



The Asthma Story

1. Is asthma a problem in Michigan? How do you know?

A recent Michigan study reported that more than 650,000 adults and 213,000 children had asthma, a slightly higher rate than the nation as a whole. Asthma is the leading cause of school absences due to chronic illness, a number that has more than doubled in the past 20 years. In 2003, the prevalence of asthma among Michigan high school students was estimated to be 21.1%.

2. What types of air pollutants might make a person's asthma worse? Why?

Particle pollution might make it worse because particles irritate the lungs and could contain allergens like pollen and mold. We also learned earlier that ozone, nitrogen oxides, and sulfur dioxide can aggravate the lungs.

Look at the *Is There a Connection Between Air Pollution and Asthma?* maps of Michigan given (or shown) to you by your teacher.

3. Where in Michigan are the highest levels of hospitalizations for children due to asthma?

Wayne County (Detroit area), Genesee County, and Saginaw County.

4. What areas of Michigan have the greatest amounts of air emissions and what do they have in common?

Southeast Michigan and parts of West Michigan. These are population and industrial centers.

5. Is there a relationship between the amount of pollutants in certain areas and the number of children hospitalized for asthma in those areas? Explain your answer.

There seems to be a relationship for the Detroit area and Genesee County. However, since other areas with high levels of pollutants did not also show high asthma hospitalization rates, other contributing factors need to be considered.