

2023-2024

**Administered Unassigned
Medication for Respiratory
Distress in Schools Report**



TEXAS
Health and Human
Services

Texas Department of State
Health Services

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Executive Summary

[Texas Education Code \(TEC\), Chapter 38, Subchapter E, Section 38.202](#) authorizes and sets standards when using prescription medications for respiratory distress on school campuses. Effective May 2023, TEC expanded the scope of the Stock Epinephrine Advisory Committee (SEAC) to examine and review the administration of unassigned medication for respiratory distress. [Senate Bill 294](#) (88th Regular Legislative Session) replaced “asthma medicine” with “medications for respiratory distress” and allowed school personnel and school volunteers to administer the medication.

[TEC, Section 38.2091](#) requires a school district or school campus that adopts a policy on the maintenance and administration of medication for respiratory distress to report the use of medication.

Schools submitted the data through the web form *Asthma – Required Reporting of Unassigned Administered Medications for Respiratory Distress to DSHS* ([Appendix A](#)). The DSHS School Health Program and the DSHS Chronic Disease Epidemiology Branch (CDE) analyzed reported data.

During the 2023-2024 school year, 1,755 uses of unassigned medication for respiratory distress in Texas schools were reported to DSHS. Nearly all individuals received Albuterol (99.9%), which was administered by Metered Dose Inhaler (MDI) (81.9%) or nebulized solution (17.8%) by a nurse (90.6%) or other school health clinic staff (8.4%).

The majority of individuals who received medication for respiratory distress had a known history of asthma (89.3%). Most individuals experienced wheezing (70.9%), trouble breathing or shortness of breath (69.2%), or frequent coughing (51.9%). Exercise was the most common reported suspected cause or trigger (43.5%).

Introduction

The purpose of this report is to understand the use of unassigned 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 valuable insight into medication for respiratory distress administration in the school setting.

Effective May 2023, [Texas Education Code \(TEC\), Chapter 38, Subchapter E, Section 38.202](#) expanded the scope of the SEAC to examine and review the administration of unassigned medication for respiratory distress.¹

Unassigned medication for respiratory distress is a prescription medication 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. [TEC, Section 38.2091](#) requires a school district, open-enrollment charter school, or private school that adopts a policy to report the use of unassigned 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 it is a private school;
- Physician or other person who prescribed the medication for respiratory distress; and
- Commissioner of the Texas Department of State Health Services (DSHS).

¹ Senate Bill (SB) 294, 88th 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 students 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.

Schools submitted the data through the web form, *Asthma – Required Reporting of Unassigned Administered Medications for Respiratory Distress to DSHS* ([Appendix A](#)), during the 2023-2024 school year. The DSHS School Health Program and CDE analyzed the reported data.

The following report documents data on unassigned medications for respiratory distress administered from August 2023 through July 2024.

Methods

The method used to report when medication for respiratory distress is administered is the *Asthma – Required Reporting of Unassigned Administered Medications for Respiratory Distress to DSHS* web form ([Appendix A](#)). This action is required no later than 10 business days after the date school personnel or school volunteer administers unassigned medication for respiratory distress in a school.

The web form consists of 19 questions, including 10 open-ended questions, six single-answer questions, and three multi-select questions. The web form can be found on the [DSHS website](#).

The web form was revised in February 2024. Revisions include new questions about the name of the reporter; the recipient's age; whether the recipient is a student, school personnel, a volunteer, or a visitor; and whether student recipients have an asthma action plan. In addition, the formatting and response options were revised on the questions about who was notified of the medication administration and the status of the recipient after the medication was administered. Finally, the instructions were reworded slightly regarding who administered the medication.

The data from the web form was assembled by the School Health Program staff. In August 2024, a CDE program evaluator analyzed the records submitted between August 1, 2023 and August 14, 2024, for medications administered between August 1, 2023 and July 31, 2024, using Microsoft Excel. Two records with incomplete responses (only school and location questions answered) submitted during this time frame were excluded.

