

Clinical Practice Guideline Implementation Toolkit: STUDENTS WITH ASTHMA



National Association of School Nurses

nasn.org

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ASTHMA HEALTH HISTORY FORM

Student's name:	Date of Birth:	Today's Date:
Parent(s)/Guardian:		
Home Phone:	Work:	Cell:
Primary Healthcare Provider:		Phone:
Last physical exam:		
Specialist Health Care Providers (i.e. pulmono	ologist, allergist):	
Phone:	Last visit with specialist:	

Asthma H	ealth His	itory				
When was the	e your stude	nt diagnosed with	asthma?			
What triggers	s your stude	nt's asthma? (Checl	< all that apply)			
🔲 Illness (colo	ds)	Emotions	s (crying/laughing	g/stress)		
Changes in	weather	🗖 Animals				
Smoke		Exercise/	Physical Activity			
Strong odd	ors/smells	🗖 Pollen				
🗖 Dust		🗖 Mold				
🗖 Food		🗖 Other:				
What sympto	ms does the	student have whe	n experiencing a	sthma? (Check	all that apply)	
U Wheezing		Coughing	Shortness of b	reath or rapid b	oreathing	Chest pain
Chest tigh	tness	Fatigue	Other:			
How many tir	nes in the pa	ast 12 months has y	/our student visi	ted the emerge	ncy departmen	t/urgent care visit due to asthma?
🔲 0 times	🗖 1 time	2 times	3 times	4 times	🔲 5 or more t	times
How many tir	nes in the pa	ast 12 months has y	/our student bee	en hospitalized o	overnight for as	thma?
🗖 0 times	🗖 1 time	2 times	🗖 3 times	4 times	🗖 5 or more t	times
In the past 4	weeks, how	often did the stude	nt's asthma inte	erfere with activ	/ities, such as ru	inning or singing?
Never	Rarely	Sometimes	🗖 Often	🗖 All the tir	ne	
During the nig or trouble bre		ast 4 weeks, how of	ften did the stud	lent experience	nighttime awał	kening, coughing, wheezing,
2 nights a	month or les	s 🔲 More than 2	nights a month	More than	2 nights a weel	k 🔲 More than 4 nights a week
During the da or difficulty b		chool), in the past \dot{c}	4 weeks, how of	ten did the stud	lent experience	coughing, wheezing,
🗖 2 times a v	veek or less	More than	2 times a week	🗖 All the t	ime, throughou [.]	t the day, everyday

During the d or difficulty l		ie), in the past 4 w	eeks, how often o	lid your student ex	xperience coughing, wheezing,
2 times a	week or less	🗖 More than 2	2 times a week	🗖 All the time	e, throughout the day, everyday
Which of the	se common asth	ima triggers is you	ur student expose		(Check all that apply) acco smoke
How many d	ays of school did	your student mis	s last school year	because of their a	sthma?

Medical Management:

- 1. Does your student have an Asthma Action Plan (AAP)?
- 2. When was the AAP last reviewed and updated by healthcare provider?
- 3. Have you shared a copy of the AAP with the school?

Assessment Data:

- 1. Asthma Control Test (ACT):
 - Last Asthma Control Test (ACT) Score: (Child 4-11 years score range 0-17/Child 12+ years score range 0-25)
- 2. Peak Flow Rate:
 - Normal Peak Flow Rate for Child:
 - Most recent Peak Flow Rate:

Medications:

Name of Medication	Dose	Route	Frequency	To be administ	ered at school
				🗖 Yes	🗖 No
				🗖 Yes	🗖 No
				🗖 Yes	🗖 No

1. Does your student use a spacer with their inhaler?

a. If yes, does your student have a spacer for school and one for home?

- 2. Has your student been educated and trained to administer their own medications?
- 3. Does the student self-carry their asthma reliever medication (i.e. albuterol inhaler)?

Equipment:

Indicate which of the following supplies (provided by parent/guardian) should remain at school or be transported (by the student) between home and school.

Equipment	Stays at School	Home-School-Home Each Day	Not Applicable
Metered Dose Inhaler			
Peak Flow Meter			
Spacer for Meter Dose Inhaler			
Nebulizer			
Nebulizer Tubing/Mask			

Social Assessment:				
Do you have needs related to:				
Understanding the causes of asthma, triggers, etc.	Ves	🗖 No		
How to manage your child's asthma?	Ves	🗖 No		
Being able to cope with your child's asthma	Ves	🗖 No		
Accessing medications	Tes Yes	🗖 No		
Accessing medical care to treat your child's asthma	Yes	🗖 No		

Student's Knowledge About Their Asthma:

How would you rate your student's ability to:	Very Good	Okay	Not Good	Not Applicable
Know when they are experiencing asthma symptoms?				
Know what triggers their asthma?				
Know what to do when they are having asthma symptoms?				
Use their peak flow meter?				
Properly administer their medications?				
Use a spacer (if applicable)?				

School and Academics:

- 1. Does the student have a 504 Plan or Individualized Education Program (IEP)?
- 2. Would the student benefit from evaluations or assessments in any of the following areas: physical therapy, occupational therapy, speech and language therapy, assistive technology, adapted physical education, functional behavior, psychology, hearing and vision?
- **3.** Would the student benefit from additional academic support and/or modified education (i.e., copies of notes, extra time, reduced workload, simplified instructions, alternative formats for presentation of material, 504/IEP)?
- 4. Does the student have any limitations related to participating in physical education and/or extracurricular activities (i.e. sports teams)?
- 5. Do you feel the student has been sufficiently supported by school staff in managing their health condition?
- 6. Is there a need for a specific plan for this student's individual needs if there is a crisis in the building?
- 7. How is the student transported to and from school?
- 8. Does the student attend before or after school care?
- 9. Does the student participate in school-sponsored clubs or athletics?
- 10. Has the student shared information about their asthma diagnosis with their peers?
- 11. Is the student exposed to tobacco smoke?

What is your preferred method of communication?					
🗖 Email	🗖 Text	Phone	Other:		
Parent/Gua	rdian Signat	ure:		Date:	
Reviewed b	y:			Date:	

References:

- American Academy of Allergy Asthma & Immunology. (2022, September 29). School nurse asthma care checklist (National Association of School Nurses)*. Available at: <u>https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/</u> Tools%20for%20the%20Public/School%20Tools/04-Component-1-6-English.pdf
- Colorado Department of Education. (2015). Asthma intake form. Available at: <u>https://www.cde.state.co.us/</u> healthandwellness/asthmaintakeformsept2016englishandspanish
- GSK. (2023). Asthma control test. Available at: https://www.asthmacontroltest.com/welcome/
- Healthy Kansas Schools. (n.d.). Asthma-Health intake form. Available at: <u>https://higherlogicdownload.s3.amazonaws.</u> <u>com/NASN/bf09cdeb-5d8d-4af9-ad06-b2f4bf5e3707/UploadedImages/Documents/Asthma-School-Health-</u> <u>Intake-Form.pdf</u>
- Missouri Department of Health and Senior Services Bureau of Community Health and Wellness. (2021). SN Chat. School nurse chronic health assessment tool. Available at: <u>https://health.mo.gov/living/families/schoolhealth/</u>pdf/sn-chat.pdf



ASTHMA CONTROL TESTS

GlaxoSmithKline

Child and Adult Asthma Control Test: https://www.asthmacontroltest.com/welcome/

American Lung Association

My Asthma Control Assessment: <u>https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/managing-asthma/asthma-control/assessment</u>



LETTER TO PARENT

Dear Parent,

Our records indicate that your child has asthma that may require treatment at school. If this information is incorrect, please contact the school at the following number to let us know [insert phone number here]. If our information is correct, please provide the following:

- Asthma reliever inhaler with prescription label.
 - Please ask pharmacy to place label directly on inhaler.
 - Note: Medications need to be brought to school by parent or designated adult.
- Spacer or valved-holding chamber, if available.
- Nebulizer medicine and supplies, if necessary.
- Asthma Action Plan (Asthma Action Plan should be obtained from healthcare provider. If your healthcare provider has not provided you an asthma action plan please have them complete the attached Asthma Action Plan).
- Peak flow meter.
 - If your child's Asthma Action Plan includes peak flow values that will help us assess your child's breathing.
- Medication Authorization Form [or enter the title of your school district's form].
 - Signed by parent/guardian and healthcare provider.
 - If you would like your child to be able to self-carry and self-administer their asthma reliever medication, please complete the appropriate section on the medication authorization form.
 - » Authorization needs to be provided by the healthcare provider and parent/guardian.
- [Insert any additional forms required in your school district].

For your child to have the best possible school year, it is important that we have the necessary supplies and information to provide appropriate care.

All forms necessary for proper care while your child is at school can be found on our website at: **[paste your school website here]**. We kindly request that these forms be completed and sent to the school by **[enter date]** so we can ensure that we are ready and prepared to create a safe school environment for your child. If any information regarding your child's health changes during the school year, including treatment plan or medications, please update us. The school nurse can be reached at: **[enter phone number]**.

Your time and effort in completing these forms is greatly appreciated. Please feel free to contact me if you would like to discuss your child's condition or need help completing these forms or accessing medication. Thank you!

[School Nurse Name] [Phone number(s)] [Email] [Website (if applicable)]



LETTER TO HEALTHCARE PROVIDER

[enter date]

Dear [insert healthcare provider's name],

The school team at [enter school name] is looking forward to an excellent year for your patient, [enter student name].

To provide the best possible school asthma management for your patient, we request your assistance with the following:

- Please complete the attached Asthma Action Plan or provide comparable information on another form.
- Please complete the attached medication administration form for any medications that may need to be administered in school.
 - Students may self-carry and self-administer their asthma reliever medications if you and their parents/guardian indicate approval on the form.
- Please let us know if your patient has additional needs.

We look forward to collaborating with you to provide [enter student's name] the best care possible when they are at school. Please feel free to reach out to me with any questions or concerns. The best time to reach me is [enter time]. I can be reached at [phone number] or via email [enter email address].

Thank you,

[school nurse name]

[phone number]

[email]



INFORMATION ON ASTHMA DISPARITIES

- National Heart, Lung, and Blood Institute:
 - Asthma in the Black Community Fact Sheet
 - Asthma in American Indian/Alaska Native Communities Fact Sheet
 - Asthma in the Hispanic/Latino Community Fact Sheet
 - Asthma in Kids
- Asthma and Allergy Foundation of America (AAFA): <u>Asthma Disparities in America. A Roadmap to Reducing</u> Burden on Racial and Ethical Minorities
 - AAFA's Asthma Disparities in America report examines how asthma affects Black, Hispanic and Indigenous populations in the United States.
- American Lung Association: <u>Asthma Trends and Burden</u>
- Asthma and Allergy Network: <u>Asthma Statistics</u>



STUDENT ASSESSMENT OF READINESS TO SELF-CARRY AND SELF-ADMINISTER ASTHMA RELIEVER MEDICATION

American Lung Association: https://lung.training/assessment.html



POTENTIAL NURSING DIAGNOSES

- Anxiety related to experiencing a chronic illness and asthma exacerbations that can be life-threatening
- Asthma education for health promotion and asthma management
- Deficient knowledge about asthma and asthma self-care
- Disturbed sleep pattern related to nighttime asthma symptoms
- Effective asthma self-management
- Family and/or student coping and/or stress with ongoing asthma management
- Impaired asthma resilience for asthma self-management
- Impaired gas exchange related to airway inflammation, bronchoconstriction, and excessive mucus with exercise
- Ineffective asthma health management related to:
 - Insufficient knowledge of therapeutic regimen
 - Insufficient social support
 - Perceived benefit
 - Perceived barrier
- Knowledge gaps and strengths for asthma self-management
- Readiness for enhanced asthma health management
- Readiness for enhanced health literacy for asthma management Readiness to improve asthma self-management
- Risk of activity intolerance related to exacerbation of symptoms associated with exercise-induced bronchospasm
- Social engagement with peers and/or family
- Unstable respiratory status

References:

- Dougherty, J. P. (2017). Asthma. In I. S. Will, M. W. Arnold, & D. S. Zaiger (Eds.). *Individualized healthcare plans for the school nurse: A comprehensive resource for school nursing management of health conditions* (2nd ed., pp.193-205). Forest Lake, MN: Sunrise River Press.
- National Association of School Nurses. (2024). School nursing evidence-based clinical practice guideline: Students with asthma.
- Utah Department of Health and Human Services. *Asthma detailed individualized healthcare plan*. Available at: <u>https://</u> <u>heal.utah.gov/wp-content/uploads/2024/03/Asthma-detailed-IHP-2-22-2024.docx</u> [downloads as Word document]



ASTHMA ACTION PLAN

An Asthma Action Plan is an asthma-specific treatment plan completed by the healthcare provider and outlining the student-specific symptoms and treatment related to asthma and emergency contact information (NASN, 2024).

SA³MPRO[™] recommends the Asthma Action Plan contain the following:

- Student name
- Date of birth
- The student's level of asthma severity (Intermittent, Mild Persistent, Moderate Persistent, Severe Persistent)
- An indication if the student has had many or severe asthma attacks
- Stop Light Zones: Provide treatment plan for chronic, acute, and emergency situations
- Asthma Triggers
- An indication if the student should receive their Short-Acting Beta Agonists (SABA) prior to exercise
- Which students should be allowed to possess and self-administer their medication
- Healthcare provider contact information
- Parent authorization for the student to communicate with the healthcare provider
- Parent, school nurse, and healthcare provider signature

(American Academy of Allergy, Asthma, and Immunology, 2022a, 2022b).

Asthma Action Plan examples:

American Academy of Allergy, Asthma, and Immunology | English and SpanishAmerican Lung Association | English and SpanishAsthma and Allergy Foundation of AmericaCenters for Disease Control and PreventionNational Heart, Lung, and Blood Institute

References:

- American Academy of Allergy, Asthma & Immunology. (2022a, September 29). *Asthma action plan for home and school*. Available at: <u>https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20the%20Public/</u> <u>School%20Tools/04-Component-1-2-English.pdf</u>
- American Academy of Allergy, Asthma & Immunology. (2022b, September 29). *Essential features of a school-related Asthma Action Plan.* Available at: <u>https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20</u> the%20Public/School%20Tools/04-Component-1-5-English.pdf
- National Association of School Nurses. (2024). School nursing evidence-based clinical practice guideline: Students with asthma.

INDIVIDUALIZED HEALTHCARE PLAN (IHP) ASTHMA

STUDENT NAME:				DOB:	
Student Address: Home Phone: Parent/Guardian: Day/Work Phone: Healthcare Provider: Provider Phone: IHP Written By: Parental/Guardian statement: I/We have read this plan and agree to Signature(s):			School: Teacher/Counselor: Grade: IHP Date: IEP Date: Review Date(s): ICD-9 Codes: ee to its implementation. Date:		
Assessment Data	Nursing Diagnosis	Goals	Nursing Interventions	5	Expected Outcome
Sample student is diagnosed with asthma.	Ineffective airway clearance associated with chronic inflammation causing bronchoconstriction and excessive mucus production.	Student will have their needed asthma medication and supplies available and easily accessible at school.	 Obtain order from healthcare provider for reliever medication. Obtain and have on file an Asthma Action F Communicate with parents/guardian to ensasthma reliever medication and supplies at school. Talk with parents/guardians to identify any asthma reliever medication and/or supplies Ensure that the student's asthma reliever medication and part of supplies are easily and quickly available to be a supplies are easily and quickly available to be a supplies are easily and quickly available to be a supplies are easily and quickly available to be a supplies are easily and quickly available to be a supplies are easily and quickly available to be a supplice as the supplice are easily and quickly available to be a supplice and supplice are easily and quickly available to be a supplice and supplice are easily and quickly available to be a supplice and supplice are easily and quickly available to be a supplice and supplice are easily and quickly available to be a supplice and supplice are easily and quickly available to be a supplice and supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice are easily and quickly available to be a supplice	Plan (AAP). sure student has their school by first day of barriers to obtaining s. nedication and	The student will have access to their asthma reliever medication 100% of the time by the first day of school.
Sample student has increased respiratory distress with physical activity.	Risk for activity intolerance related to exacerbation of symptoms associated with exercise-induced bronchospasm.	Student will be able to participate in physical activities (i.e. physical education class, recess, sports) with limited increase in respiratory distress.	 Ensure that the student has access to asthr and supplies before, during, and after phys Provide education to school staff, especially teachers, coaches, recess monitors) regard signs and symptoms of respiratory distress avoidance, how to use student's Emergency location of student's asthma reliever medica administer asthma reliever medication, and symptoms do not improve. Periodically assess the effectiveness of the applicable) and revise or modify as needed 	sical education class. y physical education ing asthma, including s, trigger control/ y Action Plan (EAP), cation, how to d what to do if asthma AAP, IHP, and 504 (if	Student will be able to participate in physical activities at least 90% of the time throughout the school year.

INDIVIDUALIZED HEALTHCARE PLAN (IHP)

STUDENT NAME:					
Parental/Guardian statement: I/We have read this plan and agree to its implementation.					
Signature(s):			Date:		_
Assessment Data	Nursing Diagnosis	Goals	Nursing Interventions		Expected Outcome
Sample student expresses interest in being able to self-carry and self-administer asthma reliever medication.	Readiness for enhanced self-care related to expressed desire to self- carry and self-administer asthma reliever medication.	Student will safely carrying and self- administer their asthma reliever medication effectively and safely.	 Educate student about how to ac asthma reliever medication and effectively use any needed suppl spacer). Educate the student about what their asthma symptoms do not ir after using asthma reliever medi Observe student administering t asthma reliever medication effect 	how to lies (i.e. to do if mprove cation. heir	The student will identify and describe responsibilities for self-carrying of medication and supplies and demonstrate safe use of self-carry medications. The student will articulate what steps they should take if their asthma reliever medication does not reduce their symptoms. The student will have their asthma reliever medication and necessary supplies accessible when the school nurse does a "spot check" 100% of the time The student will periodically review with the school nurse and parent the effectiveness of his/her asthma management.

References:

- Dougherty, J. P. (2017). Asthma. In I. S. Will, M. W. Arnold, & D. S. Zaiger (Eds.). *Individualized healthcare plans for the school nurse: A comprehensive resource for school nursing management of health conditions* (2nd ed., pp.193-205). Forest Lake, MN: Sunrise River Press.
- Texas School Nurses Organization. (n.d.). *Individualized healthcare plan (IHP) asthma*. Available at: <u>https://higherlogicdownload.s3.amazonaws.com/NASN/</u> <u>b385213b-35e8-49e3-97fe-d6627843f498/UploadedImages/Public%20Documents/IHPAsthma.pdf</u>
- Utah Department of Health & Human Services. (2024). *Asthma detailed individualized healthcare plan (IHP) template*. Available at: <u>https://heal.utah.gov/wp-content/uploads/2024/04/Asthma-detailed-IHP-4-25-2024.docx</u> (downloads as a document)



POSSIBLE INDIVIDUALIZED EDUCATION PLAN (IEP) OR 504 PLAN ACCOMMODATIONS FOR STUDENTS WITH ASTHMA

- Ensure that student's reliever medication is readily available at all times.
- Permit the student to carry and self-administer reliever medication as appropriate.
- Monitor the environment for potential triggers including during physical education class, recess, field trips, extracurricular activities.
- Attempt to reduce the student's exposure to triggers as much as possible.
- Permit the student to monitor breathing status using Peak Flow Meter.
- Allow a student to be excused from an activity that risks triggering an asthma attack.
- Ensure that the student's physical education teacher has the skills, knowledge, and ability to respond if the student is experiencing asthma symptoms.
- Excuse student's late arrival and absences when they miss school due to a medical emergency appointment, medical appointment(s), or when asthma hinders a student's ability to complete their work.
- Allow the student to make up work, without penalty.
- Allow the student to take reliever medication before physical education class as prescribed by healthcare provider/ directed by Asthma Action Plan.
- If the student is not able to participate in physical education class due to asthma, an adaptive or modified curriculum or activity may need to be developed for the student.
- Educate school staff regarding asthma, including signs and symptoms and actions to take if the student is experiencing asthma symptoms.
- Ensure there are an appropriate number of school staff educated on how to administer student's reliever medication as directed by healthcare provider's order or Asthma Action Plan at school, on field trips, and at school-sponsored events (i.e. school athletic teams and/or extra-curricular activities).
- Parents/guardian will be notified when asthma reliever medication is administered at school [based on parameters agreed upon by parents/guardian and school nurse].
- School district will adopt policies and procedures to maintain healthy indoor air quality throughout the schools within the district.
- School district will adopt policies for tobacco-free school.
- School district will enforce tobacco-free school policy.
- School will monitor localized outdoor air pollution and reduce the student's prolonged or heavy exertion outdoors when the air quality is unhealthy.

