

**2022-2023**

**Administered  
Unassigned Asthma  
Medication in Schools  
Report**



**TEXAS**  
Health and Human  
Services

Texas Department of State  
Health Services

# Table of Contents

<b>Executive Summary .....</b>	<b>3</b>
<b>Introduction.....</b>	<b>5</b>
<b>Methods .....</b>	<b>7</b>
<b>Results.....</b>	<b>8</b>
<b>Analysis and Discussion .....</b>	<b>15</b>
<b>Conclusion .....</b>	<b>16</b>
<b>List of Acronyms .....</b>	<b>17</b>
<b>General Information .....</b>	<b>18</b>
<b>Appendix A. Required Reporting of Administered Unassigned Asthma Medication to DSHS.....</b>	<b>A-1</b>
<b>Appendix B: Regional Education Service Center Map.....</b>	<b>B-1</b>

# Executive Summary

Effective May 2023, [Texas Education Code, Chapter 38, Subchapter E, Section 38.202](#), which authorizes and sets standards when using prescription medications for respiratory distress on school campuses, expanded the scope of Stock Epinephrine Advisory Committee (SEAC) to examine and review the administration of unassigned medication of respiratory distress. Senate Bill 294 replaced “asthma medicine” with “medications for respiratory distress effective September 1, 2023.”

Effective February 2021, the [Texas Administrative Code, Subchapter D, Title 25, Part 1, Chapter 40, Section 40.47](#) required a school district or school campus that adopts a policy on the maintenance and administration of asthma medication to report the use of medication for respiratory distress.

The school campus must submit a report within 10 business days to the<sup>1</sup>:

- school administrator,
- prescribing authorized healthcare provider,
- student’s primary healthcare provider, and
- commissioner of the Texas Department of State Health Services (DSHS).

Schools submitted the data through the web form, Required Reporting of Administered Unassigned Asthma Medication to DSHS (Appendix A). The DSHS School Health Program and the DSHS Chronic Disease Epidemiology Branch (CDE) analyzed reported data.

During the 2022-2023 school year, 818 uses of an asthma medication in a school setting were reported. All individuals received Albuterol, which was administered by Metered Dose Inhalers (MDI) (81.4%) or nebulized solutions (17.6%) by a nurse, clinic aide, or medical assistant. The majority of individuals who received asthma medication had a known history of asthma (94.6%). Most individuals experienced trouble breathing or shortness of breath (70.3%), wheezing (69.4%), or frequent coughing

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<sup>1</sup>Texas Administrative Code 40.47-Report on Administering Unassigned Asthma Medication <https://Maintenance and Administration of Asthma Medication>

(50.1%). Exercise was the most common reported suspected cause or trigger (40%).

# Introduction

The purpose of this report is to understand the use of medications for respiratory distress in schools across Texas. This information will be used by DSHS and the [Stock Epinephrine Advisory Committee \(SEAC\)](#) to inform future program activities and areas of focus. SEAC members are highly specialized in the asthma field and have provided great insight into asthma medication administration in the school setting. Effective May 2023, [Texas Education Code, Chapter 38, Subchapter E, Section 38.202](#) expanded the scope of SEAC to examine and review the administration of unassigned medication of respiratory distress.<sup>2</sup> Unassigned asthma medication is a prescription medication that is kept in schools and not assigned to a specific student.

[Texas Education Code, Chapter 38, Subchapter E](#) authorizes and sets standards when using medications for respiratory distress on school campuses. Effective February 2021<sup>3</sup>, the [Texas Administrative Code, Subchapter D, Title 25, Part 1, Chapter 40, Section 40.47](#) required a school district, open-enrollment charter school, or private school that adopts a policy to report the use of medication for respiratory distress.

The school must submit a report within 10 business days to the:

- school district,
- charter holder if the school is an open-enrollment charter school or the governing body of the school if the school is a private school,
- physician or other person who prescribed the asthma medication,

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<sup>2</sup> Senate Bill (SB) 294, 88<sup>th</sup> Regular Legislative Session, 2023, expanded the role of SEAC to include medications for respiratory distress; removed requirement that school nurse must administer the medication for respiratory distress only if the student has a written notification from a parent stating the student's asthma diagnosis and consent to administer prescription asthma medicine; required schools to refer student's to their primary care physician or provide information to parents on selecting a primary care physician if they didn't have one; allowed school personnel and volunteers to administer medication for respiratory distress if trained; and established reporting requirements after administration.