Results

Between August 1, 2023 through August 14, 2024, a total of 1,755 complete records were submitted. Thirty-eight independent school districts (ISD), three private schools, and one charter school submitted records. Nearly all individuals received Albuterol/Albuterol Sulfate (99.9%), with one receiving Ventolin (0.1%). The age range of people (student, school personnel or volunteer, or visitor) who received the unassigned medication for respiratory distress in the school setting was three to 68 years old according to reports submitted on or after February 28, 2024. The average age of these recipients was 11 years old.

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

Table 1: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by ESC Region (N=1,755)

Education Service Center (ESC) Region	Frequency (n)	Percent (%)
Region 1	18	1.0
Region 3	1	0.1
Region 7	34	1.9
Region 8	1	0.1
Region 10	194	11.1
Region 11	1,240	70.7
Region 13	16	0.9
Region 14	4	0.2
Region 16	124	7.1
Region 20	123	7.0
Total	1,755	100.0

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

Table 1 Interpretation

Ten Education Service Centers (ESC) regions submitted 1,755 reports in total. ESC Region 11 submitted the most reports (70.7%) ([Appendix B](#)).

Table 2: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by Recipient (N=615)

Recipient	Frequency (n)	Percent (%)
Student	602	97.9
School Personnel or School Volunteer	12	2.0
Visitor	1	0.2
Total	615	100.0

Note: The total count represents all records submitted to DSHS from February 28, 2024, through August 14, 2024. This question was not included on the reporting form for records submitted to DSHS from August 1, 2023, through February 27, 2024.

Table 2 Interpretation

Of the reports submitted to DSHS on or after February 28, 2024, almost all individuals who received the unassigned medication for respiratory distress were students (97.9%). A few individuals who received the unassigned medication were school personnel or school volunteers (2.0%), while one was a visitor (0.2%).

Table 3: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by History of Asthma (N=1,755)

History of Asthma	Frequency (n)	Percent (%)
Yes	1,567	89.3
No	172	9.8
Unsure	16	0.9
Total	1,755	100.0

Table 3 Interpretation

Most individuals (89.3%) who received the unassigned medication for respiratory distress in a school setting had a known history of asthma.

Table 4: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by Asthma Action Plan (N=615)

Asthma Action Plan	Frequency (n)	Percent (%)
Yes	63	10.2
No	527	85.7
Unsure	12	2.0
N/A	13	2.1
Total	615	100.0

Note: The total count represents all records submitted to DSHS from February 28, 2024, through August 14, 2024. This question was not included on the reporting form for records submitted to DSHS from August 1, 2023, through February 27, 2024. All respondents were asked: "If it was a student who received the medication for respiratory distress, do they have an action plan?"

Table 4 Interpretation

Of the reports submitted to DSHS on or after February 28, 2024, most respondents (85.7%) indicated the unassigned medication for respiratory distress was administered to a student who does not have an asthma action plan. Some respondents (10.2%) indicated the medication was administered to a student who does have an asthma action plan. A small percentage of respondents were unsure (2.0%) or indicated the question was not applicable (2.1%).

Table 5: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by Location Administered (N=1,755)

Location Administered	Frequency (n)	Percent (%)
Clinic/Nurse’s Office	1,723	98.2
Other	23	1.3
Field trip	5	0.3
Recess	4	0.2
Total	1,755	100.0

Note: Respondents who selected Clinic/Nurse’s Office indicated alternative education program clinic, clinic, health center, health clinic, health office, health room, nurse’s clinic, nurse’s office, or school clinic. Other included assistant principal’s office, cafeteria, cafeteria

office, classroom, counselor’s office, education support center, front/main office, hallway, or isolation room. Field trip included overnight camp and trampoline park. Recess included baseball complex, football field, outside, or practice field.