References:

- American Lung Association. (n.d.). *Air quality index*. Available at <u>https://www.lung.org/clean-air/outdoors/air-quality-index</u>
- American Lung Association. (n.d.). *Asthma and exercise. General guidelines when there is no asthma action plan.* Available at: <u>https://www.lung.org/getmedia/e6f05f36-5bec-4654-b765-898ce3a73284/modified-physical-activity-plan.pdf.pdf</u>

- American Lung Association. (2024, February 8). *Strategy 3: Provide a healthy school environment*. Available at: <u>https://</u> <u>www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/health-professionals-educators/asthma-</u> friendly-schools-initiative/toolkit/strategy-3
- Barrett, M. & Murphy Moore, C. (2019). Students with chronic respiratory conditions: Asthma and cystic fibrosis. In J. Selekman, Shannon, R.A., Yonkaitis, C.F. (Eds.). *School nursing, a comprehensive text* (3rd ed., pp. 523-548).
 Philadelphia PA.: F.A. Davis Co.
- Department of Health and Human Services. *Healthy People 2030*. (n.d.). Available at <u>https://health.gov/healthypeople/</u> objectives-and-data/browse-objectives/environmental-health/reduce-number-days-people-are-exposedunhealthy-air-eh-01
- Russell, A. F., Nanda, A., & Bingemann, T. A. (2022). The vital role of the school nurse in managing asthma. NASN *School Nurse* (Print), 37(1), 8–12. <u>https://doi.org/10.1177/1942602X211037260</u>
- U.S. Department of Education Office for Civil Rights. (2024, February). *Section 504 protections for students with asthma*. Available at: <u>https://www2.ed.gov/about/offices/list/ocr/docs/ocr-factsheet-asthma-202402.pdf</u>

MEDICATION AUTHORIZATION

Student's Name:		Student ID #:
School:	Grade:	Date of Birth:
Allergies:		
Pharmacy:	Pharmacy telepl	none number:

Parent Permission

- I request that authorized persons at my child's school assist my child in taking the prescription or overthe-counter medication(s) described below at the time indicated and as designated by his/her licensed prescriber.
- I request that my child be allowed to self-carry and self-administer medication. I shall hold harmless and indemnify the [SCHOOL DISTRICT], its agents, employees, and board members against all claims, judgments, or liability arising out of self-administration and carrying of medication by my child.

I, or a responsible adult, will be responsible for bringing the prescription or over-the-counter medications to school in a labeled container from the pharmacist or the manufacturer's container. I also understand that I am responsible for maintaining enough of the medication at the school. Failure to do this will result in an interruption of the licensed prescriber's order or discontinuation of the school's administration of the medication for my child. I understand that, if my child refuses to take the medication(s) the medication(s) will not be given, and the parent will be notified.

School personnel have permission to communicate with the licensed prescriber regarding use, side effects, response, and contraindications of the medication(s).

- □ I confirm that my child has previously taken this medication.
- □ My child has not previously taken this medication, but this is an emergency medication.

Signature of Parent/Legal Guardian:	
Relationship:	Date: (Mo./Day/Yr.):
Printed Parent Name:	Telephone number:

Licensed Prescriber Authorization:

I am prescribing the following medication(s) for the above student to be administered at school.

DAILY

Name of Daily Medication (Generic and Trade Name)	Diagnosis	DOSE (mg, mcg)	ROUTE (PO, GT, SC, IV)	Frequency	Time(s) (AM/PM)	Possible Adverse Side Effect or Contraindications	Authorized to self-carry and self- administer
PRN							

PRN

Name of Daily Medication (Generic and Trade Name)	Diagnosis	DOSE (mg, mcg)	ROUTE (PO, GT, SC, IV)	Frequency	Time(s) (AM/PM)	Possible Adverse Side Effect or Contraindications	Authorized to self-carry and self- administer

отс

Name of Daily Medication (Generic and Trade Name)	Diagnosis	DOSE (mg, mcg)	ROUTE (PO, GT, SC, IV)	Frequency	Time(s) (AM/PM)	Possible Adverse Side Effect or Contraindications	Authorized to self-carry and self- administer

The above orders shall be effective throughout the current school year, summer school and through September
30th of the following school year, unless the orders are discontinued, changed or withdrawn in writing by the
parent/guardian before that time elapses.

Licensed Prescriber's Signature:	Date: (Mo./Day/Yr.):

Printed Licensed Prescriber's Name: ______ Telephone/Fax Number: _____

Address:



ASTHMA RELIEVER MEDICATION ADMINISTRATION

PRACTICE CONCERNS AND MEDICATION MANAGEMENT CHECKLIST

(adapted from NASN's Emergency Medication Toolkit)

Disclaimer: This document provides a summary of currently available resources that school nurses can consult as they formulate independent nursing judgement for their practice. This document is not intended to provide clinical standards or guidelines. The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice.

Asthma Reliever Medication Practice Concerns:

- School nurses can:
 - Educate self on medical emergencies, emergency medications, and school resources and policies.
 - Plan for care during asthma exacerbation.
 - Educate school personnel on the symptoms associated with asthma.
 - Educate school personnel on how to respond to a student experiencing asthma symptoms.
 - Educate school personnel that have regular interaction with a student who has asthma that may require emergency management in school, on the health condition and any emergency treatment, including medication administration.
 - Conduct periodic asthma emergency response drills and practice how to handle a medical emergency.
 - Review data and information after a medical emergency (e.g., when and where medication was administered) from incident reports and assess the effect of the incident on the affected students and modify policies and practices as needed.

Medication Storage:

- Store asthma reliever medication and asthma reliever medication administration protocol in a location that is easily accessible during:
 - school day
 - before/after school programming
 - field trip
 - school evacuation
 - shelter in place.
- Be sure that staff members who have regular contact with the student know where the medication is stored.
- Develop a process and identify a person to periodically check the expiration date on asthma reliever medication package(s).
 - Inform school personnel of the student asthma reliever medication storage locations, and of any back-up supply.
- Students may be allowed to carry their own asthma reliever medication when appropriate.

Stock Medication Storage:

- Review the following considerations when determining where stock asthma reliever medication will be stored:
 - general safety standards for handling and storage of medications
 - developmental stage of students
 - competence of the student
 - size of the school building
 - availability of a full-time school nurse in the school building
 - availability of communication devices between school personnel (such as teachers, paraprofessionals) who are inside the building or outside on school grounds and the school nurse
 - school nurse response time from the health office to the classroom
 - preferences and other responsibilities of the teacher
 - preferences of the students and parent/guardian
 - movement of the student within the school building
 - ensure that the school has at least two doses of asthma reliever medication

Storage of Student Self-Administration of Asthma Reliever Medication:

- Determine where student's medication supply will be stored keeping in mind:
 - transportation to and from school
 - school day
 - before/after school programming
 - field trip
 - school evacuation
 - shelter in place
 - emergency evacuation
 - » student self-administered asthma reliever medication should not be stored in the student's locker.

Confidentiality:

- Facilitate the acquisition of a signed FERPA/HIPAA Consent Form to facilitate communication and care coordination between parents/guardian and healthcare provider.
- Remember to keep healthcare information confidential.
- When responding to a medical emergency, be sure to ensure the child's privacy and confidentiality when calling for assistance. Do not say the child's name over the PA system or walkie-talkie.
- When administering asthma reliever medication, provide the student with as much privacy as possible.
- If possible, have someone assist with removing onlookers and other students to provide the child with privacy.

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ASTHMA RELIEVER MEDICATION ADMINISTRATION DELEGATION CHECKLIST

(adapted from NASN's Emergency Medication Administration Toolkit)

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When delegating the administration of asthma reliever medication, the school nurse delegates only those nursing tasks for which the delegatee (herein referred to as Unlicensed Assistive Personnel (UAP)) has the necessary skills and competence to accomplish safely.

In maintaining accountability for the delegation, a school nurse confirms that:

- State Nurse Practice Act allows for the delegation of asthma reliever medication administration.
- School district policies and job description (and other related documents) allow for the delegation of asthma reliever medication administration.
- School nurse has educated themselves on the delegation process.
- School nurse is competent to perform the delegated task.
- UAP has the education, legal authority, and demonstrated competency to perform asthma reliever medication administration.
- UAP's job description allows for the administration of asthma reliever medication.
- Delegation of the asthma reliever medication administration is within the school nurse's responsibility and scope.
- School nurse is competent to perform the asthma reliever medication administration themselves.
- Asthma reliever medication administration is consistent with the UAP's job description and can be safely performed according to clear, exact, and unchanging directions.
- UAP is competent to administer the asthma reliever medication.
 - School nurse documents UAP competency.
 - School nurse determines how frequently competency needs to be assessed.
- UAP is willing to perform asthma reliever medication administration.
- Results of the asthma reliever medication administration are reasonably predictable.
- Asthma reliever medication administration does not require assessment, interpretation, or independent decision
 making during its performance or at completion.
 - School nurse ensures that protocols for the administration of asthma reliever medication have been developed to provide step-by-step instructions on the steps that should be taken in a specific situation to eliminate the need for a UAP to assess, interpret or perform independent decision making.
- Necessary resources are available for the UAP to safely administer asthma reliever medication.

- Selected student and circumstances of the delegation are such that delegation of the asthma reliever medication administration poses minimal risk to the student and the consequences of performing the task improperly are not life-threatening.
- School nurse provides clear directions and guidelines regarding the asthma reliever medication administration and verifies that the UAP follows each written facility policy or procedure when performing the delegated task.
- School nurse provides supervision of the asthma reliever medication administration and its outcome.
 - School nurse reviews state Nurse Practice Act and school district policies to determine the level of supervision required for delegated tasks.
 - The method and frequency of supervision and evaluation is at the discretion of the school nurse delegating the care.
- School nurse provides clear and specific instructions to the UAP including when and how to contact the school nurse.
- School nurse evaluates the outcome of the asthma reliever medication administration.
- School nurse provides feedback to the UAP, including follow-up on identified problems, intervening when needed and revising plan of care as needed.
- UAP understands what needs to be documented after asthma reliever medication administration has occurred.
- School nurse assures documentation of the asthma reliever medication administration.

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ASTHMA RELIEVER MEDICATION ADMINISTRATION DELEGATION

DECISION TREE

(adapted from NASN's Emergency Medication Administration Toolkit)

Criteria for the Delegation of ASTHMA RELIEVER MEDICATION	Answer the following questions:		Action to take if answer is negative:		
Delegation is a nursing act distinct from teaching, supervising, consulting, and advising.	Consider your role in your employment position. Do you have the authority to determine if asthma reliever medication can be delegated and to whom?	→ NO →	Consider the roles of teaching and supervising without nursing delegation. Is this parental designation or administrative assignment? Contact Board of Nursing (BON) for concerns.		
	↓ YES ↓				
When determining whether to delegate, the School Nurse should review the state's Nurse Practice Act to determine if there are restrictions to delegating asthma reliever medication administration.	Does your state's Nurse Practice Act allow for the delegation of asthma reliever medication?		Do not delegate.		
	↓ YES ↓				
Before delegating, the School Nurse should be aware of delegation rules and processes including the five rights of delegation: the right task, the right person to whom the delegation is made, the right circumstances, the right direction and communication by the School Nurse and the right supervision and evaluation.	Have you educated yourself on the delegation rules and process in general?	→ NO →	Do not delegate. Review State Board of Nursing Delegation Rules. Review delegation resources: NASN, ANA, etc. Consider delegation after you have sufficient knowledge of the process.		
↓ YES ↓					
The decision on whether to delegate should be based on the determination of the School Nurse, who has personally assessed the patient's condition, so that delegation can be performed without jeopardizing the student's welfare.	It is your responsibility to assess the situation to the extent your professional judgment determines needed. Did you assess that the asthma reliever medication administration can be delegated without jeopardizing the student's welfare?	→ NO →	Do not delegate. If the situation / assessment later changes, then may consider delegation.		

Image: Standard				
The School Nurse is competent to administer the asthma reliever medication that is being delegated. Is the School Nurse competent to administer the asthma reliever medication if you an not competent in the task of the asthma reliever medication if you an not competence. Nay then considered astimution that is being delegated. Image: the asthma reliever medication if you an not competence in the task of the asthma reliever medication if you an not competence. Nay then considered astimution and are responsible competence. Nay then considered astimute reliever medication, and among the asthma reliever medication, explaining back to you and/or you competency. Nay the asthma reliever medication, explaining back to you and/or you competency. Nay the considered and shows competency. Consider the asthma reliever medication administration of asthma reliever medication administration? Image: the set of the asthma reliever medication administration is consistent with the uapper set of the administration of asthma reliever medication and are perform the administration of asthma reliever medication and are perform the administration of asthma reliever medication and are the perform the administration of asthma reliever medication and are perform the administration of asthma reliever medication and are the perform the administration of asthma reliever medication and are perform the administration of asthma reliever medication and are the pieve medication and are the pieve medication and are the pieve medication administration of asthma reliever medication administration of asthma relieve	medication must be within the area	reliever medication within your	NO	reliever medication administration is not in your responsibility and scope of
to administer the asthma reliever medication that is being delegated. administer the asthma reliever medication that is being delegated? → No → No → No → No → No → No → No → No		↓ YES ↓		
The School Nurse shall delegate to another only those nursing tasks for which that person has the necessary skills competence to accomplish safely. In maintaining accountability for the delegation, the School Nurse shall ensures That the unlicensed assistive personnel (UAP) has the education and are responsible for the content of the education and are responsible for the content of the deducation. The UAP demonstrates competency to by showing you how to administer the asthma reliever medication, explaining back to you and/or you observe them performing the medication administration (this can be accomplished with the use of training devices). Do not delegate. If the UAP is adequately educated and shows competency, consider the asthma reliever medication administration? VES ↓ Administration of asthma reliever medication? Do not delegate. If the UAP is adequately educated and individual the use of training devices). No VYES ↓ Administration of asthma reliever medication? VES ↓ Do not delegate. If character is the administration of asthma reliever medication? No VYES ↓ Administration of asthma reliever medication is consistent with the UAP's job description? VES ↓ Do not delegate. If circumstances change for the administration of asthma reliever medication is consistent with the UAP's job description; Do not delegate. If circumstances change for the administration of asthma reliever medication administration of asthma reliever medication administration of asthma reliever medication administration	to administer the asthma reliever <i>administer the asthma reliever</i>		NO	administration of the asthma reliever medication if you are not competent in the task yourself; take measures to gain competency. May then consider
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Administration of asthma reliever medication is consistent with the UAP's job description;Does the UAP's job description allow for the administration of asthma reliever medication? \rightarrow NO \rightarrow Do not delegate.Administration of asthma reliever medication is consistent with the UAP's job description;Will the UAP be able to perform the administration of asthma 	personnel (UAP) has the education and demonstrated competency to perform asthma reliever medication	the education and are responsible for the content of the education. The UAP demonstrates competency by showing you how to administer the asthma reliever medication, explaining back to you and/or you observe them performing the medication administration (this can be accomplished with the use of training devices). Has the UAP demonstrated competency to you to perform the asthma reliever medication	NO	shows competency, consider
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Student's needs match the UAP's qualifications, available resources, and appropriate supervision;	Can the student's needs be met by a qualified UAP given the amount of resources available for adequate teaching and super- vision of that UAP by you?	→ NO →	Do not delegate. If resources are adequate later, consider delegation.		
	↓ YES ↓		·		
Results of the asthma reliever medication administration are reasonably predictable;	Is there a typical outcome from the administration of asthma reliever medication?	→ NO →	Do not delegate. If circumstances change later (research or history has later shown predictability) consider delegation.		
	↓ YES ↓				
The administration of asthma reliever medication does not require clinical reasoning, nursing judgment, or critical decision making;	Can the asthma reliever medication be completed by following a set procedure or clear algorithm without independent decision making?	→ NO →	Do not delegate.		
	↓ YES ↓				
Student's health needs and circumstances of the delegation are such that the administration of asthma reliever medication poses minimal risk to the student;	Is the student condition sufficiently stable so that when the asthma reliever medication administration is completed by following a set procedure or clear algorithm the student is not at undue risk?	→ NO →	Do not delegate.		
	↓ YES ↓				
The asthma reliever medication administration can be safely performed according to clear and exact directions and guidelines that are clearly communicated;	Have you given the UAP clear directions and guidelines?	→ NO →	Do not delegate. Consider delegation if clear directions and guidelines can be / are given.		
↓ YES ↓					
School policies allow for the delegation of asthma reliever medication.	Are there supportive policies or procedures?	→ NO →	Do not delegate. Consider delegation when policies and/or procedures are present.		
	↓ YES ↓				
The UAP follows each written facility policy or procedure when performing the delegated task;	Have you instructed the UAP and verified their compliance of asthma reliever medication administration policy/medication administration policy and any other related policies/procedures?	→ NO →	Do not delegate. Consider delegation when the UAP has been instructed on them and you verify they will follow.		
	↓ YES ↓				

Those to whom asthma reliever medication administration is delegated are properly supervised	Are you able to supervise the UAP to the degree you determine is needed given the situation?	→ NO	Do not delegate. If you later have the resources to provide adequate supervision, then			
by monitoring performance, progress, and outcomes;	8	\rightarrow	consider delegation.			
	↓ YES ↓					
Evaluation of the effectiveness of the delegation;	When you supervised, did you evaluate the effectiveness of delegation?	→ NO →	Withdraw delegation if identified problems cannot be remedied			
	↓ YES ↓					
Follow-up on problems and intervention and revision of the plan of care as needed;	Are you able to remedy any identified problems by re- instruction, increased supervision or revising the plan of care?	→ NO →	Withdraw delegation if identified problems cannot be remedied			
	↓ YES ↓					
The observation and communication of the outcomes of the delegated asthma reliever medication administration; and	This is part of supervision and the frequency is determined by your assessment of the asthma reliever medication administration and situation.	→ NO	Do not delegate asthma reliever medication administration if you are unable to observe and communicate outcomes adequately.			
	Are you able to and have you observed the outcomes of asthma reliever medication administration and provided the UAP with ongoing communication?	→				
	↓ YES ↓					
Documentation of the asthma	Have you set up a documentation	\rightarrow	Do not delegate. Consider			

Documentation of the asthma reliever medication administration.	Have you set up a documentation system for the asthma reliever medication administration and instructed the UAP to use it?		Do not delegate. Consider delegation when documentation processes are in place.
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*Adapted from *Montana school nurse delegation decision tree* by Montana School Nurse Association.

References:

American Nurses Association. (2012). Principles of delegation. Silver Spring, MD: Nursesbooks.org.

