

# Open Airways for Schools in Vermont

## Vermont Asthma Program Achievements for the 2014-2019 Grant Cycle



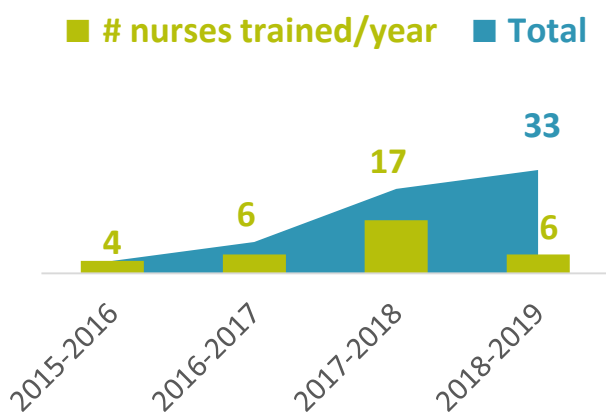
### Open Airways for Schools (OAS)

- Evidence-based asthma self-management curriculum from the American Lung Association (ALA).
- Empowers youth to control their asthma by teaching warning signs of asthma, identification of asthma triggers, and proper medication use.
- When a child completes OAS, they are healthier, absent less from school, and participate in more physical activity.
- OAS facilitator training is available to healthcare providers, school personnel, & other advocates.



### 33 Nurses trained in OAS

- 33 VT school nurses completed the training from the ALA to instruct OAS.



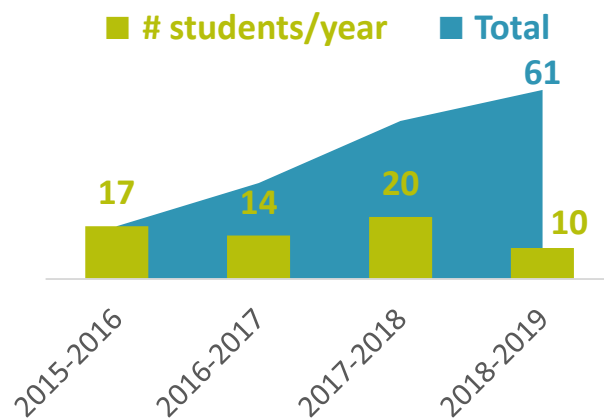
### Impact of OAS in VT

- **14% of VT school nurses** from 23 school supervisory unions were trained in **enhanced asthma management** and OAS certified.
- **100%** of enrolled students **completed OAS**.
- **VT students** completing OAS:
  - ✓ **Increased their use of long-term control medication,**
  - ✓ **Used a spacer with inhaler,**
  - ✓ **Increased proper inhaler technique,**
  - ✓ **Experienced less uncontrolled asthma.**



### 61 students completed OAS

- 11 Vermont schools offered OAS.
- 100% of the students enrolled completed the OAS curriculum.



Source: Open Airways participant forms, 2015-2019

December 2019

Learn more at [healthvermont.gov](http://healthvermont.gov)

@healthvermont

VERMONT  
DEPARTMENT OF HEALTH

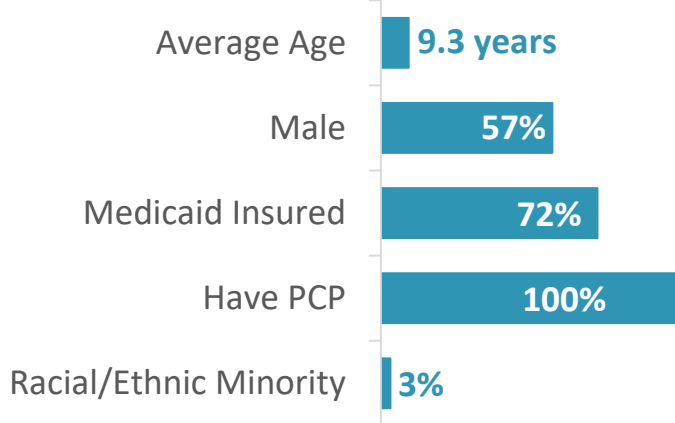
# Open Airways in VT Schools

## Vermont Asthma Program Achievements for 2014-2019



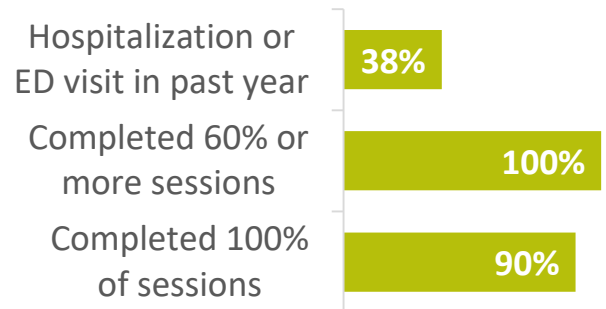
### Student demographics

- Student enrolled in OAS were 6 - 14 years old.
- Most were male, Medicaid insured, and had a primary care provider.



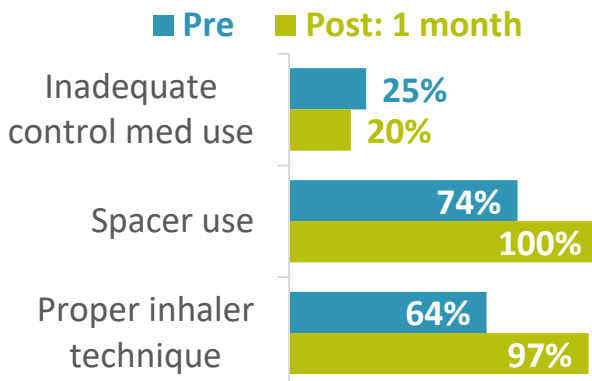
### OAS Participant profile

- 38% of students had an ED/Urgent care visit or hospitalization for asthma in the year prior to OAS.
- All enrolled students completed at least 60% of the sessions and 9 in 10 completed all sessions.