<sup>3</sup> [House Bill \(HB\) 2243, 86<sup>th</sup> Legislative Session, 2019](#), allowed schools to adopt an asthma medication policy and the adopted rule required the report use of asthma medication.

- student's primary healthcare provider, and
- commissioner of the Texas Department of State Health Services (DSHS).

Schools submitted the data through the web form, *Required Reporting of Administered Unassigned Asthma Medication to DSHS* ([Appendix A](#)) during the 2022-2023 school year. The DSHS School Health Program and CDE analyzed the reported data.

The following report only reports on asthma medication from August 2022 through July 2023.

## Methods

The method used to report when medication for respiratory distress was administered is, *The Required Reporting of Administered Unassigned Asthma Medication to DSHS* web form. This action is required no later than 10 business days after the date a school nurse administered unassigned asthma medication in a school ([Appendix A](#)).

The web form consists of 16 questions, including nine open-ended questions, five single-answer questions and two multi-select questions. The web form can be found on the [DSHS website](#).

The data from the web form was assembled by the School Health Program staff. In August 2023, a CDE program evaluator analyzed the records submitted between August 1, 2022, through July 31, 2023, using Microsoft Excel.

# Results

A total of 818 records were submitted between August 1, 2022, through July 31, 2023. Nineteen independent school districts (ISD) and one charter school submitted records. All individuals (100%) received Albuterol/Albuterol Sulfate.

It is important to note, not all schools adopt this policy and hence are not required to report to DSHS. This limitation should be kept in mind when interpreting the data.

**Table 1: Frequency and Percent of Asthma Medication Use in Texas Schools by ESC Region (n=818)**

Education Service Center (ESC) Region	Frequency (n)	Percent (%)
Region 7	1	0.1
Region 9	2	0.2
Region 10	94	11.5
Region 11	673	82.3
Region 13	5	0.6
Region 14	11	1.3
Region 20	32	3.9
<b>Total</b>	<b>818</b>	<b>100.0</b>

**Note:** Percent by ESC Region may not total 100.0 due to rounding.

Table 1 Interpretation: Seven Education Service Centers (ESC) regions submitted 818 reports in total. The ESC Region 11 submitted the most reports (82.3%) ([Appendix B](#)).

**Table 2: Frequency and Percent of Asthma Medication Use in Texas Schools by Location Administered (n=818)**

Location Administered	Frequency (n)	Percent (%)
Clinic/Nurse’s Office	807	98.7
Other	6	0.7
Recess	3	0.4
Classroom	2	0.2



Location Administered	Frequency (n)	Percent (%)
<b>Total</b>	<b>818</b>	<b>100.0</b>

**Note:** Respondents that selected Clinic/Nurse’s Office indicated nurse clinic, nurse's office, campus clinic, or school clinic. Recess also included gym, outdoor track, or playground. Other included cafeteria, front office, or hallway.

Table 2 Interpretation: Almost all individuals received the medication in a clinic/nurse’s office (98.7%). A few respondents (0.7%) indicated other locations including the cafeteria, front office, or hallway.

**Table 3: Frequency and Percent of Asthma Medication Use in Texas Schools by Method Administered (n=818)**

Method Administered	Frequency (n)	Percent (%)
Metered-Dose Inhalers (MDI)	666	81.4
Nebulized Solution	144	17.6
Unknown	8	1.0
<b>Total</b>	<b>818</b>	<b>100.0</b>

Table 3 Interpretation: Asthma medication was most frequently administered by Metered Dose Inhalers (MDI) (81.4%), followed by a nebulized solution (17.6%). Very few respondents (1%) indicated unknown.

**Table 4: Frequency and Percent of Asthma Medication Use in Texas Schools by Number of Doses Administered (n=818)**

Number of Doses Administered	Frequency (n)	Percent (%)
One	660	80.7
Two	156	19.1
Three	1	0.1
Four	1	0.1
<b>Total</b>	<b>818</b>	<b>100.0</b>