- Montana School Nurse Association. (2016). *Montana school nurse delegation decision tree*. Retrieved May 8, 2020, from https://mfpe.eventready.com/docs/download/Submission/Handouts/8051.pdf
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CONSIDERATIONS FOR THE DEVELOPMENT OF A STOCK ASTHMA RELIEVER INHALER PROGRAM

The development and implementation of a stock asthma reliever inhaler program is not linear. There are multiple steps that need to be completed. Some need to be completed sequentially while others may overlap. Depending on where the school nurse is in the development of the program some steps may have already been completed. This document outlines steps that should be completed when developing a stock asthma reliever inhaler program. We have attempted to outline the steps in a sequential order but appreciate that there will be variation in how school nurses develop a stock asthma reliever inhaler program in their school district.

State Law/Rule

Many <u>states have passed laws/rules</u> related to school stock asthma reliever programs. When considering developing a stock asthma reliever program one of the first steps the school nurse should undergo is to determine if their state has a law or rule. If the state has a law/rule related to stock asthma reliever medication, the school nurse should ascertain the answers to the following questions.

Questions related to State Law/Rule:

- **1.** Are there state laws that currently prohibit the administration of stock Asthma Reliever Inhaler programs in schools?
- 2. Does the state have a Good Samaritan law or equivalent?
- **3.** Does the state nurse practice act and other relevant laws allow the school nurse to delegate the administration of a stock asthma reliever inhaler to an unlicensed assistive personnel (UAP)?
 - **a.** State laws and nurse practice acts differ from state to state, so each school district and each school nurse must ensure before enacting any protocol that it is consistent with applicable state laws and regulations, including those governing delegation.
- 4. Is there a specific medication or type of medication specified in the law?
- 5. Who can provide the prescription?
- 6. Does the law allow for a pharmacist to dispense the medication to the school?
- 7. Does the law specify what funding can/should be used to purchase the medication?
- 8. Does the state have exemption from liability laws for medication administration or emergency care?
- 9. Does the law have specifications/requirements regarding the use of spacers or valved-holding chambers?
- **10.** Does the law indicate who is required to provide training to school staff regarding asthma and the administration of the asthma reliever inhaler?
- **11.** Does the law indicate how many staff persons in each building need to be trained to administer the stock asthma reliever inhaler?
- 12. Does the law indicate what information needs to be included in the staff training?
- 13. Does the law specify how the training must be provided (i.e., in person or online)?
- **14.** Does the law indicate how often the training needs to be provided?

- **15.** Does the law indicate who is allowed to administer the medication?
- **16.** Does the law require parental/guardian consent?
- 17. Does the law limit where the medication can be given (i.e. only on school grounds and not on field trips)
- 18. Does the law indicate where the medication must be stored?
- 19. Does the law allow administration of stock asthma reliever medication to school staff and visitors?
- **20.** Does the law indicate what information must be reported and to whom, if stock asthma reliever medication is administered?

School Nurse Practice

After reviewing state laws pertaining to stock asthma reliever medication, it is vital that the school nurse review their states <u>Nurse Practice Act</u>. The Nurse Practice Act will inform the school nurse of their responsibilities related to the delegation of medication administration. In addition to reviewing the Nurse Practice Act, the school nurse must also review their individual nursing practice, including their experience and competence in administering asthma reliever medications, the environment in which they practice, the population they are responsible for, the experience and competence of the unlicensed assistive personnel (UAP) they may be delegating to, and their other roles and responsibilities.

Questions related to School Nurse Practice:

- 1. Is delegation of asthma reliever medication to UAPs a safe decision based on the structure of the school environment, school nurse: pupil ratio, and other roles and responsibilities of the school nurse?
 - **a.** If delegation is not permitted due to your state's nurse practice act, is the coordination and oversight of asthma reliever medication administration by UAPs a safe decision based on the structure of the school environment, school nurse: pupil ratio, and other roles and responsibilities of the school nurse?
 - **b.** Are there enough UAPs willing and competent, in each school building, to administer the asthma reliever medication to ensure a safe and timely response?
 - c. Will an asthma action plan be required for administration of stock asthma reliever medication for a student?

School Policy-School Board Approval

Once the questions related to state law/rule have been answered, the school nurse should determine if their school has a policy related to stock asthma reliever medications. If the district does have an existing policy, the school nurse should review the policy to ensure that it is in line with state requirements (if applicable) and follows best practice. If the school district does not have a policy, the school nurse should identify what information should be included in a policy as they begin to develop the stock asthma reliever program. The school nurse should familiarize themselves with the district template and process for policy development. Considering that school district policy must be approved and adopted by the school board, the school nurse may want to consider meeting with school administrators to ensure there is support of a stock asthma reliever medication program. The <u>American Lung</u> <u>Association</u> and the <u>American Academy of Allergy, Asthma, and Immunology</u> have sample policies that the school nurse can use as a resource.

Questions related district policies:

- 1. Is a policy required to develop a stock asthma reliever medication program in the district?
- 2. Does the district administration support a stock asthma reliever medication program?
- 3. Does the school board support a stock asthma reliever medication program?
- 4. Does the district medical advisor support a stock asthma reliever medication program?
- 5. Does the district policy allow the delegation of asthma reliever medication to UAPs?

Acquisition of Orders, Inhalers, and Supplies

The school nurse must obtain an order for stock asthma reliever medication. Many times, the order is written by the district's medical advisor, but some states may have a standing order for school-based stock asthma reliever medication written by the state medical director or the public health medical director. The school nurse should ensure that the order is written to dispense enough inhalers to maintain adequate stock at each school building within the school district.

As the school nurse is working to obtain the medical order for the inhalers, the school nurse must also secure funding to cover the cost of the initial supply of inhalers and consider how subsequent doses will be funded (i.e. once the medication is empty or expired).

The American Thoracic Society, American Lung Association, Allergy & Asthma Network Mothers of Asthmatics, and the National Association of School Nurses recommend the use of spacers with the inhaler (American Academy of Allergy, Asthma, and Immunology, 2023). In addition to identifying funding sources for the inhalers, it is recommended that the school nurse also secure funding for spacers. Disposable spacers (plastic chambers of mouthpieces compatible with the spacer) are acceptable. Studies have shown that paperboard spacers can safely last the entire school year without microbial growth (Volerman et al., 2021, p. 519-20).

Storage, Location, Monitoring, and Cleaning

Prior to implementing a stock asthma reliever medication program, the school nurse needs to identify where the medication will be stored. This may impact the number of inhalers that are needed. For example, if the medication is stored only in the health room, multiple inhalers may not be required. But if the medication is stored with stock epinephrine or stock naloxone, then multiple inhalers may be needed if multiple stock boxes are present within the school building. Additionally, if the stock inhalers will be taken off school grounds for field trips or extra-curricular events such as sporting events, additional inhalers will be necessary to ensure that there is also a supply located at the school. It is recommended that inhalers be stored in an unlocked location so the inhaler can be easily accessed in an emergency.

Once the inhalers are obtained, the school nurse should develop a system to systematically check the expiration dates and develop a procedure for disposal after the medication is expired. If the inhaler will be used by multiple students the procedure should include periodic review of the number of remaining doses in the inhalers.

If the inhaler will be used by multiple students, the device should be cleaned following each use and prior to being used by another student. As the school nurse is developing the procedure/protocol they should include steps related to cleaning the actuator (see the device manufacturer's instructions for specifics on cleaning), including who is responsible for the cleaning. Spacers and valved-holding chambers should not be used by multiple individuals, thus disposable spacers are recommended.

Questions related to Medication and Storage:

- 1. Who will be responsible for procuring and maintaining asthma reliever medication?
- 2. How many doses will schools have in each building?
- 3. Where will the asthma reliever medication be stored?
- 4. Will standing order allow for administration of a second dose?
 - **a.** If so, protocol should include indicators and instructions for second dose.
 - **b.** If so, schools should have adequate supply of asthma reliever medication to allow a second dose to be administered.
- 5. Are there cleaning policies and procedures when using with multiple students or will it be a single dose inhaler?

- 6. How will the district fund further supply of asthma reliever medication?
- **7.** Will the continued procuring and maintenance of asthma reliever medication be cost prohibitive for the school district?
- 8. Will the stock asthma reliever medication be available for before/after school events and school sponsored events?
- **9.** Will the stock asthma reliever medication be available for community groups using the building for non-school sponsored events?
- **10.** Will the standing order for asthma reliever medication allow for the administration of the medication to staff and visitors?
- 11. Which formulation of asthma reliever medication will your district stock?
- 12. Does standing order require a specific formulation of Albuterol?
- 13. Is there a policy and form for reporting use of asthma reliever medication and who will oversee that?

Policy, Procedure, and Protocol Development

It is recommended that schools have a school board policy pertaining to stock albuterol reliever medication (American Academy of Allergy, Asthma, & Immunology, 2023). Based on the requirements of the school district, the nurse may need to develop a policy, procedure, and protocol. Some districts may only require a policy and a protocol. The school nurse should identify what documents are required in their district. It is recommended that a written protocol is developed and that the protocol include the following:

- Signs and symptoms of mild, moderate, and severe respiratory distress
- The course of action based on the initial presentation of the student
- Specific indications for when to summon emergency medical services
- The dose of albuterol to give (i.e., the number of inhaler puffs for initial use and subsequent use for same episode of respiratory distress)
- Post incident instructions
- Information on the duration that a student's documentation log shall remain on file with the school (Volerman et al., 2021).

An important treatment consideration for the school nurse to understand and educate school staff who will be administering the stock asthma reliever medication, is that 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. This also applies to students who have an Asthma Action Plan but require the administration of stock albuterol (for example, if they do not have their own inhaler at school). An asthma action plan provides school personnel with instructions on how to use a child's personal medicine, not stock albuterol (Volerman et al., 2021, p. 520).

Education, Training, and Skill Validation

The American Thoracic Society, Allergy and Asthma Network, the American Lung Association and the National Association of School Nurses recommend that school staff be trained to recognize and respond to a student experiencing asthma symptoms. They state, "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" (Volerman et al, 2021, p. 514) but they recommend to train as many school staff as possible so at least one trained individual is present in the school each day. They recommend that the training include:

- Basic asthma pathophysiology and common triggers.
- How quick-relief medications work to treat respiratory distress.
- Recognizing mild, moderate, and severe respiratory distress.

- Determining when asthma reliever medication should be administered.
- 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.
- Post incident instructions, including timely documentation and parent/guardian/caregiver contact instructions (Volerman et al., 2021, p. 518).
- It is also recommended that all school staff are educated to never send a student who is experiencing asthma symptoms, to obtain their albuterol on their own (Allergy and Asthma Network, 2023).

Since proper use of the inhaler and administration of the albuterol is key to symptom relief, "opportunities to teach back are particularly important to ensuring proper technique" (Volerman et al., 2021, p. 514). Volerman et al. (2021) also indicate that annual training of school staff is critical.

Questions related to Education for Administration of Albuterol:

- 1. How will the UAP determine when asthma reliever medication should be administered?
- 2. What education and training should be provided regarding the potential side effects that can be expected?
- **3.** What education will be provided on supportive care to be provided before and after asthma reliever medication has been administered?
- 4. How often will education and training be provided?
- **5.** Will the UAPs trained to administer asthma reliever medication also be required to be certified in cardiopulmonary resuscitation (CPR)?

Emergency Drills

A key component of a successful stock asthma reliever medication program is the effective implementation of the necessary steps when needed. The school nurse plays a vital role in ensuring the school community is prepared to respond to an emergency, such as a student experiencing asthma symptoms. To increase the likelihood that school staff know how to respond and respond appropriately the school nurse should conduct periodic emergency health drills including asthma emergency drills. Upon completing the drill, the school nurse should meet with the school staff to debrief and discuss what went well and where improvement, including education or skill reinforcement, is needed. The school nurse should document the date of the drill, the school staff involved in the drill, notes from the debrief along with recommended steps to take to improve the emergency response.

Quality Improvement

After the stock asthma reliever medication program has been implemented the school nurse should engage in quality improvement activities including conducting debriefing after asthma emergency drills and when an inhaler is utilized. Another important aspect of quality improvement is the collection and review of data to detect opportunities for improvement, identifying trends in stock asthma reliever medication use (i.e., increase utilization based on socioeconomic status, race and/or ethnicity, gender, etc.), and gaps in knowledge where additional education and/or training are needed.

Communication and Care Coordination

The intent of a stock asthma reliever medication program is to ensure that every student who is experiencing asthma symptoms has access to bronchodilators to reduce the likelihood of negative outcomes, including death. It is then imperative that the school nurse follow-up with all students who require the use of the stock asthma reliever

medications to confirm that they are receiving the necessary care coordination to reduce the likelihood that they will require further doses of the stock medication. The school nurse should assess the student's health history, healthcare utilization, access to a medical home, medications, insurance, and other resources necessary to manage their symptoms or asthma diagnosis. The school nurse should ensure ongoing communication with the student's parents/guardian and healthcare provider to determine if additional resources are needed. The school nurse should evaluate and help minimize any barriers that are preventing the student from accessing the care and needed resources (Centers for Disease Control and Prevention, 2017).

The checklist below provides a summary of actionable steps that the school nurse may consider engaging in when developing and implementing a stock asthma reliever medication program.

Action Steps:

- Determine if state has a law pertaining to stock asthma reliever medications.
- Determine if district has a policy related to stock asthma reliever medications.
- □ Identify what information should be included in district policy (if not already developed).
- Secure school district leadership, including medical advisor, support for stock asthma reliever program.
- Acquire an order for stock albuterol from healthcare provider (school's medical advisor, state medical director, public health medical director).
- Collaborate with healthcare provider to develop school district policy, procedure, and protocol.
- Secure funding source to cover the cost of initial supply of albuterol and other needed supplies (i.e, disposable spacers).
- Secure funding to maintain adequate stock of asthma reliever inhalers at each of the school buildings within the district.
- □ Identify where the stock albuterol will be stored.
- □ It is recommended that stock albuterol be stored in a temperate-controlled, dry, and unlocked place that is easily accessible to trained individuals for medication administration (Volerman et al., 2021).
- Determine if stock asthma reliever medications will be available for before and after school events.
- Obtain supply of asthma reliever inhalers.
- Develop a process to systematically check the expiration date(s) of the stock asthma reliever medications.
- □ Train all school staff on asthma, risk reduction, and response to asthma exacerbation.
- Document training of school staff who attended training including: name of staff person, date, and evaluation of knowledge acquisition.
- □ Train designated staff who will be responsible for administering albuterol in response to asthma exacerbation.
- Document training of designated staff who will be responsible for administering albuterol including: name of staff person, date of training, evaluation of knowledge acquisition and competence.
- Training should occur at least annually and when a need for education reinforcement is needed.
- Conduct periodic asthma emergency drills.
- Debrief after drills to identify what went well and areas that need to be improved.
- □ Implement quality improvement actions based on learnings from emergency drill debrief.

- Develop reliever medication use reporting process and associated documents.
- Develop and implement a system to follow-up with the student who received the stock dose of asthma reliever medication to assess their needs related to asthma management, access to asthma medications, medical home, and care coordination.
- Conduct a debrief when stock reliever medication is utilized.
- Evaluate the stock asthma reliever program at least yearly.
- □ Share successes and barriers with school leadership and stakeholders.
- □ Identify and implement quality improvement activities.

Resources for Stock Albuterol:

- American Lung Association Stock Asthma Medication: Implementation Guidance for Schools
- American Lung Association <u>Stock Asthma Medication Toolkit</u>
- American Academy of Allergy, Asthma, & Immunology <u>Stock Inhaler Toolkit for Schools</u>
- <u>Ensuring Access to Albuterol in Schools: From Policy to Implementation. An Official ATS/AANMA/ALA/NASN Policy</u> <u>Statement</u>

References:

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FIELD TRIP PREPARATION CHECKLIST

(adapted from NASN's Emergency Medication Administration Field Trip Preparation Checklist)

Local educational agencies (LEA) are responsible for providing needed accommodations for students with a healthcare condition or disability so they may participate safely in school programs or activities (US Department of Education/Office of Civil Rights, 2022). School officials cannot require that a parent/guardian of a child with special healthcare needs attend if parents of students without special healthcare needs are not required to accompany their children (USDE/OCR, 2016).

This document is a checklist for practice and medication management considerations for asthma emergency medication administration for field trips.

This document is not intended to provide clinical standards or guidelines. The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice.

Mitigation and Prevention of Asthma Emergencies:

- Prior to field trip, connect with parents/guardians of students with asthma to discuss duration and location of field trip to determine the student's needs.
- Discuss with parents/guardian any updates to emergency contact information.
- Review student's health plans and revise as needed for field trip circumstances.
- Discuss with the school administrator and field trip supervisor the staffing that is necessary to meet student health needs and abide by state Nurse Practice Act laws.
- After the field trip, initiate debriefing discussion among staff participating on the trip to evaluate what worked well and suggestions for improvement on subsequent trips.
 - Particular attention should be given to how any health emergencies that occurred were handled.

School Nurse Practice Considerations for Field Trips:

- Explore the nurse practice laws of the state(s) the students will visit or travel through.
- If the state is not part of the Nurse Compact, determine what the state where the field trip will occur requires for the licensed registered nurse to provide nursing care in that state.
- Determine if the state(s) where the field trip occurs allows for delegation of nursing health services to unlicensed assistive personnel (UAP).
- Determine whether the state(s) where the field trip occurs allows for medication administration to the student by anyone other than a licensed healthcare professional.
 - In the event of allowable delegation, determine if remote supervision is allowed if the school nurse is not attending the field trip.
- Identify if there are state-specific restrictions related to the storage, possession, or administration of particular medications or substances.

- For an "out of country" field trip investigate applicable laws as nursing licensures are not recognized out of the United States.
- Evaluate the need for extended liability for the school nurse for the performance of nursing acts while outside normal working or contract hours.

Staff Education and Training:

- Educate all field trip staff about asthma including:
 - signs and symptoms;
 - emergency management;
 - who is responsible for administering the emergency medication
 - where emergency medications will be stored.
- Train all field trip staff (who need to know) how to administer emergency medication.
- Ensure that field trip staff are competent to administer emergency medication(s).
 - Ensure documentation of training and competency.
- Review emergency protocols with appropriate field trip staff.

Emergency Preparedness:

- For all students, especially students with asthma, obtain consents and insurance information from parents/ guardians to obtain emergency medical services for their child while on a field trip.
 - keep this information in a confidential file.
- Ensure backup batteries for cell phones and other emergency communication devices are available and in working order.
- Evaluate the availability and response time of Emergency Medical Services (EMS) on the field trip route and final destination.
- Plan emergency procedures for areas in which cell phone reception may not be available.
- Understand how to directly communicate with the student's parent(s)/guardian(s) in the event of an emergency and ensure all designated adults have emergency contact numbers.
- Identify where hospitals are located on the field trip route and final destination.

Medication Storage:

- Determine where emergency medication will be stored keeping in mind temperature stability, accessibility and safety.
- Medications, especially emergency medication, or equipment should NOT be left in a backpack on the bus or with a school staff/volunteer who is not with the student.
- Determine where the student's Asthma Action Plan (AAP) will be stored, ensuring accessibility during an emergency.
- Develop a plan on what to do if emergency medication is lost or misplaced including:
 - contacting parents/guardians
 - obtaining additional medication.
- Identify which students will be able to self-carry/self-administer their medication.
 - Ensure that proper education, competency, and documentation has been completed.
- For "out of the country" field trips, obtain copies of all prescriptions for prescription medications.

Medication Administration:

- Ensure a system to document medication administration.
- Develop a plan on how to obtain additional emergency medication if needed.

