

ADMINISTRATION OF UNDESIGNATED STOCK ALBUTEROL

In 2021 the General Assembly passed [HB 2019](#) (Mc Quinn), which amended and reenacted

§§ [8.01-225](#), [22.1-274.2](#), and [54.1-3408](#) of the *Code of Virginia*, relating to public elementary and secondary schools' possession and administration of undesignated stock albuterol inhalers and valved holding chambers. The provisions of the first enactment clause shall become effective on January 1, 2022.

HB 2019 legislation requires schools to possess albuterol metered dose inhalers (MDI), and valved holding chambers, and to administer undesignated stock albuterol to any student experiencing respiratory distress. The purpose of the administration of school undesignated stock emergency albuterol is to reduce the amount of time children spend away from the classroom and to make schools safer for all children.

The administration of undesignated stock albuterol may be used in the following situations:

- If the student has a current Asthma Action Plan but does not have their prescribed medication available.
 - In this case, use the medical care plan provided by the healthcare provider for the student and the school's supply of undesignated stock albuterol inhaler with valved holding chamber.
- If there is no Asthma Action Plan and the student is having difficulty breathing.
 - In this case, use the school's standing order and the school's supply of undesignated stock albuterol inhaler with valved holding chamber.

The implementation of policies and procedures for the emergency treatment of respiratory distress using albuterol is not intended to replace the individual Asthma Action Plan of a person with asthma. Instead, it should be used when an Asthma Action Plan and/or prescribed short-acting bronchodilator Metered Dose Inhaler (MDI) with valved chamber inhaler (albuterol inhaler) are not available or easily accessible.

Symptoms of Respiratory Distress

Respiratory distress can be the sudden appearance of signs and symptoms of difficulty breathing and may be categorized into "Mild to Moderate" or "Moderate to Severe." Evaluation of the person's level of distress is based on the signs and symptoms present and occurring upon presentation. Trained school personnel should begin the plan of care based on the symptoms the student is experiencing.

Mild to Moderate Respiratory Distress may include one or more of the following:

- Struggling to breathe
- Whistling in the chest
- Persistent coughing, chest pain, wheezing, chest tightness
- Noisy breathing
- Shallow breathing
- Decreased breath sounds

- Breathing hard or fast and/or shortness of breath

Determine if the student is experiencing respiratory distress based on the signs and symptoms present. Act quickly as it is safer to give albuterol than to delay treatment. Refer to the VDH algorithm for [Mild to Moderate Respiratory Distress](#) to determine next steps in the intervention process as indicated below:

- Never leave a student alone.
- Have the student sit in a chair, or on the ground, and restrict physical activity.
- Summon for help, notify parent and school administration, and follow your school division protocol.
- If available, a Registered Nurse/Licensed Practical Nurse should obtain and continue to monitor vital signs (pulse, respiratory rate, blood pressure, pulse oximetry) every five minutes or as needed.
- Administer albuterol per standing order from the local health director.
 - Administer four puffs of albuterol with valved holding chamber between 15 - 30 seconds between puffs, or one unit or ampule dose albuterol via nebulizer per standing order.
 - If symptoms improve and the student has no tightness in chest, shortness of breath, and can walk and talk easily, continue to monitor.
 - Keep the student in the health office until breathing returns to normal and the parent or guardian has been contacted.
 - Refer the student to a healthcare provider for follow up care.
 - If there is no improvement in symptoms in ten to fifteen minutes.
 - Repeat four puffs of albuterol with a valved holding chamber, 15-30 seconds between puffs or an additional one unit or ampule of albuterol via nebulizer.
 - Call 911 and follow the actions for [Moderate to Severe Respiratory Distress](#).