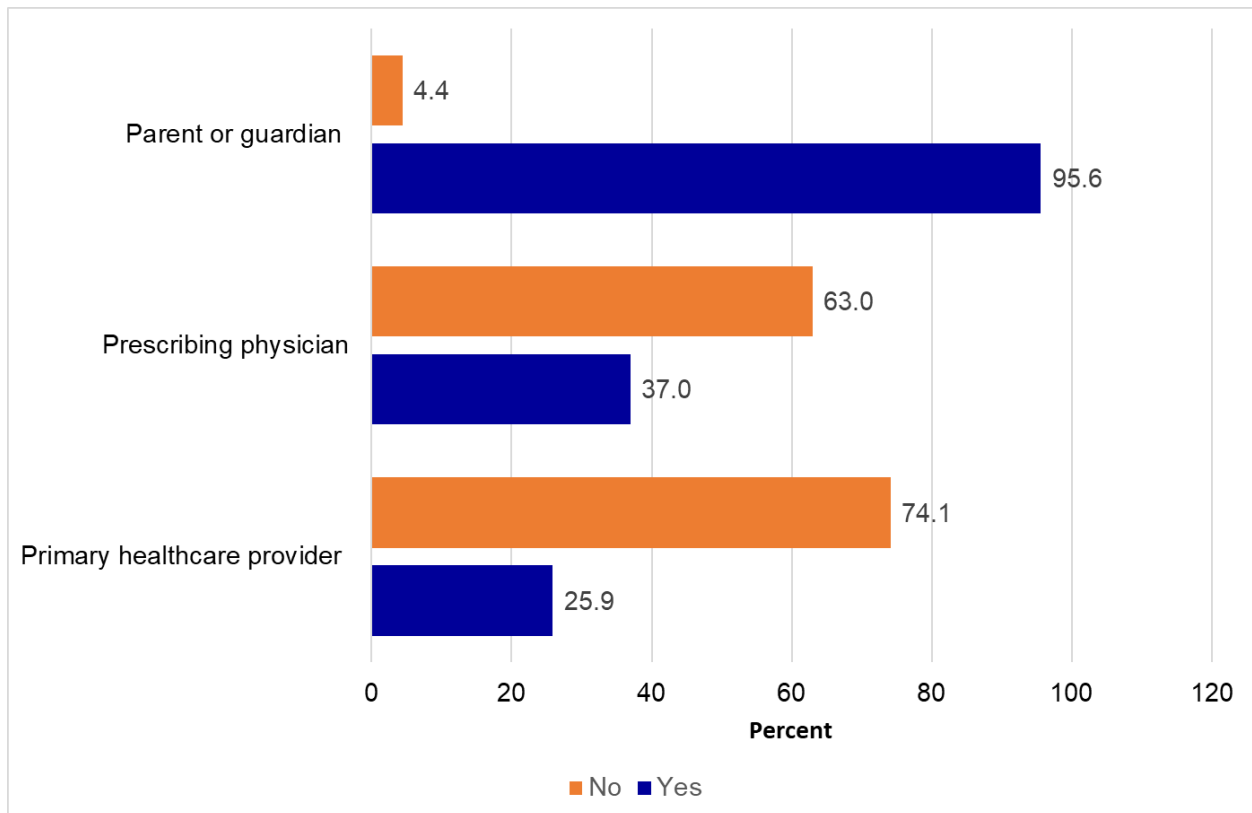
Table 4 Interpretation: While a majority of individuals received one dose of asthma medication (80.7%), approximately 19.1% received two doses.

**Table 5: Frequency and Percent of Asthma Medication Use in Texas Schools by History of Asthma (n=818)**

History of Asthma	Frequency (n)	Percent (%)
Yes	774	94.6
No	44	5.4
<b>Total</b>	<b>818</b>	<b>100.0</b>

Table 5 Interpretation: Most individuals (94.6%) who received the unassigned asthma medication in a school setting had a known history of asthma.

**Figure 1: Person Notified of Asthma Medication Use**



**Note:** This figure includes responses from three mutually exclusive yes/no questions regarding person notified. This figure shows the Yes/No response for each of three types of persons notified, respectively. Percent was calculated by using the total number of cases reported (818) as the denominator for each yes/no question. Each [Yes%+No%] will be equal to 100.0.

