

## Management of Asthma in Children and Adults

### Purpose

To improve asthma management in children and adults.

### Key Recommendations/Messages

- Assess and Monitor - assess and document asthma severity, identify triggers, conduct medical history and physical exam, assess medication use. Schedule a medical appointment for asthma at least every six months.
- Pharmacological Therapy - use stepwise approach to gaining control as quickly as possible and provide a rescue plan for acute exacerbations.
- Control Factors that Contribute to Severity- asthma exacerbations may be caused by a variety of triggers including allergens, pollutants, foods and drugs.
- Patient Education - education is an essential part of the overall management of asthma. Education includes the development of an asthma action plan.
- Asthma in all age groups may present only as repeated coughing, especially at night, with exercise and with viral illnesses, but these are particularly common patterns of presentation of asthma in children.

### High Risk Populations/Disparities

- In the elderly, the diagnosis of asthma is often not made or is missed. It is now becoming increasingly recognized that undiagnosed asthma is a frequent cause of treatable respiratory symptoms.
- Workers who are exposed to inhalant chemicals or allergens in the workplace can develop asthma and may be misdiagnosed as having bronchitis or chronic obstructive disease.
- More boys develop asthma during childhood; the prevalence of asthma in girls surpasses boys during adolescence.
- Among 20-30 year olds, the prevalence in women is nearly twice as high as in men.
- According to the New York State Department of Health Prevention Agenda (2013 – 2017), Monroe County has the highest emergency department visits for asthma in Western and Central New York.
  - According to the New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS) data 2010-2012 SPARCS Data, within the “crescent” of Rochester, asthma admission rates are about 40% higher than the state average. A child or adult living in this area is more than nine times more likely to be hospitalized for their asthma compared to a similar individual living in the 14534 (Pittsford) zip code.
  - Three zip codes stick out for asthma hospitalizations: 14605, 14604 and 14621. These three zip codes are combined comprise the bulk of all the asthma hospitalizations in the County. In fact the asthma admissions for these zip codes are nearly double the state rate. When broken down by race, the Health Department data shows that the admission rate for blacks is nearly twice that of whites.
- For tree pollen and for grass and weed pollen, pollen counting stations in Rochester reported that the annual mean daily concentrations met or exceeded the National Allergy Bureau threshold for high concentration of pollen on 25% or more days per season. ([New York State Asthma Surveillance](#), October 2013).