Table 5 Interpretation

Almost all individuals received the medication in a clinic/nurse’s office (98.2%). Some respondents (1.3%) indicated other locations inside the school building, including the cafeteria, classrooms, offices, or hallways.

Table 6: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by Administrator (N=1755)

Administered by	Frequency (n)	Percent (%)
Nurse	1,590	90.6
Clinic Staff	148	8.4
Other	16	0.9
Self-Administered	1	0.1
Total	1,755	100.0

Note: Nurse includes RN, LVN, campus nurse, clinic nurse, district nurse, or school nurse. Clinic Staff includes CMA, PA-C, clinic aide, clinic assistant, district nurse assistant, health clerk, health coordinator, nurse aide, school nurse substitute, and student health services director. Others include assistant principal, coach, counselor, officer liaison, parent volunteer, secretary, site coordinator, and teacher.

Table 6 Interpretation

Unassigned medication for respiratory distress was most frequently administered by a nurse (90.6%), followed by clinic staff (8.4%) and “other” such as an assistant principal, secretary, or teacher (0.9%). One individual self-administered the medication (0.1%).

Table 7: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by Method Administered (N=1,755)

Method Administered	Frequency (n)	Percent (%)
Metered-Dose Inhalers (MDI)	1,438	81.9

Method Administered	Frequency (n)	Percent (%)
Nebulized Solution	313	17.8
MDI and Nebulized Solution	4	0.2
Total	1,755	100.0

Table 7 Interpretation

Unassigned medication for respiratory distress was most frequently administered by Metered Dose Inhalers (MDI) (81.9%), followed by a nebulized solution (17.8%). Very few respondents (0.2%) indicated medication was administered using both methods.

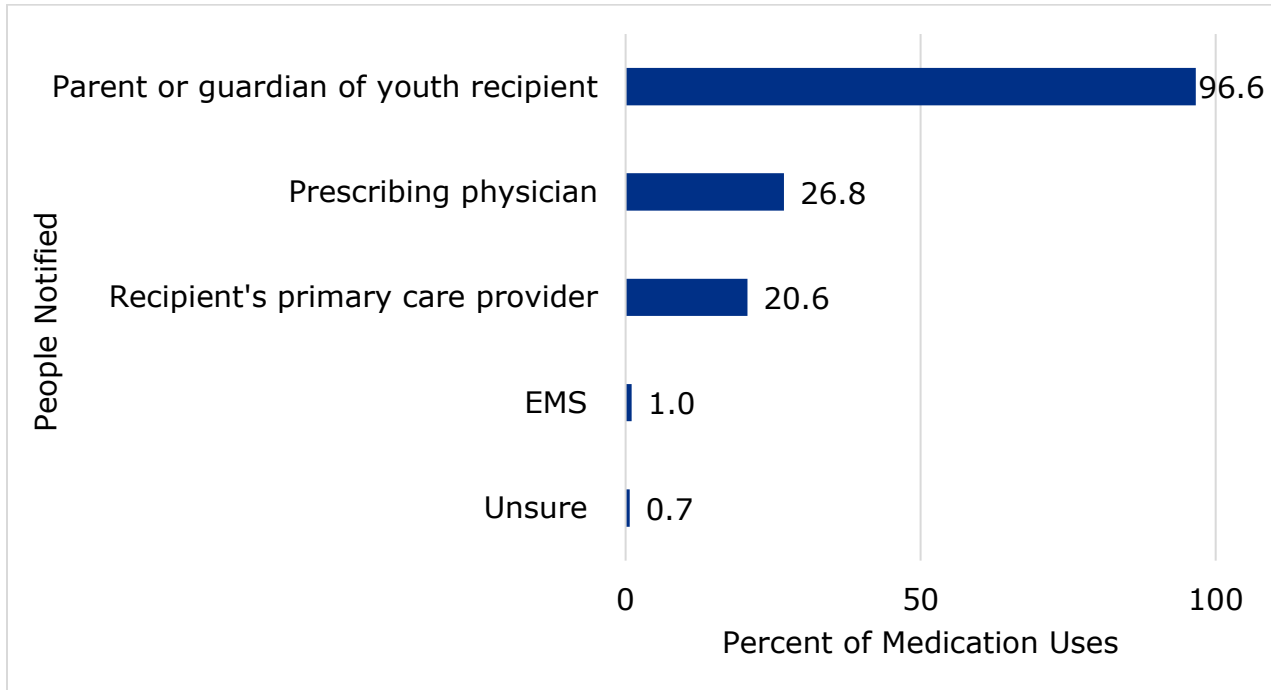
Table 8: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by Number of Doses Administered (N=1,755)

