develop and deliver training • Provide medical expertise, specifically on asthma
School nursing	• National Association of School Nurses • National, state, and local organization representatives • State school nurse consultants • School nursing leaders from districts	• Understand how nurses are hired and function in schools • Provide expert testimony • Provide asthma and respiratory disease expertise	• Provide medical expertise, specifically on asthma • Share knowledge about legislation and relevant issues • Disseminate policy to school administrators/staff and children/families • Develop and deliver training • Implement in schools
Healthcare professionals	• Primary care pediatricians • Asthma subspecialists (e.g., pulmonologists, allergists) • Certified asthma educators • Academic researchers	• Provide information on asthma and treating respiratory distress • Provide information on safety of albuterol • Discuss training of lay personnel	• Write standing orders and prescriptions • Discuss policy with patients and families
Health and education departments	• State and/or county health department • State superintendent • Board of Education • School/district administration	• Ensure implementation considered in legislative process	• Disseminate policy broadly • Help support funding of program • Develop and deliver training
School staff and administrators	• Principals/administrators • Teachers • Coaches, security guards, and office clerks • Unions for teachers and staff	• Share insights about asthma care in school	• Understand and champion policy • Participate in training
Healthcare organizations	• Managed care organizations • State Medicaid Agency • Private insurance companies • Hospitals and emergency departments	• Early awareness of legislation can facilitate implementation	• Provide avenue for potential funding
Pharmacy	• State Board of Pharmacy • Pediatric Pharmacy Association and other state and national pharmacy organizations • Durable medical supply vendors	• State Board of Pharmacy should be part of legislation related to dispensing of medication to schools • National and state pharmacy organizations can support stock albuterol programs	• Provide medications and devices to schools • Communicate about drug recalls • Help communicate with pharmaceutical companies
Legal expertise	• Legislative counsel • Trial Lawyers Association	• Consultation on appropriate legal language for drafting policy • Children health policy expertise	• Support safe adoption of policy within school
Children with asthma and parents/guardians	• Elementary, middle, and high school students • Parents/guardians/caregivers	• Provide personal stories and perspectives	• Raise awareness and champion policy • Share stories of impact

Listing does not indicate endorsement of document unless noted otherwise in statement.

introduction typically occurs when the legislative session starts, although some states start work on bills earlier and have deadlines after which legislation can no longer be introduced.

Legislation can be introduced in one or both houses of the legislature. The strategy around advancing legislation, including whether to introduce in one or both houses, is typically decided by the coalition supporting the legislation and the legislative sponsor. States have 1- or 2-year sessions. Typically, if a bill is not acted on in a state within the first year of a 2-year session, it will carry over to the session's second year. Details of how a bill moves through the House and/or Senate are depicted in Figure 1.

Testify

It is important to identify key people to testify in support of the legislation and understand how testimony occurs. The speaker must register in advance so that they are called on during the bill's hearing. The statement should begin with the proper address and thank you to the bill sponsor. For example, an opening could be "Chair and senators, thank you for allowing me to testify on an issue that is of extreme importance for the safety of our school children." Testimony is usually limited to 1–2 minutes, prompting most individuals to prepare a script. Testimony should end with an "ask," such as, "Therefore, I would urge you to vote "yes" to Bill [number] allowing schools to stock albuterol medication for respiratory emergencies." After each testimony, legislators can ask questions.

Different stakeholders bring important expertise and experience for testimony (*see* online supplement). Clinicians can speak about asthma prevalence, symptom frequency, and safe treatment of respiratory episodes with albuterol. Common questions include "What happens if albuterol is given to children who do not have asthma?" and "What are side effects of albuterol?" We suggest that the testimony include several points: it should be noted that if the school calls 911, it is likely the child will receive albuterol from emergency responders; it should be noted that it is better for a child to be given albuterol as a potentially life-saving medication than for treatment to be withheld, which would increase the risk of poor outcomes; and it is also important to discuss the safety profile of albuterol across a range of doses (34). In addition, school nurses can discuss how difficult it is to obtain a child's asthma medications for school, care for children with respiratory distress in a nonhealthcare setting, and reach parent/guardians. They can discuss how availability of stock albuterol would allow treatment to begin while awaiting emergency assistance (39). Most school nurses have experienced caring for students during a respiratory emergency, and without albuterol, the only option is to call parents/guardians and/or 911. This treatment delay can be difficult when albuterol may allow a child to return to class or may lessen the severity of symptoms. Finally, a school-aged child with asthma or their parent/guardian can share a story of a respiratory episode without available albuterol.

Passage of Legislation

Proposed legislation is discussed and voted on in committee and then on the floor in each chamber. Revisions to the legislation may occur at each step. The timeline for voting in each chamber depends on the legislators who control the floor schedule. Once both chambers pass the legislation, it is acted on by the state governor, and this action includes signing it or vetoing it. If signed by the governor, the legislation is enacted as a law. If the legislation is vetoed, the state legislature can override the veto, usually with a supermajority vote (e.g., two-thirds of legislators).

Components for Implementation of Stock Albuterol

Once legislation is passed, regulations are developed by designated state agencies (e.g., the board of education, health department). Then, efforts must be directed to implementation. Schools should be prepared to complete several steps for successful implementation (Figure2) (40). Although processes may differ across schools/districts, it is critical to engage stakeholders in key components to successfully implement stock albuterol (Table 1). Importantly, it should be recognized that stock albuterol is one piece of asthma care within the school, which should include education for affected students, training for staff, access to medications, and more.

Policy Dissemination and Education

Stock albuterol policy must be broadly disseminated. State-level professional organizations and advocacy groups are useful dissemination avenues for healthcare professionals (e.g., prescribers, nurses, pharmacists). Local and state-level health departments, education agencies, or policy e-mail listservs can serve as additional channels to disseminate policy and provide sample wording for school/district-level policies. School/district-level administrators and medical directors/nurses should notify school personnel about the policy.

