[IMAGE]

In the (O)Zone

Asthma, the most common chronic childhood disease, is on the rise due to factors such as a poor diet, infections, allergens, and air pollution. Competitive athletes sometimes have a higher prevalence of asthma than others, possibly because of breathing in more pollutants. Are children involved in outdoor team sports in highly polluted areas at an increased risk for asthma?

Nine- to 16-year-old children in 12 communities in southern California with varying levels of pollution (six with high ozone levels, six with low ozone levels) were selected for a study in a recent issue of *The Lancet*. The authors assessed asthma risk in approximately 3,500 children who played zero, one, two, or three or more team sports. The children were followed for up to five years to determine the development of asthma.

Children playing three or more team sports in high-ozone communities were over three times more likely to develop asthma than children playing no sports. Playing three or more sports in low-ozone communities had no significant effect on asthma prevalence, however. More time spent outside (unrelated to playing sports) in high-ozone communities also was linked to a higher incidence of asthma.

This study does not imply that your children should avoid outdoor activities or athletics. If you live in an area with higher-than-normal pollution levels, however, be sure to limit your children's outdoor activities and sports participation on high-pollution days. Most cities with high pollution levels provide daily reports of ozone and air quality, often in the local newspaper.

Reference:

McConnell R, Berhane K, Gilliland F, et al. Asthma in exercising children exposed to ozone: A cohort study. *The Lancet* 2002:359, pp. 386-391.

For more pediatric health information, go to http://www.chiroweb.com/find/archives/pediatrics.