Number of Doses Administered	Frequency (n)	Percent (%)
One	1,472	83.9
One and a Half	6	0.3
Two	254	14.5
Two and a Half	10	0.6
Three	4	0.2
Four	9	0.5
Total	1,755	100.0

Table 8 Interpretation

While most individuals received one dose of medication for respiratory distress (83.9%), approximately 14.5% received two doses.

Figure 1: Percent of Medication for Respiratory Distress Uses in Texas Schools by People Notified of Medication Administration (N=1,755)



Note: Percent was calculated by using the total number of cases reported (1,755) as the denominator for each notification. Respondents could select all applicable notifications. Therefore, the total percent will not equal to 100.0. Furthermore, the “EMS” and “Unsure” response options were not available on the reporting form for records submitted to DSHS from August 1, 2023, through February 27, 2024. Of the 615 reports submitted to DSHS from February 28, 2024, through August 14, 2024, 18 (2.9%) indicated they notified EMS and 12 (2.0%) indicated they were unsure who was notified.

Figure 1 Interpretation

Figure 1 shows the percentage of unassigned medication for respiratory distress uses notifying different people the medication was administered. Respondents could select multiple people. A parent or guardian of a youth recipient was notified for 96.6% of individuals who received the medication. A prescribing physician was notified for approximately one-fourth of individuals who received the medication (26.8%), while the recipient’s primary care provider was notified for approximately one-fifth of individuals (20.6%). Only 1.0% of recipients had local emergency medical services notified. Notification of medication administration submitted was unknown for 0.7% of recipients.