Moderate to Severe symptoms of respiratory distress may include one or more of the following:

- Struggling to breath and or shortness of breath and or hunched over (tripod breathing)
- Coughing, wheezing, tightness in the chest
- Difficulty speaking (one word or short sentences)
- Blueness around the lips or fingernails (may look gray or “dusky”)
- Chest retractions (chest/neck are pulling in)
- Use of accessory muscles (stomach muscles are moving up and down)
- Fast pulse (tachycardia)
- Agitation
- Nasal flaring

The student may present with or progress to symptoms of severe respiratory distress. Based on symptoms, determine that respiratory distress appears to be occurring. Act quickly as it is safer to give albuterol than to delay treatment. Refer to the VDH

algorithm for Moderate to Severe Respiratory Distress to determine next steps in the intervention process listed below:

- Call 911 immediately.
- Never leave a student alone.
- Have the student sit in a chair, or on the ground, and restrict physical activity. Encourage slow breaths.
- Summon for help, notify parent and school administration, and follow your school division protocol.
- If available, a registered nurse/licensed practical nurse should obtain and continue to monitor vital signs (pulse, respiratory rate, blood pressure, pulse oximetry) every five minutes or as needed.
- Administer albuterol per standing order from the local health director.
 - Administer eight puffs of albuterol MDI with a valved holding chamber, each 15-30 seconds apart between puffs, or one unit or ampule dose of albuterol via nebulizer per standing order.
 - If there is no improvement in symptoms: Repeat eight more puffs of albuterol MDI with a valved holding chamber, each 15-30 seconds apart between puffs, or an additional one unit or ampule of albuterol via nebulizer.
 - May give albuterol continuously until Emergency Medical Services (EMS) arrives.
 - If a student becomes unresponsive, check for pulse and initiate CPR with rescue breathing.
 - Monitor the student continuously. Registered nurse/licensed practical nurse should obtain and document vital signs (pulse, respiratory rate, blood pressure, pulse oximetry); repeat every five minutes or as needed.
 - Continue to monitor the student until EMS arrives.

Training

The *Code of Virginia*, 54.1-3408, requires the training of two or more designated school personnel to administer undesignated stock albuterol to a student, believed in good faith, to be in need of medication. These individuals should also be Cardiopulmonary Resuscitation CPR certified. Training should be annually per VDH Guidelines.

Online Training Modules

In response to HB 2019, the Virginia Department of Education (VDOE) developed online training for school health staff on the use of undesignated stock albuterol in the school setting. The Virginia Department of Health, Central Pharmacy, will require schools to attest to training prior to ordering medications or supplies.

The school division is responsible for obtaining albuterol and associated supplies on an annual basis:

Standing Orders

The Virginia Department of Health (VDH) local health physician directors will issue a standing order for undesignated stock albuterol for school divisions. The standing order

is good for one year. Training documentation will be made available to the local health directors upon request.

Storage of Undesignated Stock Albuterol Medication

The undesignated stock albuterol medication should be stored according to the manufacturer's recommendations. Storage should be in a secure location with medication clearly marked and accessible in the health office during school hours and monitored under the direct supervision of the designated and trained personnel. The following should occur:

- A designated employee who has completed the required training should be responsible for the storage, maintenance, control, and administration of the undesignated stock albuterol metered dose inhalers and valved holding chambers acquired by the school.
- If feasible, the valved holding chamber should be stored in the same location as the metered dose inhaler. To allow for rapid retrieval and use, albuterol should be in a secure location during school hours
- It is important to monitor the expiration date of the product and number of doses left in the device.

Post Event Actions

- School health staff should document respiratory distress, intervention, and follow up care with the student and parent following administration of undesignated stock albuterol.
- It is recommended that any student who requires the use of undesignated stock albuterol for respiratory distress should be referred to their healthcare provider for follow up medical care and not remain in school. An updated Asthma Action Plan along with medication orders is recommended.
- Reorder a supply of stock albuterol using the VDH online ordering system available on the VDOE School Health Office webpage.
- Refer the parent or guardian to their child's healthcare provider for additional follow-up medical care.
- Make follow up contact with parent/guardian.

Procedures for Proper Cleaning of Devices

with an approved cleaner following the manufacturer recommendations. Allow the inhaler to completely dry before reuse or restocking of the inhaler. Clean multi-use valved holding chamber according to manufacturer's recommendation and/or VDOE training modules, if utilized.

Items not shared between multiple students include:

- disposable valved holding chamber.

treatments.

Approved: by the Bristol Virginia School Board on January 06, 2022.

Reference:

VDOE Guidelines for Use of Undesignated Stock Albuterol in Schools