Figure 1 Interpretation: The parent or guardian was notified in most cases after the asthma medication was administered to students (n=782, 95.6%),

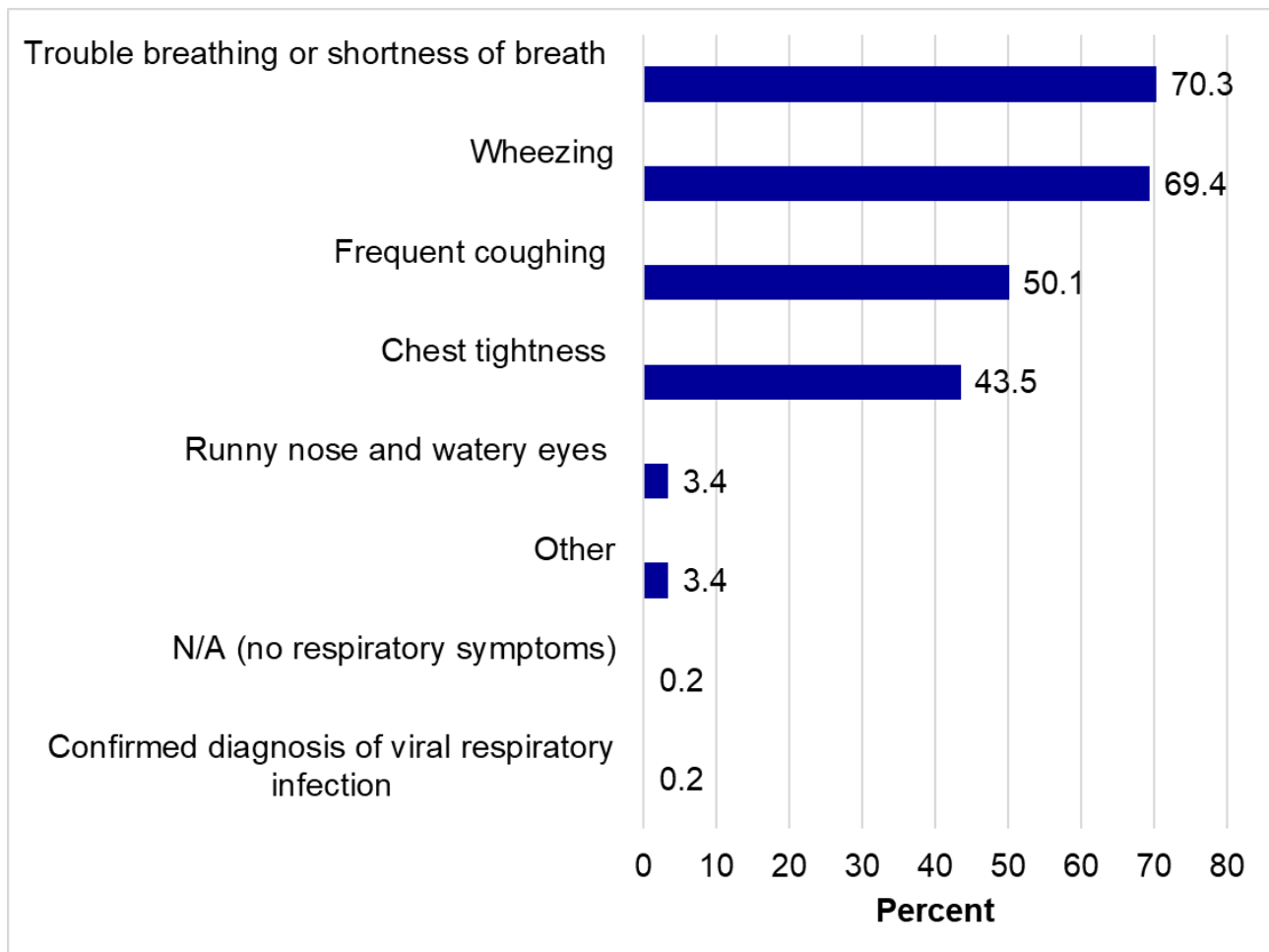
followed by the prescribing physician (n=303, 37.0%), and the student's primary healthcare provider (n=212, 25.9%).

**Table 6: Status After Student's Receiving Asthma Medication**

<b>Status</b>	<b>Frequency (n)</b>	<b>Percent (%)</b>
Returned to class	608	74.3
Parent or guardian picked up student and took them home	96	11.7
Parent or guardian picked up student and took them to a healthcare provider	52	6.4
Parent or guardian picked up student, but unknown if they got medical care	43	5.3
Called 911 and student went by EMS to emergency room	14	1.7
Other (Unknown)	5	0.6
<b>Total</b>	<b>818</b>	<b>100.0</b>

Table 6 Interpretation: After receiving the asthma medication, approximately three quarters (74.3%) of students returned to class. While approximately 11.7% were picked up by a parent or guardian and taken home, 6.4% were picked up by a parent or guardian and taken to a healthcare provider.