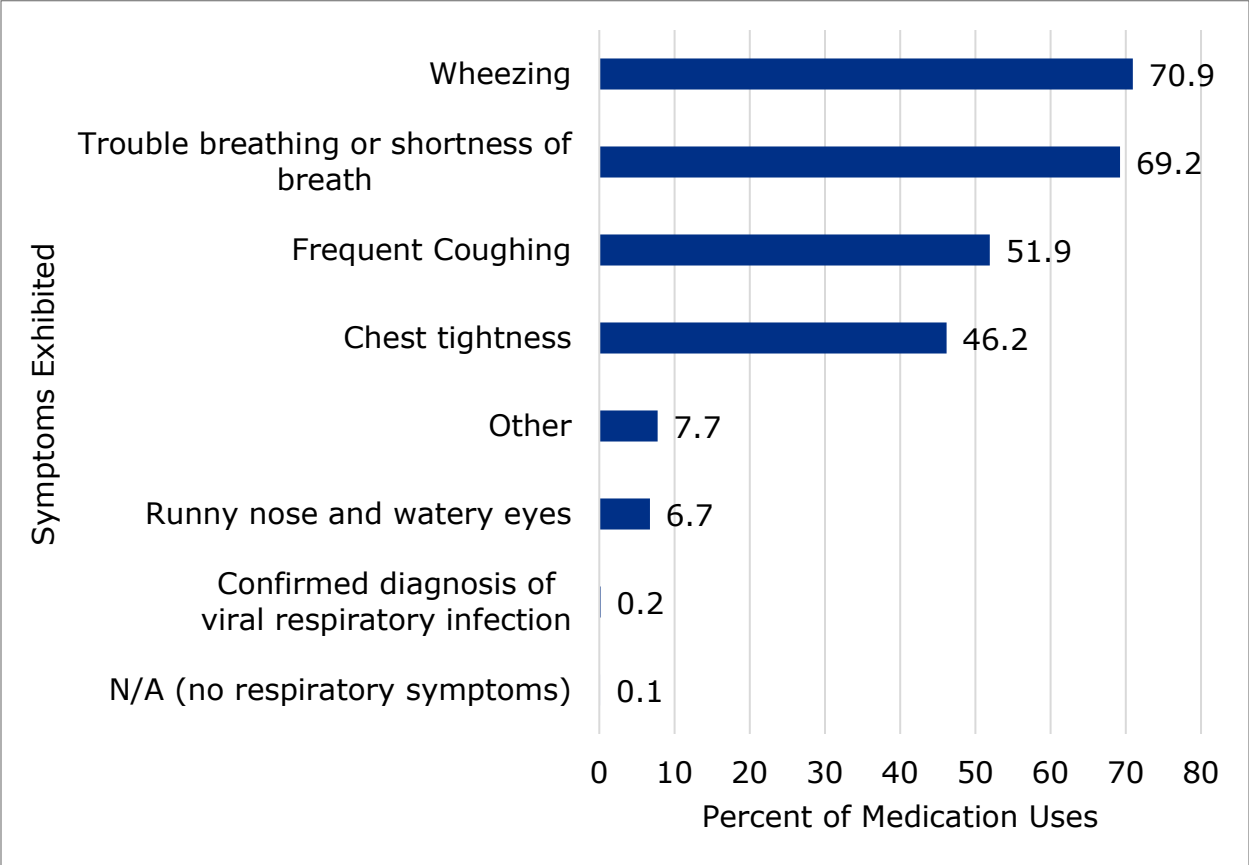
Table 9: Frequency and Percent of Medication for Respiratory Distress Use in Texas Schools by Status After Receiving Medication (N=1,755)

Status	Frequency (n)	Percent (%)
Returned to class	1,119	63.8
Parent or guardian picked up student and took them home	317	18.1
Parent or guardian picked up student and took them to a healthcare provider	187	10.7
Parent or guardian picked up student, but unknown if they got medical care	75	4.3
Other (Unknown)	31	1.8
Person went by EMS to the emergency room	26	0.5
Total	1,755	100.0

Table 9 Interpretation

After receiving the medication for respiratory distress, over half (63.8%) of individuals returned to class. While approximately 18.1% were picked up by a parent or guardian and taken home, 10.7% were picked up by a parent or guardian and taken to a healthcare provider.

Figure 2: Percent of Medication for Respiratory Distress Uses in Texas Schools by Symptoms Exhibited