Families and students are essential to effectively implementing stock albuterol policy. Annual notification about the policy should be sent home to families. To minimize barriers to life-saving medication, the policy should not require parents/guardians to sign waivers allowing albuterol administration in an emergency. Ideally, the policy should specify that school staff can assume parent/guardian consent in the case of emergency medications. Communication should be provided about by whom, when, and how medication will be administered, maintained, and stored and also about how staff will be trained. Parents/guardians must know stock albuterol does not replace the need for children to have their own quick-relief medications. A parent/guardian champion may be helpful for garnering support within the school community.

Training of School Personnel

To effectively implement the policy, annual training is critical to ensuring requisite knowledge and skills of school personnel who are designated to administer stock albuterol for respiratory symptoms or a respiratory emergency. At each school, a minimum of two individuals should be trained per building, with consideration given to additional individuals on the basis of asthma prevalence and other school indicators (e.g., population, social needs) (41). It is preferable to train as many as feasible to ensure that at least one trained individual is present in school daily. Both licensed and unlicensed school personnel, including unlicensed assistive personnel, may be designated to administer stock albuterol. Training should be geared to both groups, regardless of experience, in alignment with state legislation.

Training content about stock albuterol for school staff should include *1*) signs and symptoms of respiratory distress; *2*) an overview of asthma medications that includes inhaler administration, technique, maintenance, and cleaning; and *3*) a protocol to manage respiratory episodes. Opportunities to teach back are particularly important to ensuring proper technique. Training should be delivered by individuals with requisite knowledge and expertise in asthma and stock

Table 2. Key Questions and Pitfalls in Building a Coalition of Stakeholders

Building Coalition	Key Questions and Inclusions	Pitfalls to Avoid
Be clear about goals of engaging diverse stakeholders.	• How does engaging diverse stakeholders fit into your goals? • What do you hope to achieve in short-term for legislation and long-term for implementation?	• Trying to engage people without clarity about goals • Tokenistic approach in which focus is "getting people to the table" without commitment to authentic partnership and learning
Invest in building relationships and trust.	• What types of relationships exist among different stakeholders? • What are ways to strengthen relationships and build trust? • The goal is to engage diverse stakeholders early on to help future implementation efforts with due understanding of distinct perspectives and roles of each participant or group represented.	• Narrow focus on "getting people to the table," rather than partnership building • Paternalistic approach that does not recognize strengths • Unwillingness to hear feedback that is not positive • Overlooking importance of relationship-building and focusing on tasks • Focusing prematurely on formal structure of relationships
Recognize and work with different agendas and interests.	• What are priorities of different stakeholders you wish to engage? • What are common interests? • Can involvement in coalition add value for each stakeholder's work or help them achieve goals? • Do agendas of dominant groups within coalition get in way?	• Assuming that coalition issues should be a priority for everyone or that people who do not engage are apathetic • Allowing agendas of one group or few groups to dominate coalition
Explore different strategies for engaging communities.	• What are best strategies and structures to reach goals for engaging different stakeholders? • Are there other strategies that might meet your needs? • How can momentum be maintained once legislation is passed but before implementation?	• Structuring coalition in a way that makes it difficult for groups with fewer resources to participate • Restricting engagement strategies to coalition building
Build inclusive coalition culture.	• Are there barriers to participation built into coalition's structure or how it conducts business? • What type of coalition culture would be most welcoming and inclusive to diverse groups?	• Making assumptions about how to be inclusive without talking to people you want to engage • Attachment to "right" way to do things, leaving no room for exploration
Acknowledge and address differences in power and resources.	• How do differences in power and resources impact coalition and partnerships between groups? • What are ways to navigate differences and share power? • How can different groups in coalition share resources and strengths in a way that will benefit everyone? • Are there ways to invest resources to build infrastructure and support participation of groups that have fewer resources? It is key to build infrastructure in the legislative process so that future implementation is successful.	• Ignoring differences in power and resources, and operating as if they do not exist • Undervaluing the strengths of groups that have fewer resources • Bringing people to the table without sharing power • Allowing any group or clique to dominate the coalition

albuterol policy. School nurses are key professionals who can provide and/or facilitate training on stock albuterol for school personnel. Partnerships with local organizations and/or coalitions (e.g., the American Lung Association, Allergy and Asthma Network) are also encouraged.

Content may be delivered synchronously or asynchronously with in-person or remote (e.g., web-based, video) methods. In-person workshops are ideal for school personnel with limited prior health experience or who prefer hands-on learning, especially for reviewing inhaler techniques for which immediate feedback is beneficial. In contrast, a

Table 3. Essential and Suggested Components of Stock Albuterol Legislation

Component	Explanation/Reasoning
Essential components	
Medication can be administered in good faith to any child in respiratory distress.	The bill should permit emergency use of stock albuterol for any student in respiratory distress, not only students known to have an asthma diagnosis. Reasoning: • Many students have undiagnosed asthma and may have their first asthma exacerbation at school. • Emergency administration of albuterol may be necessary and time sensitive; review of records to determine whether a student has asthma may delay care. • There are few causes of respiratory distress in children that would not respond to or would be harmed by administration of albuterol. • Albuterol is a safe medicine.
Establish training requirements for school staff.	The bill should outline details about how many staff should be trained and about how training should be conducted to ensure that enough staff have the necessary knowledge and skills to administer stock albuterol. • The recommendation is that a minimum of two individuals be trained per school building at a ratio of one individual for every 225 students. • Recommend permitting live or remote training that can be accessed by school staff at a convenient time at no cost.
Ensure immunity from civil liability for staff and prescribers.	The bill should provide: • Immunity for medical professionals who write the orders as well as pharmacists who dispense orders. • Immunity for school districts, school staff, or agents of the school who have the required training and administer the albuterol in good faith.
Ensure that pharmacy laws allow medication dispensing to schools.	In parallel with preparing legislation, review the state's current pharmacy dispensing laws and assess whether it is necessary to update pharmacy state board laws. Specifically, it is important that pharmacies are able to dispense medication to a school/district rather than to a specific individual.
Suggested components	
Allow schools to accept donations of money or product.	Donations can help with financing for the implementation of stock albuterol programs.
Use metered-dose inhalers with VHCs/spacers.	Metered-dose inhalers with VHCs/spacers for administration of quick-relief medication allows for the inhaler to be used for multiple individuals with less cleaning, easier storage/portability, and reduced aerosolization of particles.
Ensure authorization of parents or caregivers/school volunteers to administer albuterol.	Include parents or caregivers as well as school volunteers as authorized administrators of stock albuterol to ensure that they are indemnified from good faith use if they have appropriate training. • There are many situations in which parents or caregivers as well as school volunteers act as agents of the school, such as during after-school activities, field trips, and sports.
Ensure inclusion of nonpublic schools (e.g., private, tribal).	States often do not have significant oversight for activities in nonpublic (e.g., private, tribal) schools, as they are not state licensed. • Stakeholders should explore state-specific strategies with legislators to include nonpublic schools in legislation. • Even if a school does not fall under state licensing requirements, prescribing providers and dispensing pharmacists need to legally be able to provide stock albuterol for nonpublic schools.