References:

- National Association of School Nurses. (2021). School nursing evidence-based clinical practice guideline: Medication administration in schools implementation toolkit. Available at: <u>https://learn.nasn.org/courses/36927</u>
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- Wisconsin Department of Public Instruction. (2019). *Meeting student health needs while on field trips tool kit for Wisconsin schools*. Available at: <u>https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/Meeting_Student_Health_</u> <u>Needs_While_on_Field_Trips_Tool_Kit.pdf</u>
- U. S. Department of Education, Office for Civil Rights. (2016). Parent and educator resource guide to Section 504 in public elementary and secondary schools. Retrieved from <u>https://www.ed.gov/media/document/504-</u> resource-guide-201612pdf

Resources:

Wisconsin Department of Public Instruction. (2019). *Meeting student health needs while on field trips tool kit for Wisconsin schools*. Available at: <u>https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/Meeting_Student_Health_</u> <u>Needs_While_on_Field_Trips_Tool_Kit.pdf</u>



INHALER WITH A SPACER OR VALVED-HOLDING CHAMBER

SKILL COMPETENCY DOCUMENTATION

Student's Name:	Grade/Teacher:	
Person trained:	Position:	Initials:
Person trained:	Position:	Initials:

	Procedure Steps		Initial Observation		Return Demonstration			
			Date:	Date:	Date:	Date:	Date:	
1.	Gather needed supplies and place on a clean surface							
2.	Position student, providing as much privacy as possible							
3.	Explain the procedure to the student at their level of understanding							
4.	Encourage the student to assist in the procedure as much as they are able, to help student learn self-care skills							
5.	Wash hands							
6.	If the student will be administering medication, have the student wash their hands							
7.	Review the following forms: a. medication administration form b. healthcare provider order/Asthma Action Plan c. parent/guardian authorization							
8.	Check the medication to ensure that it is:							
	a. the right student							
	b. the right medication							
	c. the right dose							
	d. being given at the right time							
	e. being given by the right route							
	f. being given for the right reason							
9.	Check the medication expiration date							

10. Review student's allergy status			
11. Make sure the inhaler and spacer are free of foreign objects			
12. Shake the inhaler for 5 seconds to mix the medicine			
13. Remove the cap from the inhaler mouthpiece			
14. Prime the inhaler if indicated (if the inhaler is new or has not been used in the past 7 days or if it has been dropped)			
a. the right student			
15. Review the six rights of medication administration again to be sure that it is:			
a. the right student			
b. the right medication			
c. the right dose			
d. being given at the right time			
e. being given by the right route			
f. being given for the right reason			
16. Place the inhaler mouthpiece onto the end of the spacer (opposite the mouthpiece)			
17. Remove cap from spacer			
18. Hold the inhaler between your index finger and thumb			
19. Have the student stand up and take a deep breath in, and breathe out			
20. Have the student tip their head back slightly toward the ceiling			
21. Have the student place the spacer between their teeth and above their tongue			
22. Have the student close their lips around the spacer (follow the individual spacer instructions)			
23. Press down on the top of the inhaler once			
24. Instruct the student to breathe in very slowly until they have taken a full breath			
25. If you hear a whistle sound, instruct the student to breathe slower—the breath in should take at least 3 to 5 seconds			
26. Instruct the student to remove the spacer from their mouth			
27. Instruct the student to hold their breath for 10 seconds			
28. Instruct the student to breathe out slowly through their mouth			
29. Wait one (1) minute before having the student take a second puff, if ordered			
30. Repeat previous steps if taking a second puff			
31. Have the student rinse out their mouth with water and spit			
32. Wash hands			

33. Document medication administration in student's medication administration log			
34. Follow up, as needed, with parents or guardian and healthcare provider			

Plan for monitoring asthma management:

School Nurse Name:	Phone Number:
Trainee's signature:	
School Nurse's signature:	



INHALER WITHOUT A SPACER OR VALVED-HOLDING CHAMBER

SKILL COMPETENCY DOCUMENTATION

Student's Name:	Grade/Teacher:	
Person trained:	Position:	Initials:
Person trained:	Position:	Initials:

	Procedure Steps	Initial Observation		Initial Observ		Ret	urn Den	nonstrat	ion
	riocedule steps		Date:	Date:	Date:	Date:	Date:		
1.	Gather needed supplies and place on a clean surface								
2.	Position student, providing as much privacy as possible								
3.	Explain the procedure to the student at their level of understanding								
4.	Encourage the student to assist in the procedure as much as they are able, to help student learn self-care skills								
5.	Wash hands								
6.	If the student will be administering medication, have the student wash their hands								
7.	Review the following forms: a. medication administration form b. healthcare provider order/Asthma Action Plan c. parent/guardian authorization								
8.	Check the medication to ensure that it is:								
	a. the right student								
	b. the right medication								
	c. the right dose								
	d. being given at the right time								
	e. being given by the right route								
	f. being given for the right reason								
9.	Check the medication expiration date								
10.	Review the student's allergy status								
11.	Make sure the inhaler is free of foreign objects								

12. Shake the inhaler for 5 seconds to mix the medicine		
13. Remove the cap from the inhaler mouthpiece		
 Prime the inhaler if indicated (if the inhaler is new or has not been used in the past 7 days or if it has been dropped) 		
 a. When the inhaler is brand new or has not been used for a while, the medication may separate from the other ingredients in the canister and the metering chamber. Shaking the inhaler will mix the ingredients in the drug reservoir but may not produce enough turbulence to re-blend the ingredients in the metering chamber. Priming, or releasing one or more sprays into the air, ensures your next dose will contain the labeled amount of medication 		
15. Review the six rights of medication administration again to be sure it is:		
a. the right student		
b. the right medication		
c. the right dose		
d. being given at the right time		
e. being given by the right route		
f. being given for the right reason		
16. Hold the inhaler between your index finger and thumb		
17. Have the student stand up and take a deep breath in and breathe out		
18. Have the student tip their head back slightly toward the ceiling		
19. Have the student put the inhaler in their mouth, between their teeth and above their tongue		
20. Have the student close their lips around the inhaler		
21. Press down on the top of the inhaler once as the student breathes in very slowly until they have taken a full breath		
22. Instruct the student to remove the inhaler from their mouth		
23. Instruct the student to hold their breath for 10 seconds		
24. Instruct the student to breathe out slowly through their mouth		
25. Wait one (1) minute before having the student take a second puff, if ordered		
26. Repeat previous steps if taking a second puff		
27. Have the student rinse out their mouth with water and spit		
28. Wash hands		
29. Document medication administration in student's medication administration log		
30. Follow up, as needed, with parents or guardian and healthcare provider		

Plan for monitoring asthma management:

School Nurse Name:	Phone Number:
Trainee's signature:	
School Nurse's signature:	



NEBULIZER ADMINISTRATION

SKILL COMPETENCY DOCUMENTATION

Student's Name:	e: Grade/Teacher:		
Person trained:	Position:	Initials:	
Person trained:	Position:	Initials:	

	Procedure Steps		Initial Observation		urn Den	nonstrat	ion
			Date:	Date:	Date:	Date:	Date:
1.	Position student						
2.	Use a room separate from where other students are receiving care (if possible) or one that has limited other use						
3.	Explain the procedure to the student at their level of understanding						
4.	Encourage the student to assist in the procedure as much as they are able, to help the student learn self-care skills						
5.	If the student will be assisting, have the student wash their hands.						
6.	Review the following forms: a. medication administration form b. healthcare provider order/Asthma Action Plan c. parent/guardian authorization						
7.	Check the medication to ensure that it is:						
	a. the right student						
	b. the right medication						
	c. the right dose						
	d. being given at the right time						
	e. being given by the right route						
	f. being given for the right reason						
8.	Check medication expiration date						
9.	Review the student's allergy status						
10.	Wash hands						

11.	Set up and plug in the nebulizer machine in a location where the power source is close to a comfortable location for the medication to be administered			
12.	Follow the directions for the specific brand of nebulizer machine, connection tubing and cup			
13.	Review the six rights of medication administration again to be sure that it is:			
	a. the right student			
	b. the right medication			
	c. the right dose			
	d. being given at the right time			
	e. being given by the right route			
	f. being given for the right reason			
14.	Unscrew top of nebulizer cup			
15.	Add medication into the bottom half of the nebulizer cup			
16.	Screw the top of the cup back on			
17.	Attach the tubing from the nebulizer cup to the nebulizer machine			
18.	Attach the nebulizer cup onto the facemask or mouthpiece			
19.	Place either the facemask on the student or the mouthpiece in the student's mouth, be sure their lips are sealed			
20.	Turn on the machine			
	a. A mist of medication should rapidly appear			
21.	Instruct the student to take relatively normal slow deep breaths			
22.	Keep the nebulizer cup in an upright position			
23.	The cup may require some tapping on the sides toward the end of the treatment to optimize the completion of the dose			
24.	The treatment is complete when there is no more mist from the cup (usually 10–15 minutes)			
25.	Turn off the machine			
26.	Remove the mask or mouthpiece			
27.	Rinse the nebulizer cup, mouthpiece or mask under warm water			
28.	Shake off excess water			
29.	Place on a paper towel to dry			
30.	Monitor student's heart rate and respirations			
31.	Wash hands			
32.	Have the student rinse out their mouth with water and spit			
33.	Have student wash hands			

34. Document medication administration in the student's healthcare record			
35. Update parents/guardian and healthcare provider, if needed			

Plan for monitoring asthma management:

School Nurse Name: _____ Phone Number: _____

Trainee's signature:

School Nurse's signature:



PEAK FLOW METER SKILL COMPETENCY DOCUMENTATION

Student's Name:	Grade/Teacher:		
Person trained:	Position:	Initials:	
Person trained:	Position:	Initials:	

	Procedure Steps	Initial Ob	oservation	Ret	urn Den	nonstrat	ion
		Date:	Date:	Date:	Date:	Date:	Date:
1.	Gather needed supplies and place on a clean surface						
2.	Position student, providing as much privacy as possible						
3.	Explain the procedure to the student at their level of understanding						
4.	Encourage the student to assist in the procedure as much as they are able, to help student learn self-care skills						
5.	Wash hands						
6.	f the student will be administering medication, have the student wash their hands						
7.	 Review the following forms: a. medication administration form b. healthcare provider order/Asthma Action Plan c. parent/guardian authorization 						
8.	Look at the peak flow meter to make sure the mouthpiece is clean and clear of any objects						
9.	Move the marker on the peak flow meter to the bottom of the numbered scale						
	a. You may need to shake it to move the marker down						
10.	Instruct the student to stand up or sit up straight						
11.	Instruct the student to take a deep breath in through their nose						
12.	Instruct the student to place the device between their teeth, biting down gently						
13.	Instruct the student to then seal their lips tightly around the mouthpiece						

14. Be sure the student's tongue doesn't block the hole in the mouthpiece			
15. Instruct the student to blow out as hard and as fast as they can with a single breath			
16. Read the number that is next to the marker			
17. Write down the number			
18. Reset the meter			
19. Move the marker back to zero and repeat the above steps two (2) more times			
20. If the student feels lightheaded, have the student stop and rest			
21. Once the student has completed the steps three times, document the highest number			
22. The highest of the 3 numbers is the student's peak flow number			
23. Document the numbers in the student's healthcare record.			
24. Wash hands			
25. Follow up, as needed, with parents or guardian and healthcare provider			

Plan for monitoring asthma management:

School Nurse Name:	Phone Number:
Trainee's signature:	
School Nurse's signature:	



FERPA/HIPAA CONSENT

SAMPLE

(adapted from the NASN Improving Care Coordination for Students with Chronic Conditions Toolkit)

Purpose:

This form provides the school nurse with family consent to release and share information between the school and a student's healthcare provider; providing a pathway to care needed by the student with a chronic health condition to be healthy, safe, and ready to learn.

Instructions:

- Present this form to families when meeting to discuss how to provide health services at school.
- Explain how this consent protects the health and safety of their child by allowing the school nurse to communicate with the child's healthcare provider, while protecting the privacy of a student's health information.
- Explain the rights to parents/guardians provided by FERPA:
 - Inspect and review the student's educational record.
 - Seek amendment to the educational record.
 - Consent to disclose personally identifiable information.
 - File a complaint concerning failures by the school to comply with the requirement of FERPA.

Documentation:

File a copy the FERPA/HIPAA Consent in the student's educational record.

References:

- Gudeman, R. (2019). Legal guide to school health information and data sharing in Colorado, HSPF learning collaborative. Available at: <u>https://healthystudentspromisingfutures.org/wp-content/uploads/2020/02/</u> <u>COLegalGuideSchoolHealthInformationDataSharing.pdf</u>
- The Network for Public Health Law. (2020). Data sharing guidance for school nurses. Available at: <u>https://</u> <u>www.networkforphl.org/wp-content/uploads/2020/01/Data-Sharing-Guidance-for-School-Nurses-with-</u> <u>Appendices-1-23-2020.pdf</u>

FERPA/HIPAA CONSENT

AUTHORIZATION FOR USE OR DISCLOSURE OF HEALTH INFORMATION BETWEEN HEALTHCARE PROVIDERS AND SCHOOL/SCHOOL DISTRICT

Completion of this document authorizes the disclosure and/or use of individually identifiable health information, as set forth below, consistent with federal laws (including FERPA and HIPAA) concerning the privacy of such information. This consent protects the health and safety of the child by allowing the school nurse to communicate with the child's healthcare provider, while protecting the privacy of a student's health information.

USE AND DISCLOSURE INFORMATION:

Patient/Student Name:

Last	First	MI	Date of Birth
I, the undersigned	, do hereby authorize (name of agency a	and/or healthcare providers):	
(1)			
(2)			
to provide <mark>[specif</mark> i	cally describe the health information	here] from the above-named chil	d's medical record to and from:
School/School Dist	rict to Which Disclosure is Made	Address / City and Stat	e / ZIP Code
Contact Person at	School/School District	Area Code and Telepho	one Number
The disclosure of h	nealth information is required for the fo	llowing purpose:	
DURATION:			
	shall become effective immediately and	d shall remain in effect until	(enter date) or for one yea

from the date of signature if no date entered.

RESTRICTIONS:

Law prohibits the Requestor from making further disclosure of my health information unless the Requestor obtains another authorization form from me or unless such disclosure is specifically required or permitted by law. Where HIPAA allows further disclosure without consent, I understand that my health information may no longer be protected by HIPAA.

YOUR RIGHTS:

I understand that I have the following rights with respect to this Authorization: I may revoke this Authorization at any time. My revocation must be in writing, signed by me or on my behalf, and delivered to the school district/healthcare agencies/ persons listed above. My revocation will be effective upon receipt but will not be effective to the extent that the Requestor or others have acted in reliance to this Authorization. A healthcare provider may not condition my treatment, payment, enrollment, or eligibility for benefits on providing authorization.

RE-DISCLOSURE:

I understand that the Requestor (School/School District) will protect this information as prescribed by the Family Educational Rights and Privacy Act (FERPA) and that the information becomes part of the student's educational record. The information will be shared with individuals working at or with the School District for the purpose of providing safe, appropriate, and least restrictive educational settings and school health services and programs.

I have a right to receive a copy of this Authorization. Signing this Authorization may be required in order for this student to obtain appropriate services in the educational setting.

APPROVAL:

Printed Name	Signature	Date
Relationship to Student	Area Code and Telephone Number	



ASTHMA SELF-MANAGEMENT RESOURCES

Facilitating asthma self-management is a proven strategy to reduce asthma related hospitalizations and emergency department visits and is recommended by the Community Preventive Services Task Force (2019). The following resources can assist the school nurse in promoting asthma self-management skills.

Resources:

Asthma and Allergy Network:

Asthma Symptom Diary

Asthma and Allergy Foundation of America:

A Higher Education in Self-Management: Sending Your Teen With Asthma to College

American Lung Association:

- <u>Asthma Basics</u> (online course)
- Avoiding and Controlling Asthma Triggers
- Student Readiness to Self-Carry/Self-Administer Assessment Tool
- My Asthma Control Assessment
- Know the Difference Between Your Asthma Medicines
- Making a Medicine Schedule
- Getting Ready for Your Next Office Visit
- Severe Asthma Treatment Planning Tool
- The Pathway to Managing Your Asthma

Asthma Action Plans:

- American Academy of Allergy, Asthma, and Immunology | English and Spanish
- American Lung Association | English and Spanish
- Asthma and Allergy Foundation of America
- Centers for Disease Control and Prevention
- National Heart, Lung, and Blood Institute

References:

Guide to Community Preventive Services. (2019). *Asthma: School-Based self-management interventions for children and adolescents with asthma*. Retrieved from https://www.thecommunityguide.org/findings/asthma-school-based-self-management-interventions-children-and-adolescents-asthma



ASTHMA TRAINING FOR ALL SCHOOL STAFF – CHECKLIST

It is recommended that ALL school staff receive education on asthma which includes the following components. It is important to note that states may have laws or rules that require school staff to be educated on specific concepts, topics, and skills related to the management of asthma. Be sure to review your state requirements. School staff who have the responsibility of administering the asthma reliever medication should receive additional education and training. See the Model Protocols for Asthma Reliever Medications for more information.

Topics to Include in School Staff Asthma Education and Training:

Prevention of asthma exacerbations

- Basic asthma pathophysiology and common triggers
- □ How to prevent asthma exacerbation
- □ How to reduce exposure to triggers
 - How to manage activities, environmental triggers, and use daily air quality information

Recognizing signs and symptoms of asthma exacerbation

- □ Signs and symptoms
- Common risk factors
- Recognizing mild, moderate, and severe respiratory distress

Managing asthma exacerbation

- Determining the course of action for managing respiratory distress events
- D Never to send a student experiencing symptoms by themselves to obtain their asthma medication
- How to use an Asthma Action Plan

Medication administration

- Where medication is stored
- How to access medication during school day, during school-sponsored events
- Student self-carry and self-administration policy (if applicable)
- How quick-relief medications work to treat respiratory distress
- The need for students/staff to bring prescribed asthma reliever inhalers with them on field trips
- Dest incident instructions, including timely documentation and parent/guardian/caregiver contact instructions

- Demonstration of correct technique to administer treatment using a metered-dose inhaler with and without a valved holding chamber/spacer
- Competency verification, of staff authorized to administer medications, of correct technique to administer treatment using a metered-dose inhaler with and without a valved holding chamber/spacer
- □ If the school has a stock asthma reliever program:
 - Where stock medication is stored
 - How to access medication during the school day, during school-sponsored events, and whether stock medication will be brought on field trips
 - Use of stock asthma reliever medication reporting procedure

Training of School Staff:

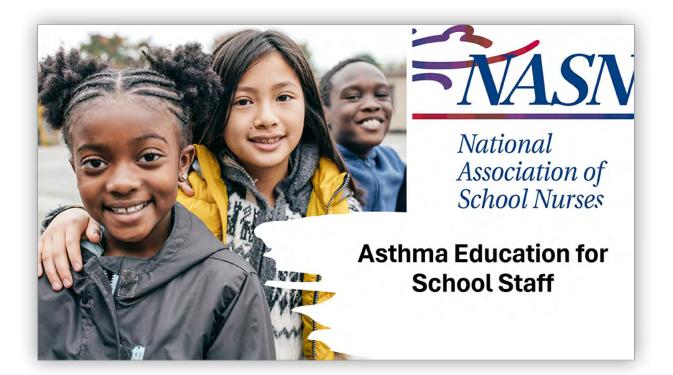
- Minimum of two individuals per school building
- Considerations should be given to additional individuals on the basis of asthma prevalence and other school indicators
- Train as many school staff as possible so at least one trained individual is present in the school building each day
- Staff education on asthma should occur at least yearly
- □ Reinforcement of education should be provided when practice concerns are identified
- Documentation of allergic reactions and treatment
- □ Anti-bullying policy

References:

- Asthma and Allergy Network. (n.d.). *Managing asthma in the schools: A guide for schools*. Available at: <u>https://</u> allergyasthmanetwork.org/allergies-and-asthma-at-school/managing-asthma-a-guide-for-schools/
- Barrett, M. & Murphy Moore, C. (2019). Students with chronic respiratory conditions: Asthma and cystic fibrosis. In
 J. Selekman, Shannon, R.A., Yonkaitis, C.F. (Eds.). School nursing, a comprehensive text (3rd ed., pp. 523-548).
 Philadelphia PA.: F.A. Davis Co.
- Volerman, A., Lowe, A. A., Pappalardo, A. A., Anderson, C. M. C., Blake, K. V., Bryant-Stephens, T., Carr, T., Carter, H., Cicutto, L., Gerald, J. K., Miller, T., Moore, N. S., Phan, H., Sadreameli, S. C., Tanner, A., Winders, T. A., & Gerald, L. B. (2021). Ensuring access to albuterol in schools: From policy to implementation. An official ATS/AANMA/ ALA/NASN policy statement. *American Journal of Respiratory and Critical Care Medicine*, 204(5), 508–522. <u>https://</u> doi.org/10.1164/rccm.202106-1550ST



ASTHMA EDUCATION FOR SCHOOL STAFF



Dear School Nurse,

This is a customizable presentation. You can download this slide deck and add your school's logo or mascot and district name. Then, use to train your staff and administration.