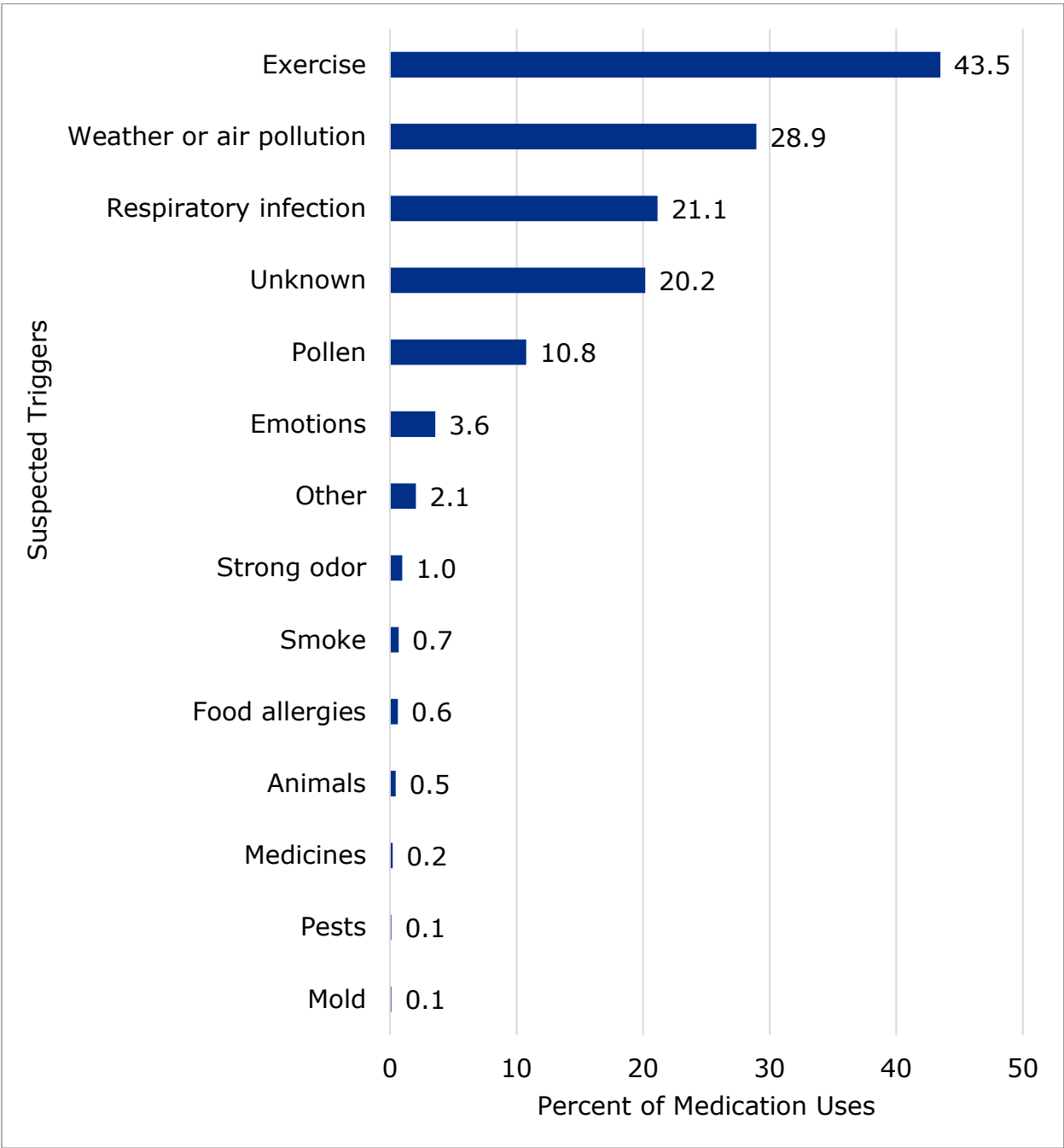
Note: Percent was calculated by using the total number of cases reported (1,755) as the denominator for each symptom. Respondents could select all symptoms that apply. Therefore, the total percent will not equal to 100.0.

Figure 2 Interpretation

Figure 2 shows the percent of unassigned medication for respiratory distress recipients who exhibited different symptoms of respiratory distress. Respondents could select multiple symptoms. Most individuals experienced wheezing (70.9%) or trouble breathing or shortness of breath (69.2%). Roughly half of individuals experienced frequent coughing (51.9%) or chest tightness (46.2%). Fewer individuals experienced a runny nose and watery eyes (6.7%), a confirmed diagnosis of a viral respiratory infection (0.2%), or no respiratory symptoms (0.1%).

135 of the 136 respondents who marked "Other" provided text responses to the follow-up question, "If you selected "Other" above, please explain." Some symptoms mentioned included low oxygen levels, retraction, decreased air exchange, diminished breath sounds, increased heart rate, increased respiratory rate, difficulty speaking, nasal congestion, nasal flaring, fever, and paleness.