Definition of abbreviation: VHC = valved holding chamber.

Stock Inhaler Program

Quick Reference Guide for Schools

1 Pre-Implementation

1. Ensure your state has a current stock inhaler law
2. Review the key components of your state's law
   a. Types of schools
   b. Training requirements
   c. Devices (e.g., spacers)
   d. Prescriptive authority
   e. Liability
   f. Documentation, Reporting & Medication administration requirements
3. Conduct outreach to stakeholders
   a. School administration
   b. Parents
   c. Teachers & school personnel
   d. Pediatricians
   e. Pharmacists
   f. EMS providers
   g. Hospitals & urgent care facilities

2 Implementation

1. Procure all necessary supplies for your school
   a. Inhaler (albuterol sulfate)
   b. Supply of spacers
   c. Prescription for both stock inhaler & spacers
   a. Signed standing medical order
   b. Protocol for medication administration
   c. Documentation forms
2. Complete training requirements
   a. Training platform (online training, in-person training or either)
   b. Who conducts training (non-licensed / licensed health care provider)
   c. Frequency of training
   d. Minimum number of individuals who shall be trained at each school **(1 trained person to 225 students (1:225) but ≥2 trained, school personnel)**
3. Notify parents of the stock inhaler program at the beginning of the academic year

3 "School Champion"

1. Identify a stock inhaler **"School Champion"** who can lead your school's stock inhaler program
   a. District-level nurses or supervisors
   b. School nurses or Health Assistants (HAs)
2. Roles of the School Champion include:
   a. Organizes and distributes stock inhaler program supplies
   b. Ensures staff are trained in accordance with state law
   c. Monitors documentation requirements including retention & reporting requirements
   a. Communicates program updates to school administration, parents (when applicable) & trained, school personnel

4 Capacity Building

1. Build strong partnerships with community stakeholders & governmental organizations who can help sustain your program
   a. County & State Health Departments
   b. Department of Health Services
   c. Local & state organizations
   d. American Lung Association
   e. Asthma & Allergy Network
   f. Local health care providers
   g. Pediatricians / Primary Care Providers (PCPs)
   h. Pediatric Pulmonologists
   i. Local health care facilities
   j. Rural hospitals
   k. Local businesses
   l. Philanthropic partners
   m. Parent teacher associations (PTAs) / Parent teacher organizations (PTOs)

5 Sustainability

1. Identify sustainable program funding. Schools can have a stock inhaler for approximately **$85 per school**
   a. Community stakeholders & partners (listed above)
   b. School health office budget
   c. Grant funds
   d. Foundation funds
2. Capture program data if possible

Stock Inhaler Programs: A Quick Reference Guide to Implementation for Schools, December 2020.

Figure 2. Stock albuterol program: quick reference guide for schools. Reprinted by permission from Reference 40.

Table 4. Essential Components to Implement Stock Albuterol in Schools

Essential Component	Explanation/Reasoning
Dissemination and education about policy	After legislation is passed, it is critical to broadly disseminate the policy to healthcare providers, school staff, and families. It is also important to provide annual education and communication about the legislation. Key individuals who should be involved in dissemination and education about the policy include: • Policy-makers • Schools, school boards, and superintendents • School nurses • Local hospitals and urgent care facilities • Primary care and subspecialty clinicians • Emergency medical service personnel • Pharmacists • Local health departments (city, county, state) • Nonprofit health organizations
Training	At each school, a minimum of two individuals should be trained per building at a ratio of one trained individual for every 225 students. School nurses are key professionals who can provide and/or facilitate training of school personnel on stock albuterol. Training should include: • Basic asthma pathophysiology and common triggers • How quick-relief medications work to treat respiratory distress • Recognizing mild, moderate, and severe respiratory distress • Demonstration of correct technique to administer treatment by using a metered-dose inhaler with a valved holding chamber • Determining the course of action for managing respiratory distress events • Maintenance of stock albuterol devices • Postincident instructions, including timely documentation and parent/guardian/caregiver contact instructions
Orders and prescriptions	Key supplies needed for stock albuterol program (with cost*) include: • Albuterol sulfate metered-dose inhaler ($20–$100 per inhaler) • Supply of one-way valved holding chambers/spacers (plastic or cardboard, $3–6 per unit) • Alcohol wipes to clean canister body and nozzle • Template documents (<$20/yr) A standing medical order and/or prescriptions are needed to obtain albuterol and valved holding chambers/spacers for each school.
Supplies	Program supplies require funding of <$85 for a stock inhaler and needed materials for a school. Program expenses may vary on the basis of student enrollment, the school layout, and the community asthma prevalence. Schools with a large student body, sports programs, or extracurricular activities may opt to purchase additional stock albuterol inhalers to store in convenient locations (e.g., the gym, fields).
Standardized protocol	The protocol provides instructions regarding the use of stock albuterol in case of respiratory distress. It should include: 1. Signs and symptoms of mild, moderate, and severe respiratory distress 2. The course of action based on the initial presentation of the individual 3. Specific indications for when to summon emergency medical services 4. The dose of albuterol to give (e.g., the number of inhaler puffs for initial use and subsequent use for same episode of respiratory distress) 5. Postincident instructions 6. The duration that an individual's documentation log shall remain on file with the school
Documents	Schools need the following forms for the implementation of stock albuterol: • Instruction sheet for stock albuterol implementation process • Template letters for communication with parents/guardians/caregivers and school/district administrative personnel • Directions about and a pictorial graphic of the effective technique for administering treatment using a metered-dose inhaler with a valved holding chamber/spacer • Documentation forms (stock albuterol documentation log; *see* online supplement) (46) • Copies of the State Board of Education regulation and stock albuterol law or statute

*Cost is based on 2020 dollars.