NASN



National Association of School Nurses

Asthma Education for School Staff

Learning Outcomes

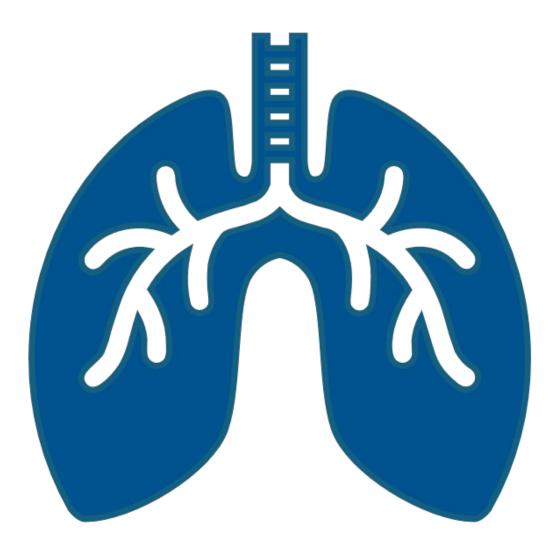
As a result of this training, the participant will be able to:

Recall basic asthma pathophysiology including common triggers and risk factors.

Identify how to reduce asthma exacerbations, including reducing exposure to triggers.



Indicate the proper course of action for managing a student experiencing asthma symptoms.



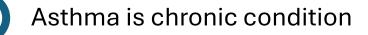
What is Asthma?

Common Health Condition



- In an average classroom of 30 students, about 3 students have asthma
- One of the leading causes of school absenteeism

Asthma



Someone with always has swelling in the airways even when they are not experiencing symptoms

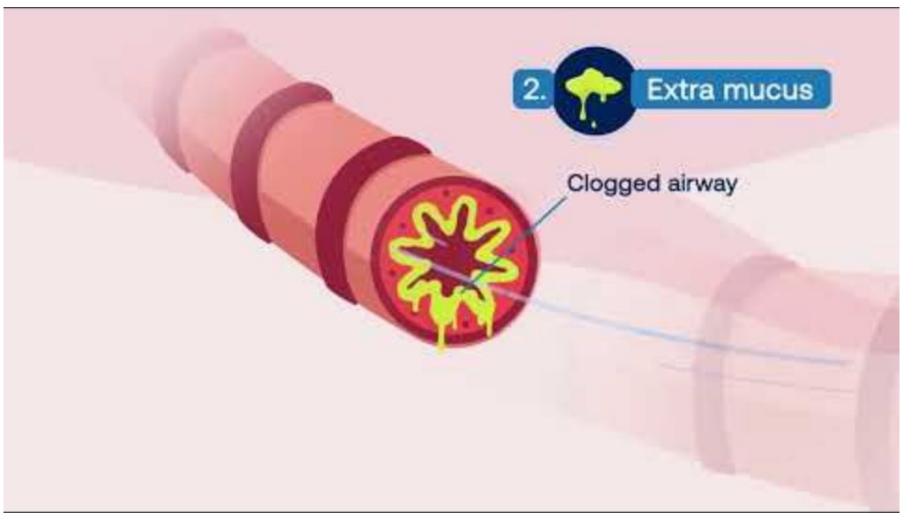
There is no cure for asthma, but it can be managed

May start at any age, can improve as they get older

Students live with asthma everyday

(American Lung Association, 2023d)





Asthma Overview

(American Lung Association, 2022)

https://youtu.be/batzSytA1Y0?si=PyBQMXC_rxgD3Vve



BREATHING



Asthma Symptoms

- Coughing
- Wheezing
- Chest tightness
- Shortness of breath
- Symptoms can vary between students
- Some students may experience only one symptom while another may experience multiple symptoms

(American Lung Association, 2023a)



WHEEZING

Signs of Respiratory Distress

Mild

Can engage in normal activities

Shortness of breath while walking

Begins to breath faster

Able to talk in full sentences

Alert and aware of what is going on around them

May start to show signs of distress or uneasiness

May experience mild wheezing

May have a cough

Moderate

Difficulty engaging in normal activities

Shortness of breath while at rest

Breathing faster than usual

Breathing is more difficult

Can only talk in short phrases

Alert and aware of their surroundings

Appears distressed

Loud wheezing usually occurring when breathing out

May have a persistent cough

Severe

Serious limitations with normal activities Shortness of breath while at rest Rapid breathing Struggling to breath Can only talk in words—need to pause to catch their breath Drowsy or confused Appear distressed or scared Loud wheezing while breathing in and out If very severe there could be no noise when breathing in and out Area around neck and ribs sink in Nostrils may flare open when breathing May sit in a tripod position Lips, nailbeds, and skin may turn blue or gray

(American Lung Association, 2023c)

Asthma Attack

- During an asthma attack, the insides of the student's airways swell even more and can produce extra mucus
- This narrows the space for the air to move in and out of their lungs
- The muscles that wrap around their airways also can tighten, making breathing even harder
- When that happens, it is called an asthma flare-up, asthma exacerbation, or asthma episode

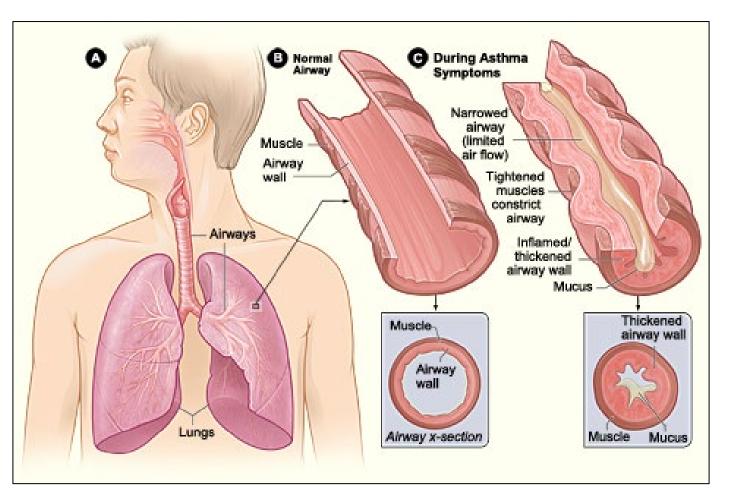


Image source: National Institute of Health: National Heart, Lung, Blood Institute

Common Triggers



(American Lung Association, 2023b)



Managing Asthma in School

What is MY role?

- Educate yourself about the symptoms of asthma and how to respond when you notice a student experiencing symptoms
- Be aware of school policies, procedures, and protocols related to the management and care of students with asthma
- Recognize and respond when a student is experiencing symptoms
- Know where student's asthma reliever medications are stored
- Know where to find a student's Asthma Action Plan
- Minimize exposure to triggers in the school environment
- Follow up with school nurse with any questions



Asthma Attack

- Intervene if you see a student having trouble breathing
- Breathing difficulty can quickly turn into an emergency
- Priority action is to get the student's asthma reliever medication and their Asthma Action Plan
- Never send a student to retrieve their asthma reliever medication on their own
- Notify the school nurse
- Call 911 if symptoms seem severe

Severe

- Serious limitations with normal activities
- Shortness of breath while at rest
- Rapid breathing
- Struggling to breath
- Can only talk in words—need to pause to catch their breath
- Drowsy or confused
- Appear distressed or scared
- Loud wheezing while breathing in and out
- If very severe there could be no noise when breathing in and out
- Area around neck and ribs sink in
- Nostrils may flare open when breathing
- May sit in a tripod position
- Lips, nailbeds, and skin may turn blue or gray

Action Steps

STEP ONE

Remain calm

Determine the severity of the situation

Help student locate their asthma reliever medication

Call 911 if needed

STEP TWO

2

Stop the activity

Try to remove the trigger

Keep the student sitting upright

STEP THREE

3

Call for assistance

Send student to the retrieve their asthma reliever medication OR have school nurse or staff member bring medication to student

NEVER SEND STUDENT ALONE

Call 911 if needed

STEP FOUR

4

(Completed by school nurse or staff member with proper training)

Administer asthma reliever medication based on student's Asthma Action Plan

Important Tools

Associat	ion.	Fo	r Hom	ne and S	School	
Name:					DOB:	_//
		nt Mild Pe	ersistent	Moderate Persiste	ent Severe Persistent	
Asthma Triggers (list Peak Flow Meter Per						
Green Zone: Doing	g Well					
Symptoms: Breathing Peak Flo	g is good – No co w Meter				s well at night	
Flu Vaccine-Date red		Next flu	vaccine due	c	COVID19 vaccine—Date re	
Control Medicine(s)	Medicine		How much	to take	When and how often to take	_ Home Sch
Physical Activity	Use Albuterol/I	Levalbuterol	puffs, 15 m	ninutes before activ	vity with all activity wh	Home Sct en you feel you need
Yellow Zone: Caut						
				hest – Problems w % and 79% of per	vorking or playing – Wake at n rsonal best)	ight
Quick rollof Madicing	(a) Albudaral	/l evalbuterol	outfo as	very 20 minutes fo	or up to 4 hours as needed	
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Asthma Action Plan

- Students diagnosed with asthma should have an asthma action plan
- Provides specific instructions on managing the student's asthma
- Outlines what medication the student should take, based on symptoms and peak flow meter readings
- Provides instructions on the dose and frequency of the medication
- It is a CRUCIAL tool to have when providing care for a student who is experiencing asthma symptoms

American Lung Association	-	nma Action Plan le and School
Name: Severity Classification: [Asthma Triggers (list): Peak Flow Meter Personal		Moderate Persistent Severe Persistent
Green Zone: Doing Wel	l -	
	od – No cough or wheeze – Can work a ster (more than 80% of per	
Flu Vaccine—Date received Control Medicine(s) Medic	cine How much to	o take When and how often to take it Take at Home School
Physical Activity	e Albuterol/Levalbuterol puffs, 15 mi	nutes before activity with all activity when you feel you need it
Yellow Zone: Caution		
	s breathing – Cough, wheeze, or tight ch ster to (between 50%)	est – Problems working or playing – Wake at night 6 and 79% of personal best)
Control Medicine(s) [[You should feel better within	Continue Green Zone medicines	ery 20 minutes for up to 4 hours as needed Change to tment. If you are getting worse or are in the Yellow Zone for more all the doctor right away!
Red Zone: Get Help Nov	w!	
	ns breathing – Cannot work or play – Gel eter (less than 50% of pers	tting worse instead of better – Medicine is not helping ional best)
		puffs, (how frequently) Trouble walking/talking due to shortness of breath Lips or fingernails are blue Still in the red zone after 15 minutes
The only control medicines to be Both the Healthcare Provider	e administered in the school are those lis	c-relief medicines according to asthma symptoms. ted in the Green Zone with a check mark next to "Take at School". ild has demonstrated the skills to carry and self-administer their improve after taking the medicine.
Healthcare Provider Name	Date Phone () Signature
I consent to communication be	etween the prescribing health care provider or asthma management and administration of this	d in school by the nurse or other school staff as appropriate. clinic, the school nurse, the school medical advisor and school-based health = medicine. Signature
after taking the medicine.		ick-relief inhaler, including when to tell an adult if symptoms do not improve
Name	Date Phone () Signature
Please send a signed copy b	eack to the provider listed above.	1-800-LUNGUSA Lung.org

Asthma Action Plan Details

Green Zone: Doing Well
Symptoms: Breathing is good – No cough or wheeze – Can work and play – Sleeps well at night Peak Flow Meter (more than 80% of personal best)
Flu Vaccine Date received: Next flu vaccine due: COVID19 vaccine Date received: Control Nedicine Control Medicine(s) Medicine How much to take When and how often to take it Take at Image: School Image: School Image: School Image: School
Physical Activity Use Albuterol/Levalbuterol puffs, 15 minutes before activity with all activity when you feel you need it
Yellow Zone: Caution
Symptoms: Some problems breathing – Cough, wheeze, or tight chest – Problems working or playing – Wake at night Peak Flow Meter to (between 50% and 79% of personal best)
Quick-relief Medicine(s) Albuterol/Levalbuterol puffs, every 20 minutes for up to 4 hours as needed Control Medicine(s) Continue Green Zone medicines Add Change to You should feel better within 20-60 minutes of the quick-relief treatment. If you are getting worse or are in the Yellow Zone for more than 24 hours, THEN follow the instructions in the RED ZONE and call the doctor right away!
Red Zone: Get Help Now!
Symptoms: Lots of problems breathing – Cannot work or play – Getting worse instead of better – Medicine is not helping Peak Flow Meter (less than 50% of personal best)
Take Quick-relief Medicine NOW! Albuterol/Levalbuterol puffs,

Asthma Action Plan classifies symptoms into zones

May include information about beak flow meter measurements

> Provides instructions on asthma reliever medication dose

Asthma Reliever Medications



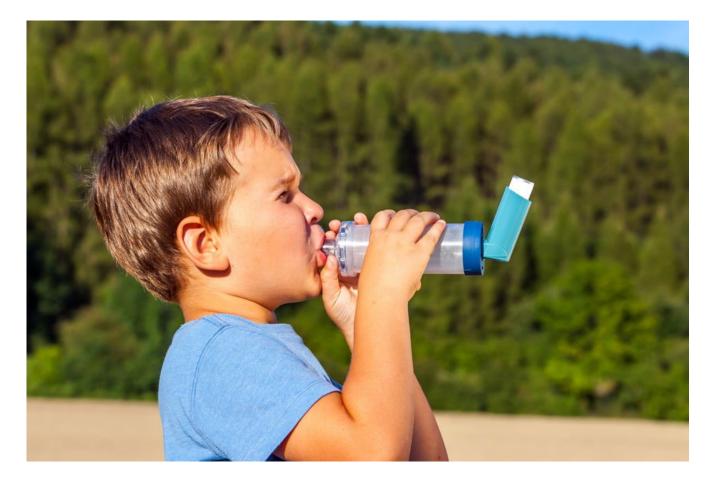
Inhaler

Inhaler with spacer or valveholding chamber

Nebulizer

How Albuterol Works

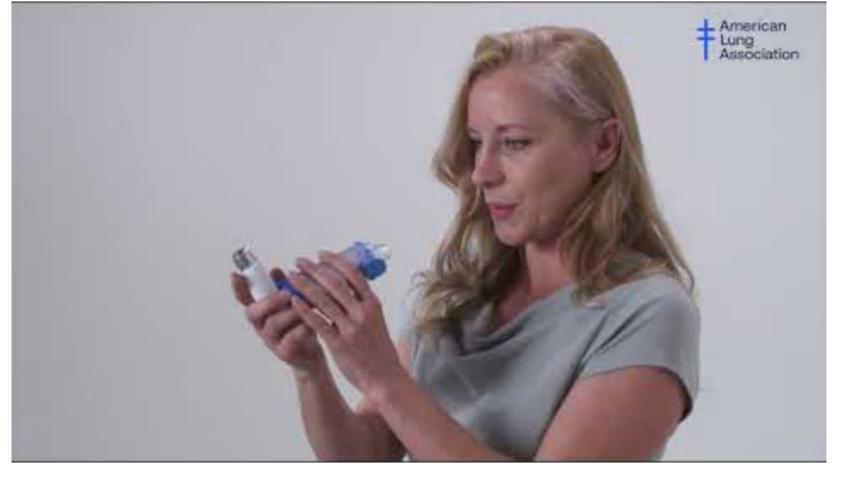
- Smooths bronchial muscles
- Opens the airways
- Makes it easier to breath



Inhaler and Nebulizer

Ventoli

Asthma Reliever Medication with Spacer



https://youtu.be/sQUUJHzO-XQ?si=vCP1_BdhzPk1F1l1

Asthma Reliever Medication without Spacer



https://youtu.be/2i9_DelNqs4?si=P5FGNuPi-WiWklqK

After Medication



(American Lung Association, 2023d)

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Symptoms should improve within 20-60 minutes after taking asthma reliever medication

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Student is at greater risk of having another asthma attack for several days--Continue to monitor the student

Student can resume activity when:

- Wheezing has stopped
- No chest tightness
- No shortness of breath
- Able to speak in sentences
- Able to walk without symptoms

Student may be tired, drowsy, withdrawn, anxious, or embarrassed—Acknowledge feelings and provide support

Notify parents/guardian

It's everyone's job to ensure students with asthma are safe and healthy at school.



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STAFF TRAINING AND EDUCATION ON ASTHMA-INFORMATION TO COLLECT AND DOCUMENT

- 1. Date
- 2. Name of staff person
- 3. Staff person's role
- 4. Hours that the trained school staff person works
 - This information may assist the school nurse in determining how many staff are in the building to determine if additional trained staff may be needed
- 5. Where the staff person's classroom/office is located
 - This information may be helpful to ensure large school buildings have enough staff persons trained in various locations within the building
- 6. Annual documentation that the school staff person was competent in administering the asthma reliever medication
- 7. Annual documentation that the school staff person is willing to administer asthma reliever medication
- 8. Annual documentation that the school staff person feels comfortable administering asthma reliever medication



STUDENT PRESENTATION



Dear School Nurse,

This is a customizable presentation. You can download this slide deck and add your school's logo or mascot and district name.

NASN



National Association of School Nurses



My Friend Has Asthma

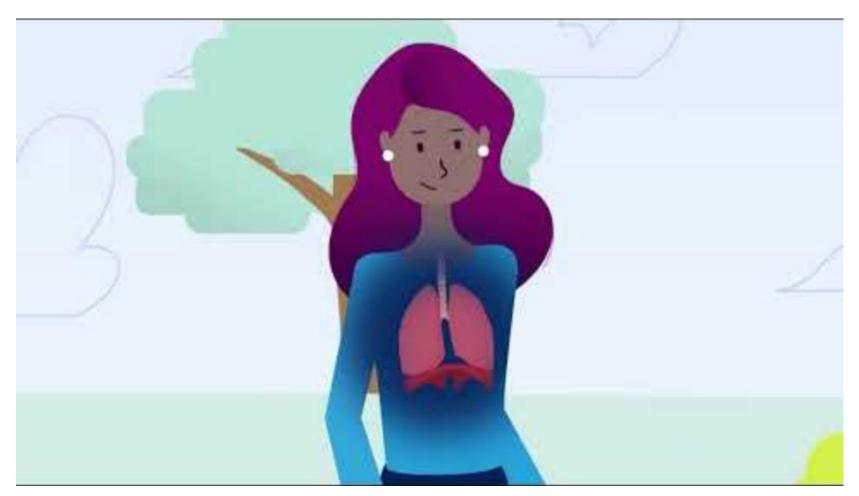
How Our Lungs Work



(Nemours KidsHealth, 2016)

https://youtu.be/0giiDDBJVQU?si=-CRjts3gbnnHb9aa

How Our Lungs Work



(American Lung Association, 2022a)

https://youtu.be/WIAoGZPw0zE?si=oyh9cnO6EL7P0c9g



What is Asthma?