Figure 3: Percent of Medication for Respiratory Distress Uses in Texas Schools by Suspected Causes or Triggers of Respiratory Distress



Note: Percent was calculated by using the total number of cases reported (1,755) as the denominator for each suspected trigger. Respondents could select all applicable suspected triggers. Therefore, the total percent will not equal to 100.0. Emotions examples include laughing or crying too hard, feeling stressed or anxious, anger, fear, or yelling. Strong odor examples include scents from perfumes, deodorants, cleaning supplies, gas stoves, scented candles or incense, hairspray, air fresheners, personal care products. Smoke examples include cigarette, cigar, pipe smoke, wood-burning fireplaces, burning leaves, campfire, or

second-hand smoke. Animal examples include pet dander, saliva, or pet allergens. Pest examples include dust mites, rodents, or cockroaches.

Figure 3 Interpretation

Figure 3 shows the suspected causes or triggers of reported respiratory distress cases. Respondents could select all applicable suspected causes or triggers. 43.5% 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 respiratory infections such as cold, flu, bronchitis, or sinus infection (21.1%), pollen including weeds, trees, grass, or flowers (10.8%), or emotions (3.6%). Some respondents indicated the trigger was unknown (20.2%).

A small number of respondents selected “other” (2.1%). Thirty-five of these respondents listed other suspected causes or triggers such as asthma, neglecting to take asthma medication, out of prescribed asthma medication, activities like choir or band, the heat, sports, seasonal allergies, or other illness.

Analysis and Discussion

During the 2023-2024 school year, a total of 1,755 uses of unassigned medication for respiratory distress in Texas schools were reported to DSHS.

- Nearly all recipients were students who received the medication Albuterol, which was administered by the Metered Dose Inhalers (MDI) method by a nurse or other school health clinic staff member.
- Most individuals who received the medication had a known history of asthma, though most of those asked had no asthma action plan.
- In almost all cases, the parent or guardian of the student was notified.
- The majority of medication recipients experienced wheezing and/or trouble breathing or shortness of breath.
- Exercise was the most reported suspected cause or trigger.

Conclusion

This report sought to understand the use of unassigned medications for respiratory distress in schools across Texas. Many individuals who received unassigned medication for respiratory distress were students with a known history of asthma, and most individuals experienced wheezing, trouble breathing or shortness of breath, 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

Acronym	Full Name
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. Asthma – Required Reporting of Unassigned Administered Medications for Respiratory Distress to DSHS

Asthma – Required Reporting of Unassigned Administered Medications for Respiratory Distress to DSHS

School districts, open-enrollment charter schools and private schools must report the administration of unassigned medications for respiratory distress. This requirement is in the [Texas Education Code, Section 38.2091](#).

No later than the 10th business day after the date a school personnel member or school volunteer administers medication for respiratory distress, the school must send the report to all of the following:

- School District
- Charter holder if the school is an open-enrollment charter school
- Governing body of the school if the school is a private school
- Prescribing physician
- Student's primary healthcare provider
- 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.

School Information

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.

Name of person completing this form: *

Email address of person completing this form: *

Confirm email *

Education Service Center region for your school district, open-enrollment charter school, or private school: *

- Select - ▼

Recipient Information

Person who received the medication for respiratory distress: *

- Student
- School Personnel or School Volunteer
- Visitor

Did the person who received the medication for respiratory distress have a history of asthma? *

- Yes
- No
- Unsure

If it was a student who received the medication for respiratory distress, do they have an asthma action plan? *

- Yes
- No
- Unsure
- N/A

(Select N/A if this report is for school personnel, school volunteer, or visitor.)