**Figure 2: Percent of Symptoms that the Individual who Got the Asthma Medication was Exhibiting**



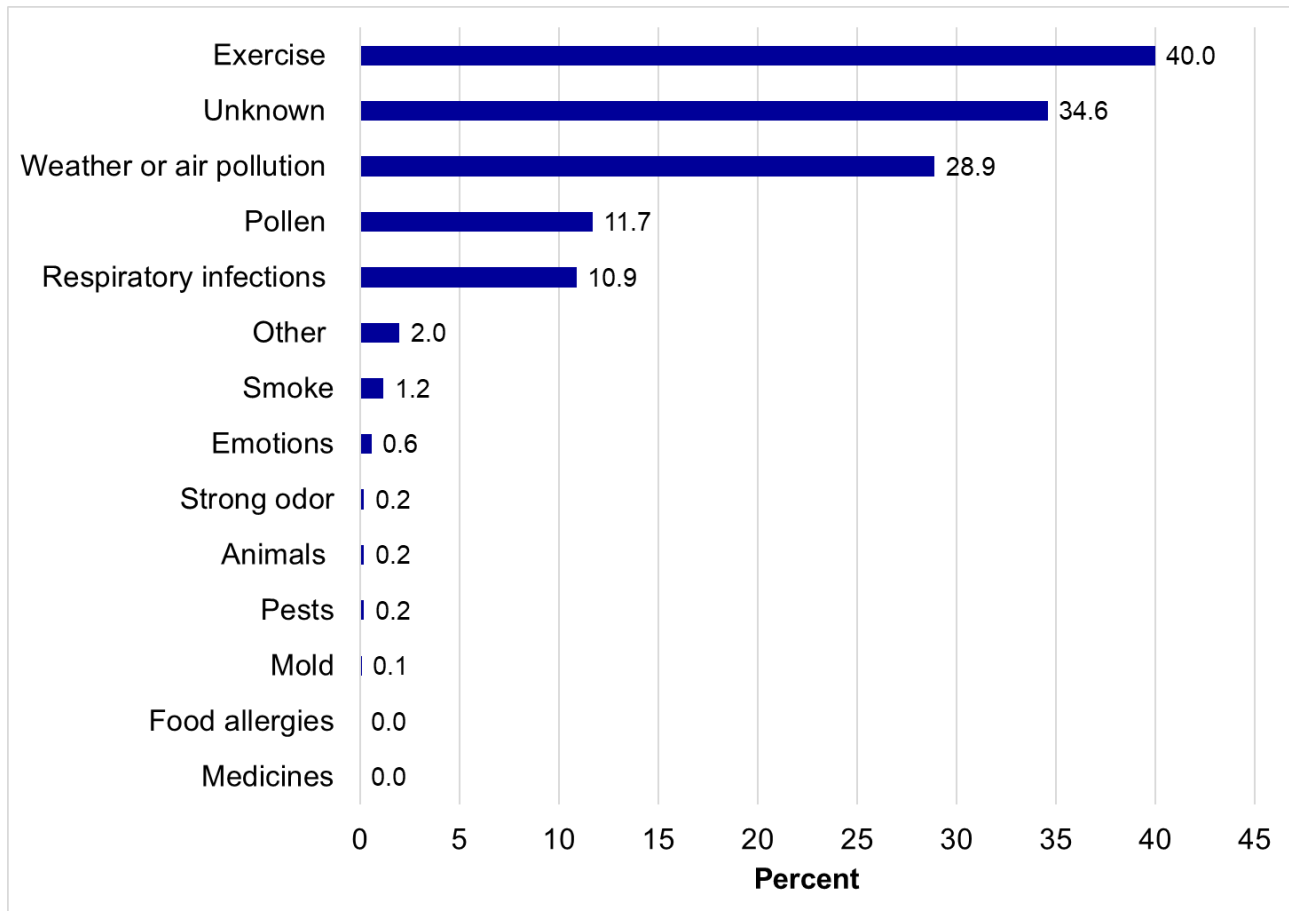
**Note:** Percent was calculated by using the total number of cases reported (818) as the denominator for each symptom. Respondents could select all that apply for symptoms. Therefore, the total percent will not equal to 100.

