VERMONT
DEPARTMENT OF HEALTH

Asthma Medication Use and Asthma Control

Reducing the Burden of Asthma in Vermont

Goals of Asthma Management

The goal of asthma treatment is to achieve and maintain control of symptoms. Hallmarks of well controlled asthma include:

- Minimal sleep disruption by asthma (< 2 times/ month)
- No missed school days or work days due to asthma
- Normal activity levels, including exercise
- Minimal use of rescue medications (< 2 times/week apart from exercise)
- Normal or near normal lung function
- No or minimal need for emergency department visits or hospitalizations for asthma

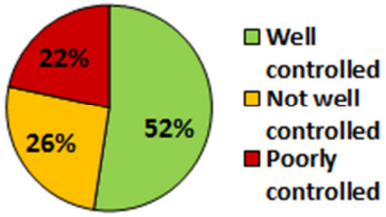
Patient education is crucial to effective asthma self-management. Patients with asthma should be able to:

- Recognize signs and symptoms of worsening asthma
- Take medications appropriately and monitor response
- Identify and reduce exposure to triggers
- Follow their written Asthma Action Plan
- Seek medical treatment when needed

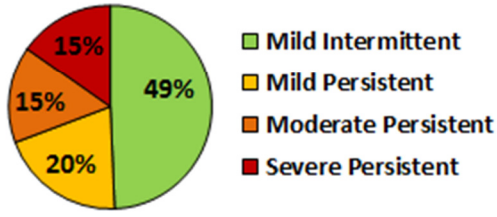
Asthma in Vermont Adults

The prevalence of current asthma among adult Vermonters is 11%, affecting approximately 54,000 adults, and is the third highest in the US.[1,2] Almost 50% of Vermonters with current asthma report asthma that is not well or poorly controlled (27,000 adults), while 31% have moderate or severe persistent asthma (17,000 adults).[3]

Asthma Control Among Vermont Adults



Asthma Severity Among Vermont Adults



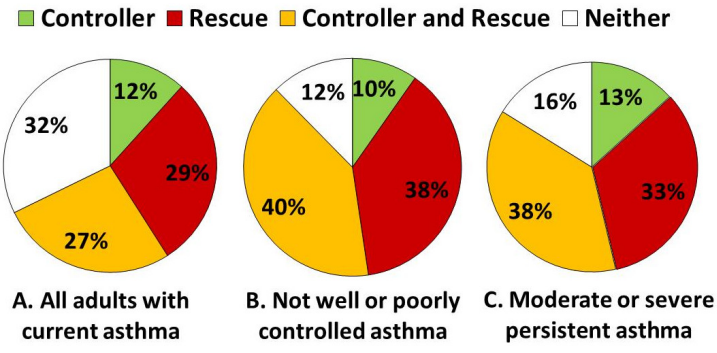
Asthma Medication Usage

Asthma symptoms can be managed through proper use of inhaled controller and rescue medications. Controller medications (corticosteroids), also called preventive or maintenance medications, work over time to reduce airway inflammation and prevent symptoms from occurring. Rescue medications for asthma (short-acting beta agonists or SABAs), also called quick-relief or fast-acting medications, immediately relieve asthma symptoms by opening up constricted airways. The EPR-3 recommendations are that controller medications be used daily to control persistent asthma and rescue medications be used only to treat an asthma exacerbation and not more than one time per day.