Table 5. Data Elements for Documentation of Stock Albuterol Usage Event Reporting in Schools

Description	Data Element
Date	Date the event occurred
Time	Time of d the event occurred
Responding person	Fill-in-the-blank space for name and role
Student's or individual's name	First name Last name
Student's or individual's age or date of birth	Fill-in-the-blank space
Student's or individual's gender	Male Female Nonbinary
Student's or individual's race	American Indian or Alaska Native Asian Black or African American Native Hawaiian or Pacific Islander White Multiracial
Student's or individual's ethnicity	Hispanic or Latino Non-Hispanic or non-Latino
Previously known asthma diagnosis	Yes No Unknown
Reason for stock albuterol use (e.g., symptoms)	Fill-in-the-blank space
Number of inhaler actuations (e.g., puffs)	Checkboxes for number of puffs based on protocol; also provide option for off-protocol with blank for number puffs and reason
Student or individual's disposition status	Returned to class Sent home Summoned EMS and not transported Summoned EMS and transported
Contact with parent/guardian	Open-ended
Comments (e.g., why stock albuterol inhaler was used)	Open-ended

Definition of abbreviation: EMS = emergency medical services.
Additional information can be recorded at the school level or individual level, including the national drug code and lot number of the albuterol medication.

standardized web or video-based curriculum provides flexibility, as many schools are unable to hold training that can be attended by all designated personnel. Because schools typically experience cyclic transitions of personnel throughout the academic year, flexible training options are necessary.

Program Supplies

Stocking albuterol in schools requires annual funding, primarily for supplies, for effective implementation. Essential program supplies are reported in Table 4 (*see also* the online supplement). To enable each school/district to meet its unique needs, policy should specify flexible options to procure supplies and promote equity for all students in the state, regardless of resources within a school or district.

Ideally, schools can procure supplies by using the school health annual budget. Alternative mechanisms include product or monetary donations from interested organizations (e.g., pharmaceutical companies, patient advocacy groups, hospitals), discounts or reimbursements from pharmaceutical companies, or fundraising through existing stakeholders, such as parent–teacher groups. Current programs cost less than $85.00 (in 2020 dollars) for an albuterol inhaler and needed supplies for a school (29). Program expenses may be affected by the number of inhalers needed at the school. We recommend at least one quick-relief inhaler per school building, with additional inhalers being added on the basis of student enrollment, the school layout (e.g., the number of buildings, locations of playgrounds and fields), and asthma prevalence.

Albuterol may come from pharmacies, pharmaceutical companies, or manufacturers. School nurses or medical directors should keep records of where medication is obtained and contact information if product issues arise. They should also monitor national databases for drug recalls (42). If the school uses a pharmacy to obtain albuterol, it is beneficial to develop relationships with the pharmacy manager to ensure notification of a drug recall or shortage.

In the school, stock albuterol should be stored in a temperate, dry, and unlocked place that is easily accessible to trained individuals for medication administration. Medication expiration dates should be monitored. All medications should be disposed of on the basis of school procedures.

Metered-dose inhalers (MDIs) should be primed before administration and cleaned after each use, as per manufacturer instructions (e.g., before the first dose, if not used for 2 wk). The MDI should always be used in conjunction with a one-way VHC/spacer ($3–$6 per unit). Most VHCs/spacers are constructed of plastic, but they are also available in cardboard models. The plastic models are available in rigid and collapsible versions and tend to be more expensive. Cardboard VHCs/spacers are also collapsible and relatively less expensive. Plastic and cardboard VHCs are equally effective, not suitable for use by more than one child, and should be cleaned or stored as per the manufacturer instructions. Schools can stock a supply of VHCs/spacers and use one per child, while using a single MDI. Once a child uses a VHC/spacer (plastic or cardboard), it should be stored in its original packaging and labeled with the child's name if reuse is needed later during the school year, as studies show

paperboard spacers can safely last the entire school year without microbial growth (43).

Standardized Protocol for Medication Administration

Every school should follow a standardized protocol for stock albuterol administration that is created and adopted at the school, district, or potentially state level and aligns with school, nursing, and other relevant regulations. The protocol should include specifics about who can receive medicine, what symptoms warrant albuterol, the number of doses to administer, how to assess the response, when to repeat administration, and what to do if medication is or is not effective.

Schools/districts in states that lack a standardized protocol should identify a medical consultant (or prescriber authority) to work with them to implement an existing or modified protocol that can be widely adopted. Medical consultants who sign the standing medical order should have the ability to modify existing protocols on the basis of their clinical practice and guideline-based care. For example, in Arizona, a protocol using a standardized number of inhaler actuations (instead of a dose range) stratified by the initial presentation of symptoms was widely adopted (29). Importantly, treatment for any child who requires stock albuterol should follow the standardized protocol and prescription instructions specified on the standing medical order, regardless of whether they have an asthma action plan on file at school. An asthma action plan provides school personnel with instructions on how to use a child's personal medicine, not stock albuterol.

Procedures for Event Documentation

All respiratory episodes requiring stock albuterol should be documented by trained school personnel (Table 5). Documentation should be retained on file with the school in accordance with school policy for student health information as well as state legislation and regulation for stock albuterol. For states that have adopted stock epinephrine in schools, these procedures can be adapted to document stock albuterol administration.

States with existing infrastructure can assist schools with maintaining documentation of quick-relief medication through centralized databases with medication events for epinephrine, naloxone, and albuterol. However, many states do not have infrastructure capable of systematic data collection on medication administration in schools. In this scenario, schools should create a documentation system that reports events in both the child's individual health record and a centralized place (within the school or electronically) for all stock albuterol events that occurred during a single academic year. Procedures should be reviewed annually.