**Figure 2 Interpretation:** Figure 2 shows the percent of the reported signs and symptoms experienced by the individuals who received the asthma medication. Respondents could select all the symptoms that applied. Most individuals experienced trouble breathing or shortness of breath (70.3%) and wheezing (69.4%). Fewer individuals experienced frequent coughing (50.1%), chest tightness (43.5%), a runny nose and watery eyes (3.4%), or a confirmed diagnosis of a viral respiratory infection (0.2%).

Seventy-four respondents provided text responses to the follow-up question, "Please list signs or symptoms not listed above". Respondents noted that some individuals experienced low oxygen levels, high or abnormal heart

rate, diminished lung sounds, nasal congestion, fever, paleness, restlessness, retractions, dizziness, shortness of breath, inability to speak, decreased air exchange, chest pain, or throat tightness/swelling.

**Figure 3: Percent of Suspected Cause or Trigger of the Asthma Attack**



**Note:** Respondents could select all suspected causes or triggers that apply. Therefore, the total frequency will not equal to 818, and the total percent will not equal to 100. Smoke includes cigarette, cigar, pipe smoke, wood-burning fireplaces, burning leaves, campfire, second-hand smoke. Pests include dust mites, rodents, cockroaches. Animals include pet dander, saliva, or pet allergens. Strong odor includes scents from perfumes, deodorants, cleaning supplies, gas stoves, scented candles or incense, hairspray, air fresheners, personal care products.

**Figure 3 Interpretation:** Figure 3 shows the suspected causes or triggers of reported asthma attacks. Respondents could select all the suspected causes or triggers that applied. At least 40% of cases were suspected to be due to exercise (i.e., walking, climbing stairs, intense exercise, or sports), while 28.9% were due to weather or air pollution (i.e., cold, windy, stormy

weather, extreme temperature changes, high humidity, air pollution, smog, or vehicle exhaust and fumes).

Fewer respondents selected pollen including weeds, trees, grass, or flowers (11.7%), respiratory infections such as cold, flu, bronchitis, or sinus infection (10.9%), or smoke (1.2%).

Some respondents selected unknown (34.6%). Twenty-one respondents listed other suspected causes or triggers such as seasonal allergies, asthma, no medication, vaping, a food allergy, or other illness.

## Analysis and Discussion

During the 2022-2023 school year, a total of 818 uses of unassigned asthma medication in a school were reported to DSHS. Nearly all individuals received the medication Albuterol, which was administered by the Metered Dose Inhalers (MDI) method by a nurse, clinic aide, or medical assistant. Most individuals who received the asthma medication had a known history of asthma. In almost all cases, the parents or guardians were notified. A few respondents indicated the individual who received the medication had no known history of asthma. The majority of medication recipients experienced trouble breathing or shortness of breath and wheezing. Exercise was the most reported cause or trigger.

## Conclusion

This report sought to understand the use of unassigned asthma medication in schools across Texas. The majority of individuals who received asthma medication had a known history of asthma, and most individuals experienced trouble breathing or shortness of breath, wheezing, or frequent coughing. Exercise was the most common reported suspected cause or trigger. This report will be used by DSHS and the Stock Epinephrine Advisory Committee to inform future program activities and areas of focus. Data in this report can help to monitor and guide future reporting and projects for asthma control in schools. These projects may include outreach to school health program networks and collaboration with the DSHS Asthma Program.



# List of Acronyms

<b>Acronym</b>	<b>Full Name</b>
DSHS	Texas Department of State Health Services
CDE	Chronic Disease Epidemiology
MDI	Metered Dose Inhalers
ISD	Independent School District
ESC	Education Service Center

# General Information

## Contact Information

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# Appendix A. Required Reporting of Administered Unassigned Asthma Medication to DSHS

## Required Reporting of Administered Unassigned Asthma Medication to DSHS

If you are a school district, open-enrollment charter school, or private school there are reporting rules. The rules apply to unassigned asthma medication. The rule says you must report the administration of unassigned asthma medication. This requirement is in the Texas Administrative Code, Subchapter D, Title 25, Part 1, Chapter 40, [Section 40.47](#).

Your campus must submit a report no later than the 10th business day after the date a school nurse administers unassigned asthma medication. You must send the report to the:

- school administrator,
- prescribing physician,
- student's primary healthcare provider, and
- commissioner of the Department of State Health Services (DSHS).