(Sesame Street Workshop, 2016)

https://youtu.be/y4G4WhjKW6Q?si=AvlT5DYGvI1EQi6G

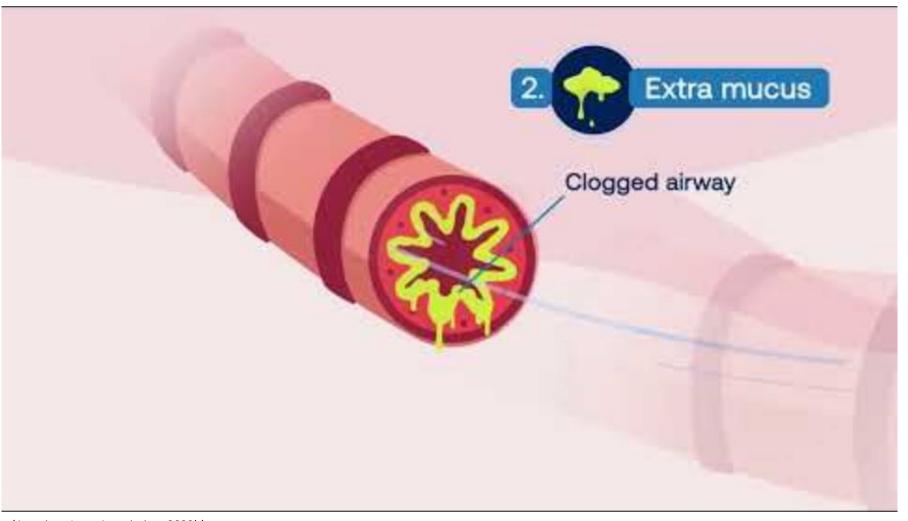




What is Asthma?

https://youtu.be/2ur1XreTiNg?si=67sqSy-1INert9_q

(BoosterShotComics, 2013)



What is Asthma?

(American Lung Association, 2022b)

https://youtu.be/batzSytA1Y0?si=68g4ZdaAJd4Xt7Oo



Asthma makes it harder for kids to breathe sometimes

- Doctors can help kids with their asthma
- 0

Kids with asthma CAN run & play

- Sometimes the kid with asthma might need to take medicine to help them breathe
- You cannot tell someone has asthma just by looking at them

You CAN'T catch asthma



Things That Can Make Asthma Worse



(American Lung Association, 2023b)

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DIFFICULTY BREATHING



Asthma Symptoms

- Coughing
- Wheezing
- Chest tightness
- Shortness of breath
- Symptoms can vary between students
- Some students may experience only one symptom while another may experience multiple symptoms

(American Lung Association, 2023a)



WHEEZING

Tools That Help With Asthma

Ventol

How Can You Help?

- Help your classmate stay away from the things that might make their asthma worse
- Don't be afraid to include your classmate in activities
- Don't tease your classmate
- Be a friend and tell an adult if you notice your classmate being teased or bullied
- Tell an adult if you notice your classmate having any problems breathing





References

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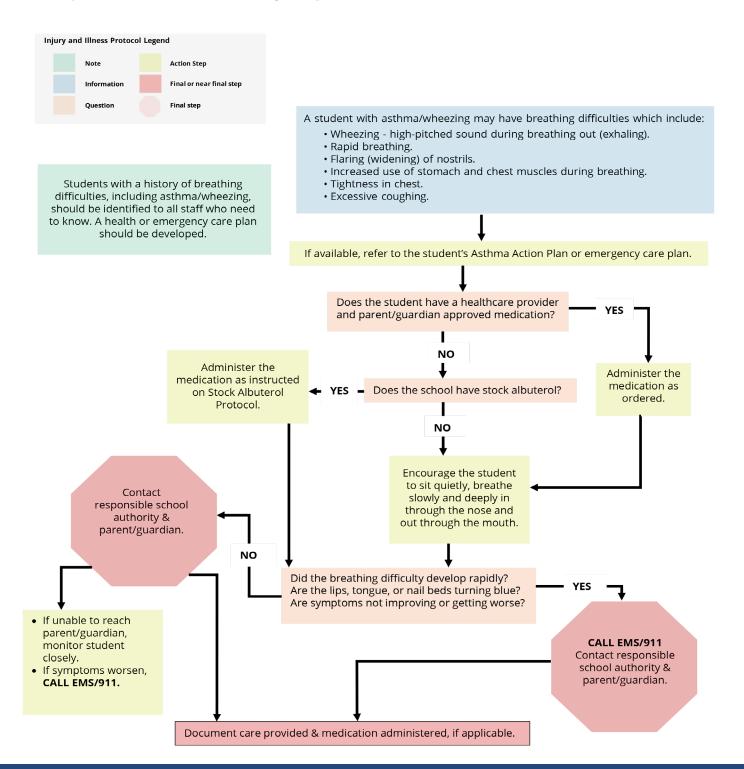
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ASTHMA/WHEEZING/ BREATHING DIFFICULTY

ALGORITHM FOR MANAGEMENT OF MEDICAL EMERGENCIES

(adapted from NASN's Emergency Medication Toolkit)



References:

- American Academy of Pediatrics, National Association of School Nurses. (2014). *PedFACTs: Pediatric first aid for caregivers and teachers (2nd ed.)*. Burlington, MA: Jones & Bartlett Publishers.
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MODEL PROTOCOL

INHALER WITH A SPACER OR VALVED-HOLDING CHAMBER

(adapted from NASN's Emergency Medication Administration Toolkit Model Protocol-Inhaler With a Spacer or Valved-Holding Chamber)

Disclaimer: NASN's model protocols and/or language are intended as examples that may serve as a tool for those responsible for drafting protocols that meet the needs of a local school or district. These examples are not authoritarian, nor should they be viewed as complying with any requirements specific or unique to any school or district. Model policies and language should not substitute or replace the advice of legal counsel and/or research on applicable federal or local laws, regulations or ordinances.

Needed Supplies:

- Reliever Medication Inhaler
- Spacer
- □ Student's Individualized Healthcare Plan
- Asthma Action Plan and/or healthcare provider's order
- □ Parent/Guardian authorization form

Procedure:

- 1. Gather needed supplies and place on clean surface.
- **2.** Position student providing for as much privacy as possible.
- 3. Explain the procedure to the student at their level of understanding.
- 4. Encourage the student to assist in the procedure as much as they are able, to help the student learn self-care skills.
- 5. Wash hands.
- 6. If student will be administering medication, have student wash hands.
- 7. Review the following forms:
 - **a.** medication administration form
 - b. healthcare provider order/Asthma Action Plan
 - **c.** parent/guardian authorization.
- 8. Check the medication to ensure that it is:
 - a. for the right child
 - **b.** the right medication
 - c. the right dose
 - **d.** being given at the right time
 - e. being given by the right route
 - **f.** being given for the right reason.
- **9.** Check the medication expiration date.
- **10.** Review the student's allergy status.

- **11.** Make sure the inhaler and spacer are free of foreign objects.
- **12.** Shake the inhaler for 5 seconds to mix the medicine.
- **13.** Remove the cap from the mouthpiece.
- **14.** Prime the inhaler if indicated (if the inhaler is new or has not been used in the past 7 days or if it has been dropped).
 - a. When the MDI is brand new or has not been used for a while, the medication may separate from the other ingredients in the canister and the metering chamber. Shaking the MDI will mix the ingredients in the drug reservoir but may not produce enough turbulence to re-blend the ingredients in the metering chamber.
 Priming, or releasing one or more sprays into the air, ensures your next dose will contain the labeled amount of medication.
- **15.** Review the six rights of medication administration again to be sure it is:
 - **a.** for the right student
 - **b.** the right medication
 - **c.** the right dose
 - **d.** being given at the right time
 - e. being given by the right route
 - f. being given for the right reason.
- **16.** Place the inhaler mouthpiece onto the end of the spacer.
- **17.** Remove cap from the spacer.
- **18.** Hold the inhaler between your index finger and thumb.
- **19.** Have the student stand up and take a deep breath in and breathe out.
- **20.** Have the student tip their head back slightly towards the ceiling.
- **21.** Have the student put the end of the spacer into their mouth, between their teeth and above their tongue.
- **22.** Have the student close their lips around the spacer.
- **23.** Press down on the top of the inhaler once.
- **24.** Instruct the student to breathe in very slowly until they have taken a full breath.
- 25. If you hear a whistle sound instruct the student to breathe slower—the breath in should take at least 3-5 seconds.
- **26.** Instruct the student to remove the spacer from their mouth.
- **27.** Instruct the student to hold their breath for 10 seconds.
- **28.** Instruct the student to breathe out slowly through their mouth.
- **29.** Wait one (1) minute before having the student take a second puff, if ordered.
- **30.** Repeat previous steps if taking a second puff.
- **31.** Have student rinse out their mouth with water and spit.
- 32. Wash hands.
- 33. Document medication administration in student's medication administration log.
- **34.** Follow up, as needed, with parents/guardian and healthcare provider.

Cleaning the Spacer:

- 1. It is recommended to clean the spacer every 1 to 2 weeks, or more often if needed.
- 2. Remove the mouthpiece and the rubber piece that holds the inhaler.
- 3. Soak the mouthpiece, rubber piece and plastic chamber in warm water and a small amount of dish soap.
- **4.** Rinse with clean water.
- 5. Shake off excess water and dry on clean surface in a vertical position, with the mouthpiece side up.
- **6.** Do not dry with a cloth or paper towel.
- 7. Once dry, store in clean container or bag.

Cleaning the Inhaler:

- **1.** Remove the canister from the actuator.
- **2.** Run warm water through the top and bottom of plastic actuator (do not boil or place the actuator in the dishwasher).
- **3.** Shake off the excess water.
- 4. Allow the actuator to air dry on a clean surface prior to putting canister back in.

References:

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MODEL PROTOCOL

INHALER WITHOUT A SPACER OR VALVED-HOLDING CHAMBER

(adapted from NASN's Emergency Medication Administration Toolkit Model Protocol-Inhaler Without a Spacer)

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Needed Supplies:

- Reliever Medication Inhaler
- □ Student's Individualized Healthcare Plan
- Asthma Action Plan and/or healthcare provider's order
- Parent/Guardian authorization form

Procedure:

- **1.** Gather needed supplies and place on clean surface.
- 2. Position student providing for as much privacy as possible.
- 3. Explain the procedure to the student at their level of understanding.
- 4. Encourage the student to assist in the procedure as much as they are able, to help student learn self-care skills.
- 5. Wash hands.
- 6. If student will be administering medication, have student wash hands.
- 7. Review the following forms:
 - a. medication administration form
 - b. healthcare provider order/Asthma Action Plan
 - **c.** parent/guardian authorization.
- 8. Check the medication to ensure that it is:
 - **a.** for the right child
 - **b.** the right medication
 - c. the right dose
 - d. being given at the right time
 - **e.** being given by the right route
 - **f.** being given for the right reason.
- **9.** Check the medication expiration date.

- **10.** Review the student's allergy status.
- **11.** Make sure the inhaler and spacer are free of foreign objects.
- **12.** Shake the inhaler for 5 seconds to mix the medicine.
- **13.** Remove the cap from the mouthpiece.
- **14.** Prime the inhaler if indicated (if the inhaler is new or has not been used in the past 7 days or if it has been dropped).
 - a. When the MDI is brand new or has not been used for a while, the medication may separate from the other ingredients in the canister and the metering chamber. Shaking the MDI will mix the ingredients in the drug reservoir but may not produce enough turbulence to re-blend the ingredients in the metering chamber.
 Priming, or releasing one or more sprays into the air, ensures your next dose will contain the labeled amount of medication.
- **15.** Review the six rights of medication administration again to be sure it is:
 - **a.** the right student
 - **b.** the right medication
 - c. the right dose
 - **d.** being given at the right time
 - e. being given by the right route
 - **f.** being given for the right reason.
- **16.** Hold the inhaler between your index finger and thumb.
- **17.** Have the student stand up and take a deep breath in and breathe out.
- **18.** Have the student tip their head back slightly toward the ceiling.
- **19.** Have the student put the inhaler in their mouth, between their teeth and above their tongue.
- **20.** Have the student close their lips around the inhaler.
- **21.** Press down on the top of the inhaler once as the student breathes in very slowly until they have taken a full breath.
- **22.** Instruct the student to remove the inhaler from their mouth.
- **23.** Instruct the student to hold their breath for 10 seconds.
- **24.** Instruct the student to breathe out slowly through their mouth.
- 25. Wait one (1) minute before having the student take a second puff, if ordered.
- 26. Repeat previous steps if taking a second puff.
- **27.** Have student rinse out their mouth with water and spit.
- 28. Wash hands.
- **29.** Document medication administration in student's medication administration log.
- **30.** Follow up, as needed, with parents/guardian and healthcare provider.

Cleaning the Actuator:

- **1.** Remove the canister from the actuator.
- **2.** Run warm water through the top and bottom of plastic actuator (do not boil or place the actuator in the dishwasher).
- **3.** Shake off the excess water.
- 4. Allow the actuator to air dry on a clean surface prior to putting canister back in.

References:

- American Lung Association. (2022, September). *How to use a metered-dose inhaler without a valved holding chamber or spacer*. Available at: <u>https://www.lung.org/getmedia/1aa45911-f79f-44ef-a348-08e089e1a57c/MDI-one-pager.</u> pdf?ext=.pdf
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- Lynn, P. (2019). Administering medication via a metered-dose-inhaler (MDI). In *Skill checklists for Taylor's clinical nursing skills. A nursing process approach*. (5th ed.). (pp. 116-118).
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MODEL PROTOCOL

ALBUTEROL ADMINISTRATION VIA NEBULIZER

(adapted from NASN's Emergency Medication Administration Toolkit Model Protocol-Albuterol Administration Via Nebulizer)

Disclaimer: NASN's model protocols and/or language are intended as examples that may serve as a tool for those responsible for drafting protocols that meet the needs of a local school or district. These examples are not authoritarian, nor should they be viewed as complying with any requirements specific or unique to any school or district. Model policies and language should not substitute or replace the advice of legal counsel and/or research on applicable federal or local laws, regulations or ordinances..

Equipment:

- Medication
- Nebulizer machine (air compressor)
- Connecting tubing
- □ Facemask, or a mouthpiece held in the mouth
- □ Individualized Healthcare Plan (IHP)
- Asthma Action Plan and/or Healthcare provider's orders
- □ Parent/guardian authorization form

Procedure:

- **1.** Position student.
- 2. Use a room separate from where other students are receiving care (if possible) or one that has limited use by others.
- 3. Explain the procedure to the student at their level of understanding.
- 4. Encourage the student to assist in the procedure as much as they are able, to help student learn self-care skills.
- 5. If the student will be assisting, have student wash hands.
- 6. Review the following forms:
 - a. medication administration form
 - b. healthcare provider order/Asthma Action Plan
 - **c.** parent/guardian authorization.
- 7. Check the medication to ensure that it is:
 - **a.** for the right child
 - **b.** the right medication
 - **c.** the right dose
 - **d.** being given at the right time
 - e. being given by the right route
 - f. being given for the right reason.

- 8. Check the medication expiration date.
- **9.** Review the student's allergy status.
- 10. Wash hands.
- **11.** Set up and plug in the nebulizer machine in a location where the power source is close to a comfortable location for the medication to be administered.
- **12.** Follow the directions for the specific brand of nebulizer machine and cup.
- **13.** Review the six rights of medication administration again to be sure it is:
 - **a.** the right student
 - **b.** the right medication
 - c. the right dose
 - **d.** being given at the right time
 - **e.** being given by the right route
 - f. being given for the right reason
- **14.** Unscrew top of nebulizer cup.
- **15.** Add medication into the bottom half of the nebulizer cup.
- **16.** Screw the top of the cup back on.
- 17. Attach the tubing from the cup to the nebulizer machine
- **18.** Attach the cup onto the facemask or mouthpiece.
- **19.** Place either the facemask on the student or the mouthpiece in his or her mouth.
- **20.** Turn on the machine.
 - **a.** A mist of medication should rapidly appear.
- **21.** Instruct the student to take relatively normal slow deep breaths.
- **22.** Keep the nebulizer cup in an upright position.
- **23.** The cup may require some tapping on the sides toward the end of the treatment to optimize the completion of the dose.
- **24.** The treatment is complete when there is no more mist from the cup (usually 10–15 minutes).
- **25.** Turn off the machine.
- 26. Remove the mask or mouthpiece.
- 27. Rinse nebulizer cup, mouthpiece or mask under warm water.
- 28. Shake off excess water.
- **29.** Place on paper towel to dry.
- **30.** Monitor student's heart rate and respiratory rate.
- 31. Wash hands.
- 32. Have the student rinse out their mouth with water and spit.
- **33.** Have the student wash their hands.
- **34.** Document medication administration in the student's healthcare record.
- 35. Update parents/guardian and healthcare provider, if needed.

Cleaning the Spacer:

- **1.** Take the nebulizer apart.
- 2. Set tubing aside.
- 3. Do not soak, wash or rinse tubing.
 - a. Replace it if it becomes cloudy, discolored or wet inside.
- 4. Wash the medicine cup and mask with warm, soapy water.
- 5. Rinse the medicine cup and mask in warm water.

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- 6. Let all the pieces air dry on a paper towel.
- 7. When dry, put pieces in a plastic bag or container.

Disinfect Weekly:

- 1. Soak medicine cup and mask in half strength vinegar for 30-60 minutes.
- 2. Rinse with water.
- **3.** Let all pieces air dry on a paper towel.
- **4.** When dry, put pieces in a plastic bag or container.

Care of the Machine:

- **1.** Wipe with a damp cloth.
- **2.** Check the filter monthly.
 - **a.** Change it every six months or sooner if discolored.
- **3.** The machine should be serviced every five years.

References:

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MODEL PROTOCOL USING A PEAK FLOW METER

Disclaimer: NASN's model protocols and/or language are intended as examples that may serve as a tool for those responsible for drafting protocols that meet the needs of a local school or district. These examples are not authoritarian, nor should they be viewed as complying with any requirements specific or unique to any school or district. Model policies and language should not substitute or replace the advice of legal counsel and/or research on applicable federal or local laws, regulations or ordinances.

Needed Supplies:

- Peak Flow Meter
- Student's Individualized Healthcare Plan
- Asthma Action Plan and/or healthcare provider's order
- Parent/Guardian authorization form

Procedure:

- 1. Gather needed supplies and place on clean surface.
- 2. Position student providing for as much privacy as possible.
- 3. Explain the procedure to the student at their level of understanding.
- 4. Encourage the student to assist in the procedure as much as they are able, to help student learn self-care skills.
- 5. Wash hands.
- 6. If the student will be assisting, have student wash their hands.
- 7. Review the following forms:
 - a. healthcare provider order/Asthma Action Plan
 - **b.** parent/guardian authorization.
- 8. Look at the peak flow meter to make sure the mouthpiece is clean and clear of any objects.
- 9. Move the marker on the peak flow meter to the bottom of the numbered scale.
 - **a.** You may need to shake it to move the marker down.
- **10.** Instruct the student to stand or sit up straight.
- **11.** Instruct the student to take a deep breath in through their nose.
- 12. Instruct the student to place the device between their teeth, biting down gently.
- 13. Instruct the student to then seal their lips tightly around the mouthpiece.
- **14.** Be sure the student's tongue doesn't block the hole in the mouthpiece.
- **15.** Instruct the student to blow out as hard and as fast as they can with a single breath/blow.
- **16.** Read the number that is next to the marker.
- **17.** Write down the number.