Together with documentation, parents/guardians should be notified each time their child uses stock albuterol to encourage follow-up with their primary care or subspecialty clinician and to obtain an inhaler to have at school. Frequent communication among the school, family, and medical home should occur, especially for children who use stock albuterol more than once in a school year. If a child does not have an asthma diagnosis, the family should be advised to follow up with a healthcare professional to be evaluated for asthma, and, if necessary, a referral should be made. Template communication resources are available (*see* online supplement).

Additional Considerations

Children and/or adults. Traditionally, emergency use protects both children and adults with emergency needs. For stock albuterol, the legislation varies by state in terms of whether only children or anyone is included. Approximately half of the 15 states with stock albuterol legislation include adults, representing a gap that should be considered in future legislation and in amendments to current policies.

Stock inhaler versus nebulizer. Several states allow administration of stock albuterol via an inhaler and/or nebulizer, although specific policies vary by state in terms of which of these can be administered by school nurses or designated personnel. The literature shows that MDIs with VHCs/spacers are as, if not more, effective than nebulizers in children during acute respiratory episodes (44). Stock nebulizers also have greater upfront cost, although the cost of albuterol used in nebulizers is presently less expensive than an inhaler; this may change as generic quick-relief inhalers become more available. Nebulizer machines are bulky and lack portability, making them less practical in certain situations (e.g., recess, before exercise). Although the administration of medicine through nebulizers tends to be easier, it takes longer to administer the same dose when using nebulizers, keeping students out of class longer. On balance, we recommend inhalers with VHCs/spacers as the preferred stock albuterol delivery system in schools, unless otherwise clinically indicated.

Stock albuterol and coronavirus disease. The severe acute respiratory syndrome coronavirus 2 pandemic has changed practices around albuterol administration via nebulizers. Nebulizers are not recommended in school settings during the pandemic because of the potential for the spread infectious aerosols. Instead, stock albuterol MDIs can be used when they are properly cleaned after use with a single, one-way VHC/spacer for each child. As per CDC guidance, proper personal protective equipment should be used by the staff person aiding in any inhaled or nebulized medication administration, and medicine should not be administered in the classroom with other children present (45).

Conclusions

Because albuterol is a safe and potentially life-saving medication that is recommended by guidelines, it is important that schools make quick-relief medications available to all school-aged children, both with and without a documented asthma diagnosis. This failsafe measure can prevent exacerbations, reduce emergency service calls to schools, and enable children to return to class (29). Stock albuterol legislation is imperative to aiding in adoption and implementation, and key policy inclusions can lay the groundwork for success. A strong group of stakeholders and a carefully chosen sponsor are crucial to successful legislation and implementation across the United States. Future work should focus on passing legislation in all states and implementing policy in schools as well as on evaluating the impact of such programs on academic and health outcomes. Effective implementation of stock albuterol can help ensure that children have access to medication that enables them to live, learn, and play. ■

This official policy statement was prepared by an *ad hoc* task force of the American Thoracic Society, Allergy and Asthma Network, American Lung Association, and National Association of School Nurses.

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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

RE: Testimony HB384, Public and Non-Public Schools – Bronchodilator Availability and Use Policy (Bronchodilator Rescue Inhaler Law)

Way and Means Chair, Vice Chair, and Committee Members,

For the record, I am Delegate Regina T. Boyce testifying today on **HB384 Public and Non-Public Schools – Bronchodilator Availability and Use Policy (Bronchodilator Rescue Inhaler Law).**

HB384 quires public schools in the state, and authorizes nonpublic schools**, to establish a policy to stock inhalers (albuterol) in schools for emergency purposes (recue inhaler),** requiring select school personnel to be trained to administer the inhaler in the absence of a school nurse and removes personal liability of nurse and personnel.

According to the Asthma and Allergy Network, **7.6% of Maryland Children,** have been diagnosed with asthma, **56% of children with asthma do not have an asthma plan** on file at their school, and it is reported that **19.2% of parents with asthmatic children** report that their children missed 1-2 days of school because of their asthma. Asthma is one of the leading causes of school absenteeism in the country alone. Add to those stats the number of individuals who haven't been diagnosed with asthmas and the growing shortage of school nurses, we have a risk management dilemma. In the U.S., asthma is responsible for 10 deaths a day. Given these stats and risks, states are considering stock albuterol (rescue inhalers) in policy and guidelines. Currently, **14 states** (Arizona, Arkansas, Georgia, Illinois, Indiana, Kentucky, Missouri, New Hampshire, New Jersey, New Mexico, Ohio, Oklahoma, Utah, and Virginia) have stock albuterol laws, and 2 states (New York and Nebraska) have stock albuterol guidelines. At the federal level, Congressman Steny Hoyer introduced and passed HR2468 **"School Based Allergies and Asthma Management Program Act", December 2020.** The bill amends the Public Health Service Act to increase the preference given in awarding certain allergy and asthma related grants to states that require certain public schools to have allergy and asthma management programs. This federal act allows states to create and implement programs as needed with financial assistance.

What I've learned about Asthma is that you cannot diagnoses it without first having an incident, or an asthma attack. **Unfortunately for some, an asthmatic incident or attack is the first and last sign of a respiratory condition.**

An inhaler is as important and lifesaving as an EpiPen, and Naloxone (Narcan). It must be available in our schools, and it must be added as a stock item to the lifesaving tool box for our schools and school professionals.

Thank you for your time and consideration of HB384. I ask for a favorable report.

Regina T. Boyce

Regina T. Boyce

MD HB384 bronchodilator written testimony S.Choi.p
Uploaded by: Sara Choi
Position: FAV

Testimony for House Bill 384

February 10, 2022

Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy

(Bronchodilator Rescue Inhaler Law)

Dear Delegate Boyce, members of the Ways and Means Committee, and others:

Thank you for allowing me to provide my testimony in support of this bill which would provide albuterol in emergency situations within the Maryland schools. My name is Sara Choi, and I am a pediatric pharmacist at the Johns Hopkins Pediatric Emergency Department. As a health care provider who sees first hand many children presenting to the emergency department due to respiratory distress, I am testifying today to the safety and efficacy of albuterol inhalers and to the necessity of this legislation.