**You must save a copy of the report in the student's permanent record.**

Submission of this electronic form meets the reporting requirement for DSHS. Be sure to report complete and accurate information.

Please fill out the entire form and provide detailed information.

*All fields with an asterisk (\*) must be completed.*

### Certain Entity/Venue Information

Remember to report this information to the school administrator, the prescribing physician and the student's primary healthcare provider and keep a copy in the student's permanent record.

**Name of school district, open-enrollment charter school, or private school: \***

Spell out the school district, open-enrollment charter school, or private school's name.

Do not use an abbreviation.

[Education Service Center Region](#) for the school district, open-enrollment charter school, or private school: \*

Email address of person completing this form:\*

## Location and Dosage Information

List the physical location where you administered the asthma medication:\*

*(Examples: nurse's office, classroom, hallway, etc. A mailing address is not needed.)*



Name of medication: \*

Administered by Metered Dose Inhaler (MDI) or Nebulized Solution:

Number of doses administered:\*

*(Example: 2 puffs = 1 dose)*

Date administered:\*

[None]  

Title and name of person who administered the asthma medication: \*

*(Must be a school nurse, as defined by statute: [School nurse](#)--Registered nurse, as defined in [19 TAC §153.1022](#), authorized to administer asthma medication, or licensed vocational nurse working under supervision as described in [Texas Occupations Code §301.353](#).)*

## Other Information

Did the student who got the asthma medication have a history of asthma? *	<input type="radio"/> Yes <input type="radio"/> No
Did you notify the parent or guardian after the asthma medication was administered? *	<input type="radio"/> Yes <input type="radio"/> No
Did you notify the prescribing physician when the asthma medication after the medication was administered? *	<input type="radio"/> Yes <input type="radio"/> No
Did you notify the student's primary health care provider when you administered the asthma medication? *	<input type="radio"/> Yes <input type="radio"/> No
After the student got the asthma medication the student: *	<input type="radio"/> Returned to class. <input type="radio"/> Parent or guardian picked up student and took them home. <input type="radio"/> Parent or guardian picked up student and took them to a healthcare provider. <input type="radio"/> Parent or guardian picked up student, but unknown if they got medical care. <input type="radio"/> We called 911 and student went by EMS to the emergency room. <input type="radio"/> Other (Unknown)

## Symptom Information

Please select the symptoms the individual who got the unassigned asthma medication was exhibiting. **Mark all that apply.**

If no respiratory symptoms occurred, choose "N/A" and write symptoms in the "other" category. \*

- Wheezing
- Frequent coughing
- Trouble breathing or shortness of breath
- Chest tightness
- Runny nose and watery eyes
- Confirmed diagnosis of a viral respiratory infection
- N/A (no respiratory symptoms)
- Other

Please list signs or symptoms not listed above, if applicable:

## Suspected Asthma Triggers

Please indicate the suspected cause or trigger of the asthma attack  
(Check all that apply\*):

- Respiratory infections such as a cold, flu, or sinus infection
- Exercise (walking, climbing stairs, intense exercise, sports)
- Emotions (laughing or crying too hard, feeling stressed or anxious, anger, fear, yelling)
- Medicines (aspirin, fever reducers, anti-inflammatories, alternative therapies, herbal remedies)
- Food allergies (peanuts, eggs, milk, tree nuts, fish, shellfish, wheat or soy)
- Smoke (cigarette, cigar, pipe smoke, wood-burning fireplaces, burning leaves, campfire, second-hand smoke)
- Weather or air pollution (cold, windy, stormy weather, extreme temperature changes, high humidity, air pollution, smog, vehicle exhaust and fumes)
- Pollen (weeds, trees, grass, flowers)
- Animals (dander, saliva, pet allergens)
- Pests (dust mites, rodents, cockroaches)
- Mold
- Strong odor (scents from perfumes, deodorants, cleaning supplies, gas stoves, scented candles or incense, hairspray, air fresheners, personal care products)
- Unknown
- Other

If you selected "Other", please explain \*:

Remember to replace the unassigned asthma medication and the equipment used to administer the medication.

If you used a metered dose inhaler, make sure you wipe it down with a sterilizing solution.



I'm not a robot

Submit Request

Clear Form

# Appendix B: Regional Education Service Center Map



School Health Program

***[dshs.texas.gov/schoolhealth](https://dshs.texas.gov/schoolhealth)***