Asthma Medication Usage among Vermont Adults

- Among Vermont adults with current asthma, 12% report using controller medication in the last three months and 27% used both controller and rescue medications. Almost a third used only rescue inhalers, while another third did not use either type of medication (A).[3]
- Among Vermont adults with current asthma that is not well or poorly controlled, 38% (10,000 adults), report using only rescue medication and 12% (3,000 adults) used neither rescue nor controller medications (B).[3]
- Similarly, among those with persistent moderate or severe asthma one third used only rescue medication and 16% used no controller or rescue medication (C).[3]
- While 82% of adults not using controller or rescue inhalers had well controlled asthma, only 38% of those using solely rescue inhalers had well controlled asthma.[3]

Asthma Medication Use Among Vermont Adults with Current Asthma



A. All adults with current asthma

B. Not well or poorly controlled asthma

C. Moderate or severe persistent asthma

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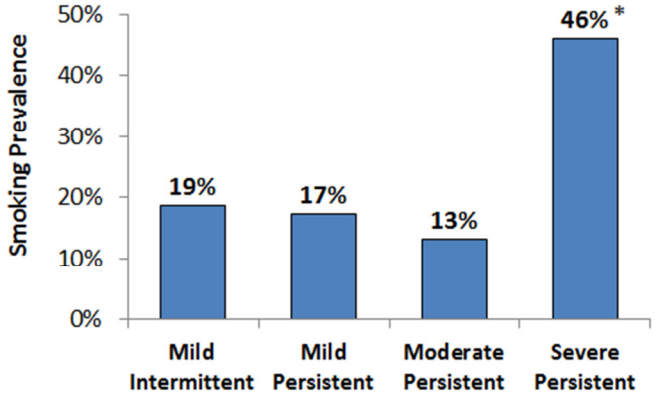
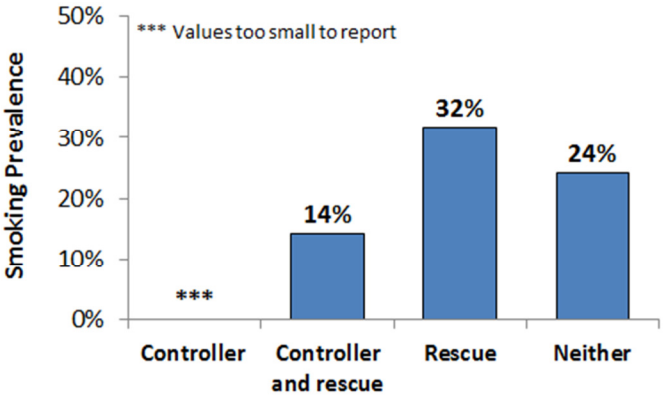
Asthma and Smoking

- In Vermont, those with asthma smoke at a higher rate (23%) compared to those without asthma (16%).[1, 4]
- Vermonters with severe persistent asthma have a significantly higher prevalence of smoking compared to those with mild intermittent and moderate asthma. [3]
- No significant differences in smoking prevalence by type of inhaler used were observed. [3]

Smoking Prevalence Among Vermont Adults with Current Asthma by Severity of Asthma



Smoking Prevalence Among Vermont Adults with Current Asthma by Inhaler Use



Action Steps

Increasing proper use of controller and rescue medications through prescribing aligned with EPR-3 guidelines, delivering patient education in a regular basis, using Asthma Action Plans, and linking patients who smoke to smoking cessation resources represent areas of opportunity to lessen the burden of asthma in Vermont.

Guideline-based care advises asking patients about current tobacco use.

For more information, including free patient resources and the fax referral form, visit the 802Quits webpage at http://802quits.org/

For More Information Regarding Asthma and Proper Medication Use

- Vermont Asthma Program: http://healthvermont.gov/prevent/asthma/index.aspx
- Physician's Reference Guide to Managing and Diagnosing Asthma: http://www.nhlbi.nih.gov/guidelines/asthma/asthma_qrg.pdf
- Link to Asthma Action Plan: http://healthvermont.gov/prevent/asthma/tools.aspx#actionplan

For More Information on Asthma Data

- Asthma Surveillance: http://healthvermont.gov/research/asthma/asthma_surv.aspx

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Data Sources

[1] 2012 Behavioral Risk Factor Surveillance System (BRFSS).
[2] http://www.cdc.gov/asthma/brfss/2012/tableC1.htm
[3] 2011-2012 Vermont Asthma Call Back Survey
[4] Data age adjusted to the 2000 U.S. standard population

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