In the event of an asthma attack, inflammation and constriction of the small, microscopic airways in the lungs can lead to difficulty breathing, wheezing, and respiratory distress. Albuterol is a medication that works quickly to relax the smooth muscles in these small airways, which opens them up and makes it easier for a person to breathe. Patients with asthma refer to this medication as their "rescue inhaler," and it is an essential medication for them to have access to at all times. Immediate interventions are necessary in anyone presenting with severe respiratory distress because, if untreated, an asthma attack can lead to cardiorespiratory arrest and potentially death. Albuterol was first approved by the FDA in 1981**,** so it is a familiar medication to the health care community and the general population[1]. It is effective and also one of the safest medications we use. Albuterol has a quick onset of action of less than 5 minutes and has minor adverse effects including tremor, increased heart rate (tachycardia), and nervousness. The only contraindication to administering albuterol is a previous anaphylactic reaction to albuterol, which is extremely rare.

Interventions for a child in respiratory distress from asthma is time sensitive, vital, and directly impacts medical outcomes. Although albuterol will be most effective if the breathing emergency is due to asthma, it is important that the law is written in a way that any child presenting with respiratory distress can be treated with albuterol. Fortunately, the Bronchodilator Rescue Inhaler Law is written this way, and this is for several reasons. First, some children have undiagnosed asthma. They may have their first asthma attack at school or perhaps they have had them before, but it has not yet been recognized as asthma, and the child has not received the appropriate diagnosis by a healthcare provider. Another example is that the child is known to have asthma by someone such as their primary care provider or their parent, but for some reason, the school is not aware. A diverse number of other examples can be imagined, but the bottom line is that the vast majority of children exhibiting respiratory distress at school will be having these symptoms due to asthma.

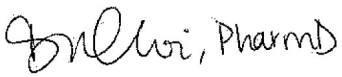
The benefit of administering albuterol in a child presenting with respiratory distress outweighs any potential risk of albuterol as this can be a matter of life and death. In the event that the child has respiratory distress for another reason such as pneumonia, administering albuterol, regardless of asthma diagnosis, would not cause patient harm or death. It would simply not help very much in this situation. Providing albuterol in a child who presents with respiratory distress, but does not have asthma, may cause some mild, short-term tachycardia which can last for about four hours[2]**.** On the other hand, administering albuterol in a child who presents with respiratory distress with undiagnosed asthma, but actually has asthma, will save this child's life. The low risk of increased heart

rate is incomparable to saving a child's life and is definitely worth providing albuterol in any acute respiratory distress. Furthermore, the administration of an albuterol inhaler through a spacer is straightforward and easy, allowing school administration staff to safely administer to students in need.

Working in the pediatric emergency department, I frequently see children presenting with difficulty breathing throughout all seasons of the year. Sometimes these children are not yet diagnosed with asthma but present with the typical symptoms of asthma including, but not limited to, wheezing, coughing, shortness of breath, and/or chest tightness. Some children, whether they are known asthmatics or newly diagnosed with asthma, present in extreme respiratory distress leading to intubation and mechanical ventilator use due to the severity of the asthma exacerbation. Thankfully, the pediatric emergency department is a well-equipped environment and has the abundant resources a child needs to receive necessary treatment as well as physicians and nurses who are able to appropriately prescribe and administer therapy. Although a school environment has minimal resources, the provision to administer albuterol can be a life-saving treatment when a physician assessment is delayed. Additionally, in a school setting, there are multiple factors that can further delay the medical care for a child such as the wait for an ambulance to arrive and the transportation time to the hospital. The time between when a child shows respiratory distress and to when the child arrives to a hospital are critical moments that must be taken advantage of.

Thank you again for the opportunity to testify in support of this bill. I urge you as a pediatric pharmacist and a healthcare advocate for children, to please be in favor of this legislation in order to provide a safe medical plan in schools for our vulnerable pediatric population. Albuterol is a safe, effective, and necessary tool for our children to have access to in schools.

Sincerely,



Sara Choi, PharmD
Pediatric Emergency Medicine Clinical Pharmacy Specialist
The Johns Hopkins Hospital
Department of Pharmacy
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Baltimore, MD 21287

Disclosure: The views expressed in this testimony are my own and do not necessarily reflect the policies or positions of my employer, Johns Hopkins Hospital.

References:

1. Accessdata.fda.gov. 2022. Drugs@FDA: FDA-Approved Drugs. [online] Available at: https://www.accessdata.fda.gov/scripts/cder/daf/index.cfm?event=reportsSearch.process&rptName=1&reportSelectMonth=5&reportSelectYear=1981&nav. Accessed 6 February 2022.
2. Albuterol. Lexi-Drugs. Lexicomp. Wolters Kluwer Health, Inc. Riverwoods, IL. Available at: http://online.lexi.com. Accessed 6 February 2022.

HB 384 Bronchodilator Availability and Use - Polic

Uploaded by: Dawana Sterrette

Position: FWA

BALTIMORE CITY
PUBLIC SCHOOLS

Testimony of the
Baltimore City Board of School Commissioners
Support with Amendments
House Bill 384 –
Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy

February 10, 2022

The Baltimore City Board of School Commissioners supports with amendments House Bill 384 and believes this legislation is designed to save lives of students that may suffer an unexpected asthma attack.

The school board estimates that the proposed legislation would cost approximately $40,000 annually to ensure two bronchodilators per school are present, with the understanding that these devices do expire and would need to be replaced. Students with identified risk already have a prescription and orders for administration exist in health suites.

The legislation further calls for training on recognizing signs of distress. The Baltimore City Health Department staff health suites in Baltimore City schools i.e. they are not employees of the school system, therefore the school board cannot direct them to provide training. While the board believes this can become part of ongoing professional development, the actual training should be conducted by qualified health professionals. **Therefore, we ask for language that would require local health departments to provide professional development on recognizing distress to local schools in school systems that have a contractual arrangement to provide health services**.

Additionally, rescue inhalers should only have school nurses administer the inhaler because they have already have the training necessary to recognize distress. If a school does not have a designated health professional, emergency person can be identified to administer to already identified with bronchial issues. **We also request an amendment that the person to administer must be a person that is in the school every day, not someone that is part time or in only 7 days a school year.** For non medical personnel, familiarity with a student in key in also understanding medical issues.

