

Asthma Shouldn't Rule Out Kids from Sports

By Brooke deLench

By the numbers

Nearly 5 million children in this country suffer from asthma. Without immediate treatment to keep a child's airways from constricting, asthma can be fatal.

Even if only mildly asthmatic, a child can suffer a fatal asthma attack playing sports. A report in the February 2004 issue of *The Journal of Allergy and Clinical Immunology* found that:

- 61 confirmed asthma deaths occurred during the 7 1/2 year study period;
- White males between ages 10 and 20 were most at risk;
- Deaths of whites outnumbered deaths of African-Americans by almost 2 to 1;
- Twice as many males died as females; and
- Basketball and track accounted for more asthma deaths than any other sport, but fatalities also occurred in football, swimming, and cheerleading (asthmatics playing any aerobic sport are at risk).

Safety tips

Despite the risks, asthma shouldn't keep your child out of sports. With proper precautions, they can play, as long as parents follow these safety tips:

- Make sure your child - or his coach - has his rescue inhaler at all times;
- Make sure your child's asthma is stable. If he is up during the night coughing and wheezing, it is probably not a good idea for him to play sports the next day;
- If your child needs his rescue medication before a game and once during the game, that's okay. If he needs to use it a third time, do not allow him to continue to play.
- Do not let your child play on fields that are less than about 1000 feet from a highway. Vehicular air pollutants are a serious danger for children playing sports.

Vehicular Pollution is the main source of many asthmatic episodes

Consider these serious facts before allowing your child to play near traffic:

- The American Academy of Pediatrics concluded in December 2004 that "exposure to traffic-related pollution, such as exhaust emissions from cars and diesel exhaust from trucks and even school buses, increases a child's risk of respiratory complications as well as lifetime risk of cancer."
- A substantial and growing body of scientific evidence has linked airborne toxic pollution from motor vehicles, trains and aircraft to significant health problems, especially in children, including aggravated asthma, chronic bronchitis,

- reduced lung function, irregular heartbeat, heart attack and premature death in people with heart or lung disease.
- Recent studies warn that the developing lungs of children may be especially vulnerable to adverse consequences of particle inhalation and that exercise in high ambient particle conditions may increase the risk of lung and vascular damage.
 - A 2006 study in the journal *Inhalation Toxicology* found that levels of ambient air pollution at athletic fields located adjacent to major highways were several fold higher than levels measured at fields located in more rural areas.
 - The same study also found that the fields close to major highways exposed children to levels of ambient ozone above levels shown to cause airway inflammation, abnormal lung function, and asthma exacerbation, with the highest levels in the warmer afternoon hours when games and practices are held and traffic is at its peak.
 - The Massachusetts Department of Environmental Protection (among others) recognizes that the fine particulates, which are more likely than larger particulates to pass through the throat and into the lungs, present the greatest health risk because they have “been more clearly linked to the most serious health problems and have been linked with illness and deaths from heart or lung disease.”
 - Exhaust from cars and diesel trucks contain high concentrations of the ultrafine particulate matter that have the greatest toxicity, with concentration directly related to traffic density.