- **18.** Reset the meter.
- **19.** Move the marker back to zero and repeat the above steps two (2) more times.
- **20.** If the student feels lightheaded, have the student stop and rest.
- **21.** Once the student has completed the steps three times, document the highest number achieved.
- **22.** The highest of the 3 numbers is the student's peak flow number.
- **23.** Document the numbers in the student's healthcare record.
- 24. Wash hands.
- **25.** Follow up, as needed, with parents/guardian and healthcare provider.

References:

American Lung Association. (2022, September). *How to use a peak flow meter*. Available at: <u>https://www.lung.org//</u> getmedia/321d18a5-19cd-4404-a783-9b8a78efacde/Peak-Flow-Meter-one-pager.pdf?ext=.pdf

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USE OF STOCK ASTHMA RELIEVER MEDICATION REPORTING FORM

Date:		Time:		
Age:	Grade:		Teacher:	
Other:				
Ethnicity: Hispanic or Latino Non-Hispanic or non-Latino 		Race:American Indian or Alaska NativeAsianBlack or African AmericanNative Hawaiian or Pacific IslanderWhiteMultiracial		
Name:			Role/Position:	
🗆 Y	'ES	🗖 NO		
🗆 Y	ΈS	🗖 NO		
 Wheezing Coughing Shortness of Breath Change in Skin Difficulty Breathing Chest Tightness Other: 				
[list the do Other:	ose of m	edication as indicate	d on your school protocol]	
		YES	🗆 NO	
Π Υ	'ES	🗆 NO		
		EMS/911 Called but NOT Transported to ED	Sent Home with Parent/ Guardian	
	Stayed	at School	Other	
 	'ES	🗆 NO		
		🗖 NO	UNSURE	
	Other: Other: Name: Y Whee: Change Change Other (list the de Other: Y EMS/911 of Transport Y	Age: Grade: Other: Race: Am Asia Blac Nat Blac Nat Blac Nat Name: VHS VHS Mult Name: VHS Vhesting Simple Change in Skin Simple Other: Simple Other: Simple Ist the dose of m Other: Simple Simple EMS/911 Called & Transported to ED Simple	Age: Grade: Other: Race: • American Indian or Alas Asian • Asian Black or African America • Native Hawaiian or Pacifi White • Natrical Native Hawaiian or Pacifi • Name: • Othor • Name: • Othor • Name: • Othor • Othor: • Othor • Othor: • Othor • Other: • Othor • Othor • Othor	

How many doses of stock asthma reliever medication remain in the inhaler?	doses		
Does asthma reliever inhaler need to be restocked?	🗖 YES	🗖 NO	
Was a spacer used?	🗆 YES	🗆 NO	
Was the spacer cleaned or disposed of per the protocol?	YES By whom:	🗆 NO	UNSURE
Does the supply of spacers need to be restocked?	🗖 YES	🗆 NO	
What school staff responded to the event?	Names:		

Name of individual completing the form: ______

Signature:

Date:

School Nurse Follow-Up:

Does the student have a previous diagnosis of asthma:	🗖 YES		🗆 NO
Asthma Severity:	Intermittent		Mild Persistent
	Moderate	e Persistent	Severe Persistent
Results of last Asthma Control Test	Well Co	ontrolled	Partially Controlled
		Uncontro	olled
Does the student have an Asthma Action Plan on file?		YES	🗆 NO
What are the student's common asthma triggers?			
Was the student exposed to one of their triggers prior to/during this event?	YES	🗆 NO	
Does the student have a diagnosis of anaphylaxis?		YES	🗆 NO
Does the student have other chronic health conditions?		YES	🗆 NO
If yes, list other conditions:			
Does the student have an order for asthma reliever inhaler?	🗆 YES		🗆 NO
Did the student have their asthma reliever medication at school?		YES	🗆 NO
Does the student have a prescription for other asthma medications?	YES		🗆 NO
If yes, list other medications:			
Had the student been taking their asthma medication as prescribed?		YES	🗆 NO
Has the student been hospitalized for asthma in the past 12 months?	☐ YES	🗆 NO	
Has the student been seen in the emergency department for their asthma in the past 12 months?	🗆 YES	🗆 NO	
If yes, how many times?			

	ninformation	from boalth	aro providor:	
-ollow-u	pinformation	from nearing	care provider:	
Adition	al notes:			
laantion	urnotes.			

Follow-up information from parents/guardian:

Signature:

Date:

References:

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HEALTHCARE PROVIDER LETTER

Date:

Dear [name of provider],

We are writing about your patient, ______ Date of Birth _______.

We are working with [student's name] and their family to eliminate or minimize the number of school days and class time missed because of asthma. As the health provider for [student's name], please help us achieve this goal.

To help address the student's health needs, we have requested the student's family schedule an appointment with you. We have received permission to exchange information with your office (attached or shown below). The following information is being provided for your information and records.

- Missed ______ days in ______ period of time, possibly due to asthma.
- Has no prescribed quick-relief medication available at school (has not provided to school health office and does not self-carry).
- □ Is not taking controller medication as prescribed.
- □ Is not participating in physical education or physical activities because of symptoms related to asthma.
- □ Visits school health office frequently because of symptoms related to asthma.
- Has the following suspected medication side effects: _
- □ Has required emergency management of asthma (i.e., 911, ED referral) while at school.
- □ The student/family also report the following information to the school nurse:
 - Using a quick relief inhaler (albuterol) more than two times per week.
 - Awakening at night with asthma symptoms more than two times per month.
 - Refilling a quick relief inhaler (albuterol) more than two times this year.
 - We have observed the following components of asthma control (circled):

Symptoms	≤2x per week	>2x per week	Throughout the day
Peak Flow, % normal (personal best)	>80%	60-80%	<60%
Interference with normal activity	None	Some limitation	Extremely limited

If you feel it is appropriate, we request help with the following:

- Prescribe quick-relief medication for use at school. Currently there is no prescribed quick relief medication at school or the student's quick relief medication is past its expiration date.
- Discuss with the parent or guardian the possibility of sending a second inhaler to school if student carries own medication, so that one is always available when needed.
- □ Reassess this child and his/her current medical regimen.
- Send us or update the child's Asthma Action Plan (form attached).
- Prescribe a Peak Flow Meter to assist us to better monitor their asthma at school.
- Prescribe a spacer/valved-chamber holder. This student's technique with MDI was observed and the student would benefit from using a spacer/valved-chamber holder.
- Requires an additional MDI _____ (medication name) at school for optimal availability/safety.

Other:

Please contact me at the above telephone number if there are questions or concerns.

Thank you!

Sincerely,

[Name of School Nurse]

[Phone number]

[Email address]

Adapted from National Institutes of Health National Heart, Lung, and Blood Institute's Managing Asthma A Guide for Schools. Available at: <u>https://www.nhlbi.nih.gov/files/docs/resources/lung/NACI_ManagingAsthma-508%20FINAL.pdf</u>



Model Policy for School Districts: Stock Bronchodilators

How to Implement a Model Policy

The American Lung Association has created this model policy to inform development of policies allowing use of stock bronchodilators in schools. The purpose of this model policy is to improve the health and academic outcomes of students with asthma.

The policy below assumes an ideal school setting. However, we recognize not every school or school district will have the same resources and thus may need to revise and customize the policy prior to adoption and implementation. When customizing the policy, school officials are encouraged to examine their school's additional policies related to asthma care insuring they are in line with best practices, such as those recommended by the <u>Centers for Disease Control and Prevention (CDC)</u>.

Below are some frequently asked questions when adopting a model policy.

What does the red text mean?

The red text within the model policy indicates a place to customize the policy to your school or locality. Please insert the appropriate information related to your school and your policy for the red text.

Do I have to implement the policy word for word?

No. As mentioned above, the policy is written broadly, but makes some basic assumptions, such as all schools have a full time school nurse. Given this, the policy should be amended, customized as necessary, to appropriately fit your school and school district's situation and legal framework.

Should I have a lawyer and/or other relevant policy advisor review it to be sure it fits with my school district's laws and policies?

Yes. The model policy is written broadly, but cannot take into account every state and local law. Please review the policy before adoption to make sure it is consistent with your state and local laws and regulations.

What else do I need to do after adopting the model policy?

After adopting the model policy, it is strongly encouraged that each school or school district develop a "Protocol and Procedures" document. The model policy is broad and does not address specific situations that may arise in a school. This Protocol and Procedures document will govern specific situations in each school or school district. It can take into account differences in resources between schools and school districts. There is additional information on the next page about creating this document.

After adopting your school's policy, it is encouraged that you promote the policy to staff, parent/guardians and students in your community.

Is there additional information available to help the students at my school with asthma?

Yes. The American Lung Association has created numerous resources to help make your school asthma friendly. You can find those resources at <u>www.lung.org/afsitoolkit</u>.



Creating a Protocols and Procedures Document

Each school/school district is encouraged to create and adopt a "Protocols and Procedures" document to further clarify the Stock Bronchodilator policy and its use in specific situations to best fit the needs of their school/school district. Below is a list of questions each school/school district may want to address when creating their "Protocols and Procedures."

Questions

- In the model policy, school personnel need to complete the appropriate training in order to administer the stock bronchodilators to students. What topics must be included in that training? Who will provide the training? Who will oversee, track and monitor the training?
- Should the school implement a system to track and record instances of use of the stock bronchodilators? If so, how?
- What is the process for notifying a student's parent/guardian when the stock bronchodilator is used?
- What is the process for notification or communication with a student's healthcare provider when the stock bronchodilator is used?
- Is the release of liability already addressed elsewhere in your school's/ school district's policies? If it is, this may not need to be addressed in the specific policy of stock bronchodilators.
- What are the procedures for sanitizing the medical devices and device components needed to use the bronchodilator?
- If there is a preference for one delivery method (i.e., nebulizers or inhalers), will that be addressed in your school policy? How will the chosen delivery method impact the implementation of the policy?



Model Policy: Stock Bronchodilators in Schools

The [INSERT NAME OF SCHOOL DISTRICT] Board of Education recognizes as thma is a chronic, lifethreatening condition. Over 7 million children in the United State have as thma, including [INSERT STATE #] in [STATE]. As thma is the third leading cause of hospitalization of children and is responsible for 10.5 million missed school days every year. Students with a diagnosis of as thma who are prescribed bronchodilator (fast-acting inhaler) are strongly encouraged to self-carry and selfadminister their medication, if appropriate. Students who are unable to self-carry and self-administer their medication should bring their inhaler to school and follow the alternate procedure outlined by the school nurse, student's parent/guardian and health care provider.

Under this policy, the school board shall allow the school health program, in coordination with the school administration, to provide bronchodilators to students with asthma in the event the student is experiencing an asthma episode and does not have access to their own inhaler.

[Note: For more specific details on protocols and procedures in carrying out this policy, please refer to your school's Protocols and Procedures document.]

Definitions

For the purposes of this policy, the following definitions have the following meanings:

- 1) "Bronchodilators" means any medication used for the quick relief of asthma symptoms that dilates the airways and is recommended by the National Heart, Lung and Blood Institute's National Asthma Education and Prevention Program Guidelines for the Treatment of Asthma, such bronchodilators may include an orally inhaled medication that contains a premeasured single dose of albuterol or albuterol sulfate delivered by a nebulizer (compressor device); or by a pressured metered dose inhaler used to treat respiratory distress, including, but not limited to, wheezing, shortness of breath, and difficulty breathing or another dosage of a bronchodilator recommended in the Guidelines for the Treatment of Asthma.
- 2) "School Nurse" means a registered nurse (RN) licensed by the state board of nursing, working in the school and meeting any additional state criteria.
- 3) "Asthma" means a chronic lung disease that inflames and narrows the airways. It causes recurring periods of wheezing, chest tightness, shortness of breath and coughing. For the purpose of this policy, "asthma" also includes "reactive airway disease" commonly referred to as RAD.

Conditions for Administering Bronchodilators

Students diagnosed with asthma whose personal bronchodilator is empty or temporarily unavailable shall be able to receive an emergency dose of school-stocked bronchodilator under the following conditions:

- The student is experiencing an asthma episode (e.g., asthma attack) or asthmatic symptoms and has been diagnosed with asthma.
 - For students experiencing respiratory distress without a diagnosis of asthma, school personnel should call 9-1-1 immediately.



- The student's parent/guardian has provided the required annual written permission for their student to be given the stock bronchodilator. This permission can be included as part of the permission for the student to self-carry asthma medication at school if applicable.
- [INSERT NAME OF SCHOOL DISTRICTOR SCHOOL OR NONPUBLIC SCHOOL] has informed the parent/guardians of the student, in writing, that the school/school districtor nonpublic school and its employees and agents, including an authorized licensed prescriber providing the standing protocol or prescription of a school bronchodilator, are to incur no liability, with the exception of gross negligence, as a result of injury arising from the administration of stock bronchodilators.
 - [INSERT NAME OF SCHOOL DISTRICT OR SCHOOL OR NONPUBLIC SCHOOL] has informed the parent/guardians of the student, in writing that the stock bronchodilator is not to be used as a replacement for students bringing their prescribed asthma medications to school.
 - The parent/guardians has signed a statement that [INSERTNAME OF SCHOOL DISTRICT OR SCHOOL OR NONPUBLIC SCHOOL] and its employees and agents, including an authorized licensed prescriber providing the standing protocol or prescription of a school bronchodilator, are to incur no liability, except for gross negligence, as a result of injury arising from the administration of stock bronchodilators.

Administering and Storing Stock Bronchodilator

To administer and store the stock bronchodilator, the following procedures shall be followed:

- Only school nurses and designated personnel that have completed appropriate training, as designated in [NAME OF SCHOOL DISTRICT OR SCHOOL OR NONPUBLIC SCHOOL]'s protocol, shall administer the stock bronchodilator.
 - Each school shall appoint other personnel to administer the stock bronchodilator when the nurse is not available.
 - All who will be administering stock bronchodilators, including the nurse and other designated personnel, are required to complete the appropriate training.
- The stock bronchodilator shall be stored in a secure and easily accessible, but unlocked location known to the school nurse and all school staff designated to administer the bronchodilator in case of the nurse's absence.
- To minimize the spread of disease, inhalers shall be used with disposable spacers or disposable mouth-pieces.
- To minimize the spread of disease, disposable tubing with mask or mouthpieces may be used with nebulizers and discarded after the student is finished with it. Nebulizers shall be cleaned and sanitized properly to avoid spreading infection.
- Each school shall implement a reporting system to notify parent/guardians, and if applicable, the student's healthcare provider when the stock bronchodilator has been used by a student. [INSERT NAME OF SCHOOL DISTRICT OR SCHOOLOR NONPUBLIC SCHOOL] may implement a recording system to document each time the stock bronchodilator has been used, and by which student.



Obtaining Stock Bronchodilator

The stock bronchodilator and appropriate medical devices needed for proper medication delivery shall be prescribed by:

- An authorized licensed prescriber. [Include the following sentence only if allowed by state law] A provider may prescribe bronchodilators in the name of [INSERT SCHOOL DISTRICTOR SCHOOL] to be maintained for use when deemed necessary based on the provisions of this section.
 - All bronchodilators, devices and device components needed for appropriately administering the medication must be dispensed from a licensed pharmacy or manufacturer.
 - Schools shall be allowed, with a valid prescription, to accept donated bronchodilators, devices and device components and seek and apply for grants to obtain funding for purchasing bronchodilators, devices and device components.
- An authorized licensed prescriber may refill any used or expired prescription in the name of [INSERT NAME OF SCHOOL DISTRICTOR SCHOOL OR NONPUBLIC SCHOOL] to be maintained for use when deemed necessary based on the provisions of this section.
- All expired medication shall be discarded in accordance with proper procedure.

Effective Date

This policy shall take effect in full on [INSERT DATE].



MODEL POLICY

STUDENT POSSESSION AND SELF-ADMINISTRATION OF ASTHMA RELIEVER MEDICATION

(adapted from NASN's Emergency Medication Toolkit)

Disclaimer: NASN's model policies and/or language are intended as examples that may serve as a tool for those responsible for drafting policies that meet the needs of a local school or district. These examples are not authoritarian, nor should they be viewed as complying with any requirements specific or unique to any school or district. Model policies and language should not substitute or replace the advice of legal counsel and/or research on applicable federal or local laws, regulations or ordinances.

Definitions:

- **1.** "Administer" means the direct application of a nonprescription drug product or prescription drug, whether by injection, ingestion or other means, to the human body.
- **2. "Drug"** means any substance recognized as a drug in the official U.S. pharmacopoeia and national formulary or official homeopathic pharmacopoeia of the United States or any supplement to either of them.
- **3.** "Reliever Medications" means a type of medication that acts as a bronchodilator during an asthma attack to relax the airway muscles to restore air flow in and out of the lungs. Examples of short-acting reliever medications are albuterol, levalbuterol, and metaproterenol. For children prescribed single maintenance and reliever therapy (SMART), a combination inhaled corticosteroids (ICS)/long-acting reliever inhalers containing formoterol are used for acute symptoms.
- **4.** "Drug product" means a specific drug or drugs in a specific dosage form and strength from a known source of manufacture.
- 5. "Professional Nurse" [enter state specific information], herein referred to as the school nurse.
- **6.** "Healthcare Provider" means any physician, dentist, optometrist, physician assistant, advanced practice nurse prescriber, or podiatrist licensed in any state.
- 7. "Prescription drug" [enter state specific information].

Policy:

The authorization for self-administration of asthma reliever medication will be valid only for the current school year. The parent/guardian must renew the authorization each school year.

Back up asthma reliever medication should be requested from the parent/guardian and, if provided, will be kept at a location in the school to which the student has immediate access during school hours in the event of an asthma emergency. The parent/guardian will assure that backup asthma reliever medication is available to the student after school hours and traveling to/from during school-sponsored events.

A student's authorization to possess and self-administer asthma reliever medication may be limited or revoked by the building principal after consultation with the school nurse and the student's parents/guardian if the student demonstrates an inability to responsibly possess and self-administer such medication.

Students with asthma are authorized, in consultation with the school nurse, to possess and self-administer asthma reliever medication during the school day, during school-sponsored events, or while traveling to and from school or school-sponsored activities. The student will be authorized to possess and self-administer asthma reliever medication if the following conditions are met:

- The parent/guardian must submit a written request for the student to self-administer asthma reliever medication(s);
- A healthcare provider must prescribe the medication(s) for use by the student during school hours and has instructed the student in the correct and responsible way to use the medication(s) and the school must be provided with a copy of such prescription;
- Parent and healthcare provider must agree in writing to allow student to carry and/or self-administer medication.
- On a yearly basis, the student must demonstrate to the healthcare provider and school nurse, if available, the skill necessary to use the medication(s) and to use the device necessary to administer the medication(s).
- The healthcare provider must formulate a written treatment plan for managing the asthma episodes of the student and for use of medication(s) during school hours. The frequency with which it may be administered, possible side effects, and the circumstances that warrant its use; and the school must be provided with a copy of the treatment plan.
- The student should be educated to seek assistance if they have no relief of their symptoms.

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ASSESSING STUDENT'S READINESS TO SELF-CARRY AND SELF-ADMINISTER ASTHMA RELIEVER MEDICATION

School nurses should work with students to increase their understanding of their asthma, including trigger avoidance, recognition of asthma symptoms, symptom management, response to and treatment for symptoms, including the administration of reliever medications. This includes the school nurse assessing a student's ability to self-carry and self-administer their reliever medications.

In addition to communicating with the student's parents/guardian and healthcare provider to confirm they believe the student is ready to self-carry and self-administer their reliever medication, the school nurse should also assess the student's asthma knowledge and readiness. The American Lung Association has developed the <u>Student</u> <u>Readiness Assessment Tool</u>.

Once the student has demonstrated appropriate knowledge the school nurse should also assess to ensure the student can correctly utilize their prescribed equipment (i.e. peak flow meter and/or valved-holding chamber) and administer their prescribed medication.