The Board also wants the committee to understand that the reason a skilled nurse or emergency personnel are the best to administer is because with COVID, there are similar breathing issues and a nurse or emergency personnel would understand the difference, but a person without medical training may not.

For the foregoing reasons, the Baltimore City Board of School Commissioners supports with amendments, House Bill 384 and urges a favorable report.

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MAJ -hb384 - FWA - Bronchilator.pdf

Uploaded by: Josh Howe

Position: FWA

MARYLAND ASSOCIATION FOR JUSTICE

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HB 384

Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy

Favorable with Amendments

The Maryland Association for Justice (MAJ) envisions a fair and impartial legal system that protects the rights and safety of all people. The Maryland Association for Justice is dedicated to improving and protecting the civil justice system through legislative advocacy and the professional development of trial lawyers.

HB 384 would establish components of a Bronchodilator Availability and Use Policy to be adopted and maintained by public and non-public schools in Maryland. Central to HB 384 is a legislative grant of immunity: causes of action for civil liability "may not arise" against school nurses and personnel who responds to asthma attack and causes harm, see §7-426.6 (page 3, Part (E)) and§7-426.7 (page 6, Part (E)).

MAJ respectfully submits that a broad legislative grant of immunity is bad public policy, because victims of negligent conduct, including minor children, lose their chance to get justice in court. HB 384 attempts to narrow the immunity to only those who respond in good faith in accordance with an adopted Bronchodilator policy; however, MAJ respectfully offers the following amendments to further clarify immunity eligibility.

Part 1-Beginning on Page 3, Line 21 of HB 384 insert and remove the following:

(E) EXCEPT FOR ANY WILLFUL OR ~~GROSSLY~~ NEGLIGENT ACT, A SCHOOL NURSE OR ANY OTHER SCHOOL PERSONNEL WHO RESPOND <u>IN ACCORDANCE WITH THIS SECTION AND</u> IN GOOD FAITH TO THE ASTHMA ATTACK OR RESPIRATORY DISTRESS OF A CHILD ~~IN ACCORDANCE WITH~~ ~~THIS SECTION~~ MAY NOT BE HELD PERSONALLY LIABLE FOR ANY ACT OR OMISSION IN THE COURSE OF RESPONDING TO THE CHILD IN DISTRESS.

(OVER)

Part 2- Beginning on Page 6, Line 10 of HB 384 insert and remove the following:

(E) EXCEPT FOR ANY WILLFUL OR ~~GROSSLY~~ NEGLIGENT ACT, A SCHOOL NURSE OR ANY OTHER SCHOOL PERSONNEL WHO RESPOND IN ACCORDANCE WITH THIS SECTION AND IN GOOD FAITH TO THE ASTHMA ATTACK OR RESPIRATORY DISTRESS OF A CHILD ~~IN ACCORDANCE WITH~~ ~~THIS SECTION~~ MAY NOT BE HELD PERSONALLY LIABLE FOR ANY ACT OR OMISSION IN THE COURSE OF RESPONDING TO THE CHILD IN DISTRESS.

MAJ respectfully urges a Favorable with Amendments Report

HB 384- MoCo- (GA2022) SWA.pdf
Uploaded by: Leslie Frey
Position: FWA

Montgomery County
Office of Intergovernmental Relations

ROCKVILLE: 240-777-6550 **ANNAPOLIS: 240-777-8270**

HB 384 **DATE: February 10, 2022**

SPONSOR: Delegate Boyce

ASSIGNED TO: Ways & Means

CONTACT PERSON: Leslie Frey **(leslie.frey@montgomerycountymd.gov)**

POSITION: SUPPORT WITH AMENDENT **(Department of Health and Human Services)**

Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy
(Bronchodilator Rescue Inhaler Law)

This bill requires each local board of education to establish a policy for public schools to authorize the school nurse and other school personnel to administer a bronchodilator, if available, to a student who is determined to have asthma, is experiencing asthma-related symptoms, or is perceived to be in respiratory distress, regardless of whether the student (1) has been diagnosed with asthma or reactive airway disease; or (2) has a prescription for a bronchodilator as prescribed by an authorized licensed health care practitioner. However, a bronchodilator may not be administered to a prekindergarten student without a prescription. The bill also requires the policy to include training for school personnel on how to recognize the symptoms asthma and respiratory distress, and a requires that a student's parents be notified of the administration of a bronchodilator and records be kept and reported to the Maryland State Department of Education. Likewise, the bill authorizes each nonpublic school to establish a policy that meets the same requirements.

Montgomery County Department of Health and Human Services (MCDHHS) supports the intent of the bill to help ensure that students have access to potentially life-saving medication such as bronchodilator rescue inhalers. However, as written, the bill poses the likelihood of an unfunded mandate and a further extension of the already stretched resources of the school health nurses in the County's public schools.

MCDHHS requests amendments to the bill to remove the requirements to: train designated personnel on how to recognize the symptoms of asthma and respiratory distress (which will likely have a significant demand on the time of school health nurses); allow school personnel other than school nurses to administer a bronchodilator; and to notify the student's parent or legal guardian of the use of a bronchodilator and report to the Department the number of incidents of bronchodilator use at the school or related events.

Montgomery County Public Schools has approximately 14,000 students with asthma enrolled in our schools. The tracking and submittal of incident reports for each time a bronchodilator is administered to, or used by, one of these students would be a significant administrative undertaking and not necessarily noteworthy from the perspective of the MCDHHS if a student has a diagnosis of asthma or reactive airway disease. The relative benefit of this data to the Department is far below the administrative cost to school health nurses. MCDHHS respectfully urges the committee to adopt the above amendments.

2022 MNA HB 384 House Side.docx.pdf
Uploaded by: Robyn Elliott
Position: FWA

Committee:	**House Ways and Means Committee**
Bill:	**House Bill 384 – Public and Nonpublic Schools – Bronchodilator Availability and Use - Policy**
Hearing Date:	**February 10, 2022**
Position:	**Support with Amendments**

The Maryland Nurses Association (MNA) will support *House Bill 384 – Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy* if the Committee adopts that we have offered in this testimony.

