



Healthy Vermonters 2020 Goals Related to Asthma

1. Reduce hospitalization rates for asthma
2. Increase the percentage of Vermonters with asthma who receive a written Asthma Action Plan from their health care provider
3. Reduce exposure to second-hand smoke
4. Reduce exposure to environmental triggers in the home, work, and school environment

KEY ACHIEVEMENTS

- Asthma-related hospitalizations decreased
- Exposure to indoor environmental triggers and second-hand smoke decreased
- Pneumonia vaccinations increased

Goals from the Vermont State Asthma Plan: 2013-2018

1. Ensure proper diagnosis and treatment of asthma using National Asthma Education and Prevention Program EPR-3 guidelines
2. Pursue sustained efforts to incorporate asthma care into the forefront of state and national health care reform
3. Adopt reimbursement strategies for health care systems that lead to optimal asthma care
4. Improve both indoor and outdoor air quality for all Vermonters
5. Engage Vermonters with asthma, their families, and other caregivers in appropriate evidence-based self-management education

Current Asthma Prevalence ¹	Baseline 2010	Status 2017	Trend
VT adults	11%	12%	
U.S. adults	9%	9%	
VT females	14%	15%	
VT males	8%	8%	
VT adults with low education (< high school)	16%	22%	
VT adults with low household income (<125% FPL)	15%	22%	
VT adults who are unable to work	23%	28%	
VT adults who smoke cigarettes	16%	15%	
VT youth	10%	7%	
US youth (from 16 states)	8%	8%	

Prevalence measures did not significantly change between 2010 - 2017.

Vermont Asthma Goal Tracker

Comorbidities, Risk Factors, and Triggers		Baseline 2010	Current Status	Goal 2018	Trend	
Obesity among those with asthma ¹ ‡	Adults	35%	39%	30%		✗
Cigarette smoking among those with asthma ¹ ‡	Adults	21%	21%	17%		
Exacerbation of asthma by current job ²	Adults	27%	17%	--		
Second-hand smoke exposure among those with asthma ²	Adults	15%	10%	13%		✓
	Youth	4% ^a	n/a	3%		
Indoor pets among those with asthma ²	Adults	78%	61%	--		
	Youth	86%	72%	--		
Exposure to 4 or more indoor environmental triggers among those with asthma ²	Adults	43%	31%	39%		✓
	Youth	32%	39%	32%		✗

✓ = Goal Met, ✗ = Measure moved in wrong direction

Asthma Care and Treatment		Baseline 2010	Current Status	Goal 2018	Trend	
Routine asthma visit with health care provider in past 12 months among those with asthma ²	Adults	50%	47%	58%		✗
	Youth	76%	59%	78%		✗
Receipt of written Asthma Action Plan among those with asthma ²	Adults ^{†HV}	31%	29%	36%		✗
	Youth ^{HV}	48%	52%	65%		
Advisement to change things in home, school or work environments among those with asthma ²	Adults ^{†HV}	35%	39%	45%		
	Youth ^{HV}	33%	28%	50%		✗
Flu vaccination within past year among those with asthma ¹⁻²	Adults	54%	45%	60%		✗
	Youth	76%	78%	80%		
Pneumonia vaccination among those with asthma ¹	Adults	42%	58%	47%		✓
People with asthma who have taken an Asthma Management Course ²	Adults	9%	9%	--		
	Youth	4% ^a	n/a	--		
People with asthma taught to recognize early symptoms ²	Adults	67%	67%	--		
	Youth	86%	90%	--		

✓ = Goal Met, ✗ = Measure moved in wrong direction

Learn more about the work of the Vermont Asthma Program:

www.healthvermont.gov/wellness/asthma

Asthma Morbidity & Mortality		Baseline 2008	Status 2015	Goal 2018	Trend	
Asthma <u>ED visits</u> ³ (rate per 10,000)	Statewide	39.6	39.8	--		
	Children age <5	72.3	77.6	--		
	People age 5-64	41.8	42.0	--		
	Adults age 65+	14.7	19.4	--		
	Women age 15-44	71.0	61.1	69.2		✓
	Men age 15-44	40.3	44.1	37.2		✗
	Boys age < 15	62.3	66.8	57.0		✗
Asthma <u>hospitalizations</u> ³ (rate per 10,000)	Statewide	5.8	4.3	--		
	Children age <5 ^{HV}	13.3	8.6	14.0		✓
	People age 5-64 ^{†HV}	4.2	3.1	4.2		✓
	Adults age 65+ ^{†HV}	13.3	8.1	9.3		✓
	Boys age <15	9.8	5.9	10.2		✓
	Women age 15-44	4.8	4.0	6.1		✓
Deaths due to Asthma (#) ⁴	Statewide	11	13 ^b	0		✗

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Key Takeaways

- Asthma prevalence in VT continues to be higher than the U. S. rate (12% vs. 9%).
- Asthma rates remain higher among women, those with low SES, those unable to work, and those who smoke cigarettes.
- Exposure to environmental triggers decreased among adults, particularly for indoor pets and second-hand smoke.
- The proportion adults with asthma who are obese increased.
- Pneumonia vaccination increased from 42% to 58% among adults with asthma.
- Opportunities remain to increase components of guidelines-based asthma care such as routine asthma visits, provider written asthma action plans, and annual flu vaccination.
- Hospitalization rates for asthma decreased statewide and within each age group, while ED rates for asthma increased.

Decrease in asthma hospitalizations indicates progress toward improved asthma care and control in VT.

Data Sources, Notes, & References:

1. Behavioral Risk Factor Surveillance System (BRFSS), VT and U.S. 2010-2017. BRFSS survey methodology changed in 2011. Therefore, caution must be used when comparing data from 2011 to prior years.
 2. Asthma Call Back Survey (ACBS), Adult 2010-2015; Child 2010 & 2015-2016; ^a 2008-2010.
 3. Vermont Uniform Hospital Discharge Data Set (VUHDDS), 2010-2015. Asthma Dx1 =493 or J45. In Oct 1, 2015, a change from ICD9 to ICD10 coding was implemented and may contribute to any change in values observed.
 4. Vermont Vital Statistics System, 2010-2016, ^b = 2016.
- n/a=data not available, † Data age adjusted to U.S. 2000 standard population, *** Values too small to report, ^{HV} Healthy Vermonters Measure.

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