Age of person who received the medication for respiratory distress: *

Location and Dosage Information

List the physical location where you administered the medication for respiratory distress: *

(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: 1 dose of Metered Dose Inhaler = 2 puffs; 1 dose of Nebulizer = 1 unit-dose vial)

Other Information

Date Administered: *



Title of the person who administered the medication for respiratory distress: *

(Examples: 6th grade teacher, school librarian, basketball coach, school volunteer, etc.)

Which of the following were notified after the medication was administered? Please select all that apply. *

- EMS
- Prescribing physician
- Recipients primary care provider
- Parent or guardian of youth recipient
- Unsure

(Examples: 9-1-1 was called, emailed prescribing physician that medication was used, etc.)

After the medication was administered, the recipient: *

- Returned to class
- Was picked up by a parent or guardian and taken home
- Was picked up by a parent or guardian and taken to a healthcare provider
- Was picked up by a parent or guardian, but unknown if medical care was obtained
- Was taken by EMS to the Emergency Room
- Other (Unknown)

Symptom Information

Please select the symptoms the individual who received the medication was exhibiting. **Mark all that apply.**

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

Symptom Information *

- 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

If you selected "Other" above, please explain:

Suspected Asthma Triggers

Please indicate the suspected cause or trigger of the individual's respiratory distress (Check all that apply*):

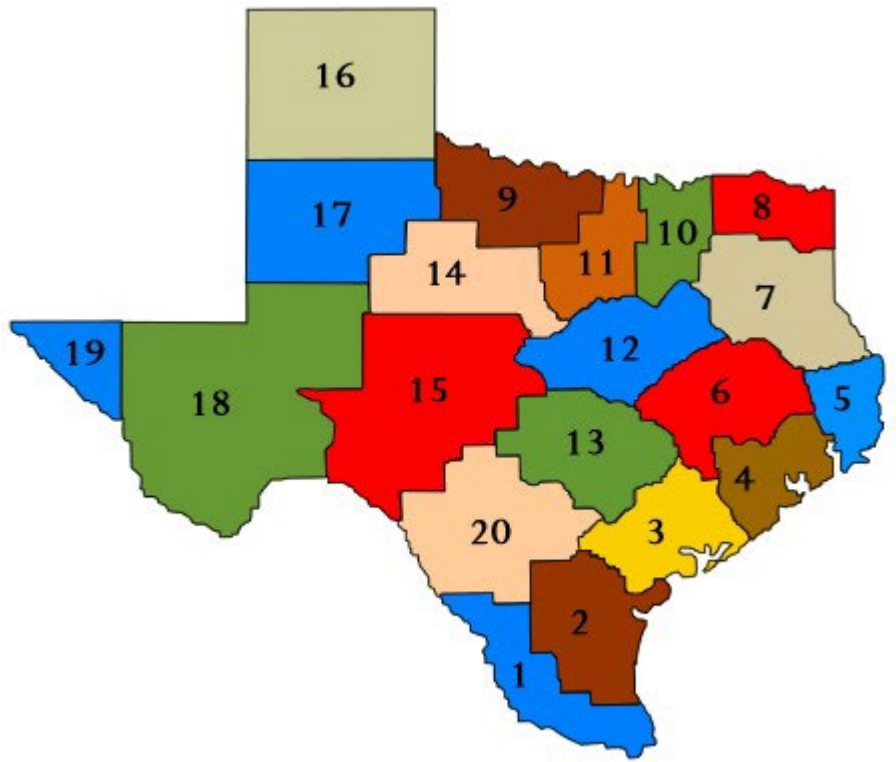
- Respiratory infections such as a cold, flu, or sinus infection
- Exercise (walking, climbing stairs, intense exercise, sports)
- Emotions (laughing or crying too hard, feeling stressed or anxious, anger, fear, yelling)
- Medicines (aspirin, fever reducers, anti-inflammatories, alternative therapies, 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

Remember to replace the medication for respiratory distress 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.

If you selected "Other" above, please explain:

Appendix B: Regional Education Service Center Map



School Health Program

dshs.texas.gov/schoolhealth