MNA supports the underlying intent of the bill to increase schools' readiness to address the needs of students with asthma. According to the Centers for Disease Control and Prevention, 7% of children under the age of 18 years of age have asthma, and Maryland's prevalence rate is 9%.[i] We support a focus in implementing school-health guidelines on asthma. We are strong supporters of the bill's goals to:

- Ensure schools have stock bronchodilators for students who have left their bronchodilators at home.
- Support school nurses' efforts to identify other school personnel who are competent to administer or support a student in self-administering a bronchodilator in an emergency if the student has been diagnosed with asthma and their provider has issued a written authorization for the use of a bronchodilator.

As drafted, the bill raises two primary concerns which we have addressed in our proposed amendments:

- In the bill as drafted, the school administrators would determine which non-clinicians could administer bronchodilators in an emergency. For most emergency medication, the protocol is for school nurses to work with non-clinical school personnel to ensure they are competent to administer medication in an emergency. This protocol, as delineated in the laws and regulations governing nurses, is to protect the health of students.

- In the bill as drafted, stock bronchodilators would be administered by school nurses and non-clinicians to students in respiratory distress even if they had not been diagnosed with asthma and did not have a prescription for a bronchodilator. This protocol raises serious safety concerns. For students in respiratory distress and without an asthma diagnosis, the protocol is for the use of auto-injectable epinephrine ("epi pen") as the student could be having an allergic reaction. The use of a bronchodilator could temporarily mask the student's symptoms, but the student could be at great risk of anaphylactic shock.

We think these concerns could be addressed by the amendments attached to our testimony and still preserve the most important components of the bill. If we can provide any further information, please contact Robyn Elliott at relliott@policypartners.net or (443) 926-3443.

Amendment 1: Ensuring School Nurses Approve All Non-Clinicians to Administer Bronchodilators:

On page 2 in line 8 after "YEAR,", strike in "REGISTERED NURSE CASE MANAGERS, DELEGATING NURSES" and insert after "ADMINISTRATORS" in line 9, insert "TO WHOM THE SCHOOL NURSE HAS AUTHORIZED TO ADMINISTER A BRONCHODILATOR UNDER THE REQUIREMENTS OF TITLE 8 OF THE HEALTH OCCUPATIONS ARTICLE AND CONSISTENT WITH THE SCHOOL SYSTEM'S POLICIES AND PROCEDURES"

On page 2 in line 12 insert after "PERSONNEL", "IF THERE IS WRITTEN AUTHORIZATION FROM THE STUDENT'S PARENT OR GUARDIAN AS WELL AS THE STUDENT'S PRIMARY CARE PROVIDER FOR THE USE OF A PRESCRIBED BRONCHODILATOR TO TREAT A DIAGOSIS OF ASTHMA"

On page 32 in line 33 after "BRONCHODILATOR", insert "CONSISTENT WITH THE REQUIREMENTS OF TITLE 8 OF THE HEALTH OCCUPATIONS ARTICLE AND THE SCHOOL SYSTEM'S POLICIES AND PROCEDURES."

Explanation: This change aligns the bill with existing legal requirements for school nurses to determine the competency of no clinicians in administering medication to ensure the health and safety of students. It also aligns the bill with existing policies that the use of a prescribed medication in school must be authorized by both the student's parent/guardian and the student's primary care provider.

Amendment 2: Preserve existing safety protocols

On page 2, strike beginning with ", REGARDLESS "in line 15 down through "PRACTITIONER" in line 26.

Explanation: If a student does not have an asthma diagnosis and a prescription for a bronchodilator, then the existing safety protocol is to administer auto-injectable epinephrine and call 911. A bronchodilator could just mask the symptoms of anaphylactic shock, and if so, the student would be at risk for much worse health consequences.

Amendment 3: Non-Public Schools

All the amendments made to the public school provisions should be applied to the non-public schools to be consistent.

HB 384.Bronchodilator Availability and Use Policy.

Uploaded by: John Woolums

Position: UNF

MABE
MARYLAND ASSOCIATION OF BOARDS OF EDUCATION

621 Ridgely Avenue, Suite 300, Annapolis, Maryland 21401
410-841-5414 · 800-841-8197 · Fax: 410-841-6580 · MABE.org

BILL: House Bill 384
TITLE: Public and Nonpublic Schools – Bronchodilator Availability and Use – Policy
DATE: February 10, 2022
POSITION: OPPOSE
COMMITTEE: Ways and Means
CONTACT: John R. Woolums, Esq.

The Maryland Association of Boards of Education (MABE) opposes House Bill 384 in favor of providing the school health needs of students with bronchodilators and related health services through the administration of individual student health plans.

MABE is very concerned about the risks and unintended consequences associated with this legislation. This bill would require each local board to establish a policy to authorize not only the school nurse but also other designated personnel to administer a bronchodilator to a student. Further, the bill would require that these new policies cover instances when a student is determined to have asthma, or is experiencing asthma-related symptoms, or is perceived to be in respiratory distress, regardless of whether the student has been diagnosed with asthma or has a prescription for a bronchodilator.

MABE has a supported legislation in recent years to ensure that school health guidelines are updated and strengthened. MABE has recently supported legislation enacted to ensure that school health plans adequately address students with diabetes and students with sickle cell disease. These bills were enacted to ensure a high degree of care and heightened awareness among school personnel regarding the needs of students with diabetes, sickle cell disease, and other health conditions including seizure disorders.

Local boards of education place a very high priority on student health, by ensuring that schools are operating in accordance with adopted state school health guidelines and local policies and procedures intended to provide a health and safe school environment conducive to student learning.

MABE also wants to assure the legislature that local school systems are already operating in accordance with Maryland law that provides for emergency care planning for all students under the Code of Maryland Regulations 7-401 and 7-426. Under the law, MSDE and the Maryland Department of Health must provide technical assistance to schools to: implement the adopted guidelines, train school personnel at the local level; and develop a process to monitor the implementation of the guidelines. The law also establishes the office of the school health services program coordinator, who is responsible for implementing State and local health policies in the public schools; ensuring that public schools adhere to local health services guidelines; and communicating State and local health policies to the parents and guardians of public school students.

For these reasons, MABE requests an unfavorable report on House Bill 384.