After the student has demonstrated the appropriate knowledge and skills, the school nurse should have the student complete and sign a Contract for Student Self-Carry and Self-Administration of Asthma Reliever Medication.

CONTRACT FOR STUDENT SELF-CARRY AND SELF-ADMINISTRATION OF ASTHMA RELIEVER MEDICATION

Student's Name:	Grade:	Teacher:
Physician:		Phone:
Medication:	Dose:	Time:
Special Instructions:		

The Authorization for Student Possession and Use of a Asthma Reliever Medication form must be completed according to school policy. The Asthma Reliever Medication should be labeled with the student's name.

Responsibilities for Carrying and Self-Administering Asthma Reliever Medication

Expectation	Outcome			
Student has been instructed on the proper use of the medication.	🗆 YES	🗆 NO		
Student has demonstrated, to the school nurse, proper technique for medication administration.	🗆 YES	🗆 NO		
Student has demonstrated appropriate self-management skills.	🗆 YES	🗆 NO		
Student will maintain a written record of their medication administration at school (i.e., in school planner, notebook, etc.).	🗆 YES	🗆 NO		
Student agrees to follow instructions from licensed prescriber.	🗆 YES	🗆 NO		
Student agrees to follow all relevant school district policies.	🗆 YES	🗆 NO		
Student will not allow any other person access to their medication.	🗆 YES	🗆 NO		
Student agrees to keep the current supply of medication in (i.e., backpack, purse, etc.).	🗆 YES	🗆 NO		
Student will keep a spare supply of medication in [enter location].		🗆 NO		
Student agrees to have medications refilled before they run out.	🗆 YES	🗆 NO		
Student agrees to check in with the school nurse. Daily Weekly Monthly Other:	🗆 YES	🗆 NO		
Student agrees to notify the school nurse for the following circumstances:				
Student has an increase in symptoms.	🗆 YES	🗆 NO		
Symptoms are not relieved by medication.		🗆 NO		
Student suspects they are having side effects from medication.	🗆 YES	🗆 NO		
Other:	🗆 YES	🗆 NO		

If the student does not demonstrate safe use and storage of the asthma reliever medication, parent/guardian and physician should be notified and an alternate approach to asthma reliever medication/asthma management will need to be determined.

School Nurse Signature:

Date:

Spot Check for Student Possession of Asthma Reliever Medication

Date			
School Nurse Signature			
Yes/No			
Expiration Date			



ONLINE ASTHMA EDUCATION RESOURCES FOR STUDENTS, SCHOOL STAFF, AND SCHOOL NURSES

Students:

Open Airways for Schools

The American Lung Association's Open Airways for Schools® (OAS) is a program that educates and empowers children ages 8 to 11 through a fun and interactive approach to asthma self-management. The program teaches children with asthma how to detect the warning signs of asthma, avoid their triggers and make decisions about their health.

https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/health-professionals-educators/openairways-for-schools

Kickin' Asthma

The American Lung Association's Kickin' Asthma is an asthma self-management education program for kids ages 11-16 (grades 6-10) that empowers them through a fun and interactive approach to asthma self-management. Kickin' Asthma includes different learning techniques suitable for teen-aged kids and highlights self-management practices, such as recognizing triggers and proper medication use.

https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/health-professionals-educators/kickinasthma_

School Staff:

Asthma Basics

The American Lung Association's Asthma Basics course is a free one-hour interactive online learning module designed to help people learn more about asthma. This course is ideal for frontline healthcare professionals, such as school nurses or community health workers, as well as individuals with asthma, parents of children with asthma, and co-workers, friends and family who want to learn more about asthma.

https://lung.training/courses/asthma_basics.html

Responding to Asthma Emergencies in Schools

The American Lung Association's Responding to Asthma Emergencies in Schools course will teach you about asthma emergencies, how to recognize the signs and symptoms of respiratory distress at each level, and how to respond to a student experiencing respiratory distress.

https://lung.training/courses/responding-asthma-emergencies-schools.html

School Nurses:

Stock Asthma Medication: Implementation Guidance for Schools

The American Lung Association's Stock Asthma Medication: Implementation Guidance for Schools is a free, onehour interactive online course designed for licensed and unlicensed school personnel who administer stock quickrelief asthma medication, and stakeholders seeking to understand and implement relevant legislation, policies, or programs. The course is divided into four modules that address essential elements from understanding the need for asthma-related policies in schools to successfully implementing a robust stock asthma medication program.

https://lung.training/courses/stock-asthma-medication.html

Asthma Basics

The American Lung Association's Asthma Basics course is a free one-hour interactive online learning module designed to help people learn more about asthma. This course is ideal for frontline healthcare professionals, such as school nurses or community health workers, as well as individuals with asthma, parents of children with asthma, and co-workers, friends and family who want to learn more about asthma.

https://lung.training/courses/asthma_basics.html

Other Asthma Education Resources

Students:

Open Airways for Schools

This program from the American Lung Association educates and empowers children ages 8 to 11 through a fun and interactive approach to asthma self-management. The program teaches children with asthma how to detect the warning signs of asthma, avoid their triggers and make decisions about their health.

https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/health-professionals-educators/openairways-for-schools

School Nurses:

We Breathers

This program from the Asthma and Allergy Foundation of America is for health professionals who teach parents of young children about managing asthma. Use it during home visits, one-on-one or in group classes for parents in child care centers. All handouts are at a sixth grade reading level or lower.

https://secure.aafa.org/np/clients/aafa/product.jsp?product=227&



SCHOOL ASTHMA TRIGGER REDUCTION INTERVENTIONS

A key component of a school-based asthma program is the mitigation and reduction of potential triggers in the school environment. The school nurse plays a key role in assessing the school environment and implementing interventions to reduce exposure to triggers. There are several resources available to assist the school nurse and the larger school team.

Resources:

1. Air Now:

- a. Air Quality Flag Program
- b. Air Quality Report

2. American Lung Association:

- a. Sample Tobacco Free Policy
- **b.** <u>Sample Fragrance Free School Policy</u>
- c. <u>Practical Guidance For Schools & School Districts: Enhancing School Wellness Policies To Protect Student Lung</u> <u>Health</u>
- d. Asthma Friendly Schools Toolkit—Strategy 3: Provide a Healthy School Environment
 - i. Carpet Policy

3. Environmental Protection Agency:

- a. Idle-Free Schools Toolkit for a Healthy School Environment
- **b.** EPA's Healthy Schools Checklist
- c. Indoor Air Quality Tools for Schools Action Kit

4. National Heart, Lung, and Blood Institute:

- a. How Asthma Friendly is Your School?
- b. Managing Asthma: A Guide for Schools (Pages 17-20)

5. Wisconsin Asthma Coalition

- a. Asthma Walkthrough Program
- b. Asthma School Walkthrough Checklist

References:

American Lung Association. (n.d.) Asthma-Friendly schools initiative toolkit. Available at: <u>https://www.lung.org/</u> <u>lung-health-diseases/lung-disease-lookup/asthma/health-professionals-educators/asthma-friendly-schools-</u> <u>initiative/toolkit</u>

- American Lung Association. (2022, November 17). *National public policy agenda for schools*. Available at: <u>https://www.lung.org/policy-advocacy/healthcare-lung-disease/asthma-policy/national-asthma-public-policy-agenda/schools</u>
- American Lung Association. (2024, February 8). *Strategy 3: Provide a healthy school environment*. Available at: <u>https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/health-professionals-educators/asthma-friendly-schools-initiative/toolkit/strategy-3</u>
- National Association of School Nurses. (2021). *Environmental health* [Position Statement]. Silver Spring, MD: Author. Available at: <u>https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-environmental-health</u>
- Permaul, P., & Phipatanakul, W. (2018). School environmental intervention programs. *Journal of Allergy and Clinical Immunology: In Practice, 6*(1), 22–29. <u>https://doi.org/10.1016/j.jaip.2017.10.002</u>

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RESOURCES FOR THE MANAGEMENT OF ASTHMA IN THE HOME

American Lung Association: Avoiding and Controlling Asthma Triggers

Asthma and Allergy Foundation of America:

- Asthma Friendly Home Checklist
- How Can I Control Indoor Allergens and Improve Indoor Air Quality?

National Environmental Education Foundation:

- Environmental History Form for Pediatric Asthma Patient
- Pediatric Environmental History (0-18 Years of Age)
- <u>Environmental Intervention Guidelines and Patient Handouts</u>

National Heart, Lung, and Blood Institute: Reducing Allergens in Your Home Fact Sheet



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FIRST AID FOR ASTHMA RESOURCE

Click on the link to download this <u>First Aid for Asthma</u> poster from the American Lung Association.

American Lung Association.	First Aid for Asthma Five Steps to Follow for an Asthma Episode
If individual has	excessive coughing, wheezing, shortness of breath, or chest tightness:
1	Help to an upright position
2	Access the individual's quick-relief inhaler If the individual's quick-relief inhaler is not available, seek medical assistance. Never leave them alone.
3	Follow the individual's action plan for use of quick-relief inhaler Scan the QR Code to access How-To videos and instructions.
4	 Get help from healthcare provider, school nurse or designated staff if individual has any of these emergency signs: Inhaler not helping Nostrils open wide Can't walk or talk well
5	Call 911 if not breathing, unconscious, lips are blue, struggling to breathe (hunched over or ribs show), or other signs of distress. Then, notify parent or guardian.

For more information on managing asthma in schools, visit Lung.org/asthma-in-schools.



ASTHMA MEDICATION RESOURCES

Asthma and Allergy Foundation of America:

- Respiratory Treatments
- Asthma Medicines

American Academy of Allergy, Asthma, and Immunology:

Drug Guide

American Lung Association:

- How to Use Asthma Medicine Devices
- Understand Your Asthma Medication
- Know the Difference Between Your Asthma Medicines



ASTHMA AND BULLYING RESOURCES

The school nurse plays a key role in preventing, identifying students involved in bullying and responding to episodes of bullying (NASN, 2023). Unfortunately, students with chronic illness, including asthma, may be impacted by bullying.

Resources:

Allergy and Asthma Network:

- 1. How Parents, Schools Can Prevent Bullying <u>https://allergyasthmanetwork.org/news/how-parents-schools-can-prevent-bullying/</u>
- 2. Back to School With Confidence: How to Prevent Bullying <u>https://allergyasthmanetwork.org/news/back-school-</u>with-confidence-prevent-bullying-kids-with-asthma-food-allergies/

Centers for Disease Control and Prevention:

- 1. People with Disabilities and Chronic Diseases: Information about Bullying <u>https://www.cdc.gov/ncbddd/</u> disabilityandsafety/bullying.html
- 2. Anti-Bullying Policies and Enumeration <u>https://www.cdc.gov/healthyyouth/health_and_academics/bullying/anti_bullying_policies_infobrief-basic.htm</u>

PreventBullying.gov:

- 1. Create a Long-Term Strategy to Prevent or Address Bullying <u>https://www.stopbullying.gov/blog/2019/10/25/</u> create-long-term-strategy-prevent-or-address-bullying
- 2. Prevention at School <u>https://www.stopbullying.gov/prevention/at-school</u>
- 3. Bullying Prevention Training Center <u>https://www.stopbullying.gov/resources/training-center</u>

Crisis Text Line — https://www.crisistextline.org/topics/bullying/#what-is-bullying-1\

Asthma and Mental Health:

- 1. Asthma vs. Panic <u>https://www.lung.org/getmedia/d23b769f-7db0-4cf6-9b2a-662a0e2c47ec/asthma_vs_panic.</u> pdf?ext=.pdf
- 2. Emotions, Stress, and Depression <u>https://aafa.org/asthma/asthma-triggers-causes/emotions-stress-depression/</u>
- **3.** Mental Health Care Is Important for People Affected by Asthma and Allergies <u>https://community.aafa.org/blog/</u> mental-health-care-asthma-allergies
- 4. Ask the Allergist: How Depression and Anxiety Can Impact Asthma, Allergies and Eczema <u>https://allergyasthmanetwork.org/news/ask-the-allergist-how-depression-and-anxiety-can-impact-asthma-allergies-and-eczema/</u>

References:

National Association of School Nurses. (2023). *Prevention and intervention of bullying and cyberbullying in schools* (Position Statement). Author.



NASN ASTHMA RESOURCES

NASN has developed a number of resources related to asthma. They can be accessed by clicking on the link(s) below.

Resources:

Asthma Chronic Health Condition Management Allergies and Anaphylaxis School Nurse Asthma Care Checklist PCORI Symptom-based Adjustment of Inhaled Steroid Therapy Study (The ASIST Study) for Mild Asthma: School Nurse Implementation Guidance

Position Statements:

Emergency Preparedness Environmental Health The School Health Services Team: Supporting Student Outcomes School-Sponsored Before, After, and Extended School Year/Out of School Time Programs School-Sponsored Trips- Equitably Addressing Student Health Needs Transition Planning for Students with Healthcare Needs Use of Individualized Healthcare Plans to Support School Health Services

Toolkits:

Allergy and Anaphylaxis Toolkit Medication Administration in Schools Toolkit Emergency Medications Toolkit Improving Care Coordination for Students with Chronic Conditions



SUGGESTED ASTHMA DATA COLLECTION

It is recommended that the school nurse collect data related to asthma management in the school setting. This data can be used for multiple purposes including identifying the prevalence of asthma in the school and evaluating the effectiveness of asthma-related interventions. This list is not all inclusive.

Asthma	
# of students diagnosed with asthma by healthcare provider	
# of Asthma Action Plans (AAP) on file	
# of students with asthma who have an Individualized Healthcare Plan (IHP)	
# of 504 plans that address asthma-related needs	
# of Individualized Education Programs (IEP) that address asthma related needs	
# of students with asthma who are chronically absent	

Medication/Treatment		
# of students who have an order for asthma reliever inhaler		
# of students who have a supply of asthma reliever medication at school		
# school nurse spot checks for student self-possession of asthma reliever medication	Student prepared	
	Student NOT prepared	
	# school nurse reinforcement provided	
# of students who use a spacer/valved-holding chamber		
# of students with peak-flow meters		
# of students who are allowed to self-carry and self- administer their asthma reliever medication		

Asthma Management	
# of doses of student-specific asthma reliever inhaler administered	
# of doses of albuterol administered from stock asthma reliever inhaler (if applicable)	
# of doses of asthma reliever medication administered via nebulizer	
# of doses of asthma controller medication administered	

# of visits to the health room for students diagnosed with asthma (regardless of whether the student is experiencing asthma symptoms)	
# of visits to the health room for asthma-related symptoms (with or without the diagnosis of asthma)	
# of visits to the health room for students experiencing asthma exacerbation (student diagnosed with asthma)	
# of times asthma reliever medication was administered by:	RN
	LPN/LVN
	UAP
	Office staff
	Teacher
	Other
Disposition following respiratory distress	# of students who returned to class after being seen for asthma related symptoms
	# of students who went home after being seen for asthma- related symptoms
	# of 911/EMS calls due to student experiencing asthma-related symptoms
	# of students who were transported to hospital by EMS due to asthma-related symptoms
	# of students hospitalized due to asthma-related symptoms

Staff training	
# of school staff provided education on asthma	
# of school staff trained on how to identify students experiencing asthma symptoms	
# of school staff trained on how to administer asthma reliever medication	
# of asthma emergency drills completed	
School Nurse Feedback/Evaluation of Asthma Management Care	
Student/caregiver satisfaction with care coordination efforts of the school	
School nurse evaluation of effectiveness of staff training	
School nurse eval of effectiveness of staff response to seizure emergency management	
Policy changes noted	
Practice changes noted	
General notes	



SAMPLE ASTHMA PROGRAM QUALITY IMPROVEMENT CHECKLIST

It is important for school nurses to evaluate outcomes of student interventions to ensure the outcomes reflect what is anticipated or expected. When the outcomes do not reflect what is expected, it provides the school nurse with an opportunity to take a closer look at the process steps to identify areas for quality improvement (NASN, 2024). The following offer suggestions of data the school nurse may want to collect and evaluate.

Continuous systematic data collection for students with asthma (e.g., electronic health record or other data tracking tool)

- Review asthma reliever medication administration reports to identify trends in the data that may identify potential opportunities to reduce asthma triggers in the school environment
- Track the number of students with Asthma Action Plans
- **G** Follow up with student's parents/guardian and healthcare provider to obtain Asthma Action Plan
- □ Identify how often students are completing Asthma Control Test
- Review Asthma Control Test data
- □ Identify and follow up with students who have increased risk of asthma exacerbation based on Asthma Control Tests
- **D** Review activities the school nurse engaged in to improve the student's asthma control
- □ Track the number of students that have spacers/valved-holding chambers
- □ Follow up with students without spacers/valved-holding chambers to identify barriers to access
- **Review** activities the school nurse engaged in to reduce barriers to access to spacers/valve-holding chambers
- □ Track the students without a medical home
- **D** Follow up with students and parents/guardian to identify barriers to identifying a medical home
- **Review** activities the school nurse engaged in to connect students with a medical home
- □ Identify students with asthma who do not have asthma-reliever medication at school
- **□** Follow up with students without asthma reliever medication at school to identify barriers to access
- Document the activities the school nurse engaged in to reduce barriers to allow student to have asthma reliever medication at school

For student's who self-carry and self-administer asthma reliever medication

- □ Track the number of students who self-carry and self-administered their asthma reliever medication
- Observe students who self-carry/self-administer their medication to ensure proper technique
- Document student competency related to self-carry and self-administer asthma reliever medication
- Document activities the school nurse engaged in to increase student's readiness to self-carry/self-administer

Debrief following the administration of stock asthma reliever medication

- Review school staff implementing the school's stock asthma reliever medication protocol
- Review Use of Stock Asthma Reliever Medication Reporting Form
- Review event data
- After debriefing, identify areas for improvement including reducing asthma triggers, emergency response, administration of medication, communication, and documentation
- □ Identify whether the student had a referral after the use of stock asthma reliever medication.
- Determine whether the student who used stock asthma reliever medication has a prescription for asthma reliever medication.
- Determine whether the student who used stock asthma reliever medication has their asthma reliever medication at school.

Staff training

- Complete skill competency validation for school staff who are designated to administer asthma reliever medication
- Provide remedial education and training to school staff, as needed

Annual review of school asthma reliever policy(ies) and asthma reliever medication management program/protocols and update as needed. Consider trends, gaps, any new state laws, or nursing practice regulations.

- If the school district does not have policy(ies) related to stock asthma reliever medication, student self-carry/selfadministration, implement school policies related to asthma reliever medication access (stock asthma reliever medication program, student self-carry/self-administration)
- If the school district has a policy, review district policy related to stock asthma reliever medication program
 - Review the policy considering trends, gaps, any new state laws, or nursing practice regulations
- Implement school policies related to asthma trigger reduction (bus idling, smoke-free school, fragrance-free school)
- □ If the school district has a policy, review the district policy related to self-carry/self-administration
 - **D** Review the policy considering trends, gaps, any new state laws, or nursing practice regulation

References:

- American Lung Association. (2023, September 28). *Asthma quality improvement: Enhancing care for children with asthma*. Available at: <u>https://www.lung.org/professional-education/health-systems-improvement/enhancing-asthma-care-program</u>
- Centers for Disease Control and Prevention's (CDC's) National Asthma Control Program. (2020, October 6). *Exhale* guide for Medicaid and Children's Health Insurance Program (CHIP) leaders strategies to help people with asthma achieve better health. Available at: <u>https://www.cdc.gov/national-asthma-control-program/php/exhale/pdfs/</u> <u>EXHALE_Guide_Medicaid_CHIP-508.pdf</u>
- National Association of School Nurses. *School nursing evidence-based clinical practice guideline: Students with asthma*. Available at: [enter link]