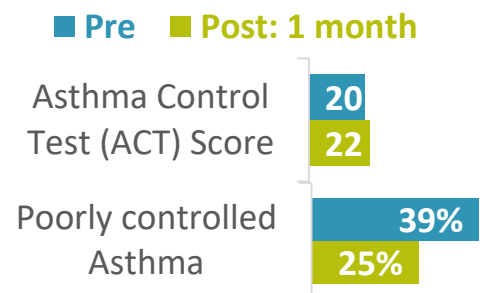
### Medication use

- Students completing OAS showed a 20% relative increase in long-term control medication use, universal spacer use, and 52% increase in proper inhaler technique.



### Asthma control

- Average Asthma Control Test (ACT) score increased from 20 to 22.
- Proportion of students with poorly controlled asthma decreased from 39% to 25%.
- 69% of students achieved improved asthma control (33/48).



Sources: Open Airways Participant forms, 2015-2019  
December 2019

Learn more at [healthvermont.gov](http://healthvermont.gov)

@healthvermont

# Open Airways in VT Schools

## Vermont Asthma Program Achievements for 2014-2019



### OAS Curriculum

- Delivered by OAS certified facilitator.
- Developed for youth ages 8 to 11.
- Taught in five or six 30-minute small-group sessions that include:
  - ✓ *Caring for your lungs,*
  - ✓ *Identifying and decreasing exposure to asthma triggers,*
  - ✓ *Recognizing and managing asthma symptoms,*
  - ✓ *Understanding how to properly use asthma medications,*
  - ✓ *Getting exercise and doing well at school.*



### To learn more...

#### Vermont Asthma Program

[www.healthvermont.gov/wellness/asthma](http://www.healthvermont.gov/wellness/asthma)

#### Vermont Asthma Data

<https://www.healthvermont.gov/health-statistics-vital-records/surveillance-reporting-topic/asthma>

#### Open Airways for Schools

[www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/asthma-education-advocacy/open-airways-for-schools](http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/asthma-education-advocacy/open-airways-for-schools)

### Tips for Conducting OAS <sup>1</sup>

- **Identify students with uncontrolled asthma.**
- **Form cohorts of students from a single grade to aid in scheduling.**
- **Begin early in the semester to allow time for curriculum and 1-month follow up.**
- **Seek an asthma champion to assist in delivering OAS.**

### Data Notes

- <sup>1</sup> VT Open Airways for School: Pilot Initiative Evaluation Summary Report 9/2016.
- OAS was not implemented in Year 1 of CDC grant.
- # of sessions attended was not available in year 2, and not available for one school in year 3.
- Percentages calculated as the # / # students with data for given measure (missing data dropped).
- Relative percent change = (baseline - final)/baseline \* 100.
- Collection of all data points for each student is needed to fully assess the impact of OAS in VT.

Sources: Open Airways Participant forms, 2015-2019  
December 2019

Learn more at [healthvermont.gov](http://healthvermont.gov)

 @healthvermont

 VERMONT  
DEPARTMENT OF HEALTH

## OAS Performance Measure Summary

CDC Performance Measures	Y2	Y3	Y4	Y5	Total
# of students enrolled	17	14	20	10	61
# w/ ED/IP/UC in past year	n/a	7	8	1	16
# w/ uncontrolled asthma at enrollment	4	8	6	4	22
% w/ uncontrolled asthma at enrollment*	25%	89%	30%	40%	40%
# completing 60% of sessions	n/a	9*	20	10	39
# completing 100% of sessions	n/a	9*	16	10	35
# completing 60% of sessions who demonstrate skills/knowledge	n/a	7	18	8	33
# completing 100% of sessions who demonstrate skills/knowledge	n/a	7	15	8	30
# completing 60% of sessions w/o PCP who received referral	n/a	n/a	n/a	0 <sup>‡</sup>	0 <sup>‡</sup>
# completing 100% of sessions w/o PCP who received referral	n/a	n/a	n/a	0 <sup>‡</sup>	0 <sup>‡</sup>
# completing 60% of sessions w/ uncontrolled asthma @ enrollment	n/a	8	6	4	18
# completing 100% of sessions w/ uncontrolled asthma @ enrollment	n/a	8	5	4	17
# comp. 60% of sessions & w/ uncontrolled Asthma & using LT control Med <7 d/wk @ enrollment	n/a	2	3	3	8
# completing 100% of sessions & w/ uncontrolled Asthma using & using LT control Med <7 d/wk @ enrollment	n/a	2	2	3	7
# completing 60% of sessions & w/ uncontrolled Asthma & using LT control Med @ enrollment, who ↑ med use	n/a	0	2	0	2
# completing 100% of sessions & w/ uncontrolled Asthma & using LT control Med @ enrollment, who ↑ med use	n/a	0	2	0	2
# completing 60% of sessions w/ uncontrolled asthma @ enrollment, & controlled at 1 m follow up	n/a	3	4	3	10
# completing 100% of sessions w/ uncontrolled asthma @ enrollment, & controlled at 1 m follow up	n/a	3	4	3	10
# completing 60% of sessions who had ED/IP/UC in past year	n/a	5	8	1	14
7 performance measures were n/a due to no 12 m follow up	n/a	n/a	n/a	n/a	n/a

n/a: data not collected/available; \* Those with missing data excluded from calculation; ‡ All students had primary care provider at intake. The Vermont Asthma Program began promotion of OAS in Year 2 of CDC grant.