



Why do IAQ Tools for Schools?.....

TOOLS FOR SCHOOLS WORKS!

According to a study by the CT Academy of Science and Engineering (CASE), up to 70% of CT schools have indoor air quality (IAQ) problems. The U.S. Environmental Protection Agency (EPA) *IAQ Tools for Schools* (TfS) program can help address these problems. During the past 7 years, there have been many accomplishments contributing towards improved IEQ and health in CT schools after TfS was implemented. Here are just some of these accomplishments.

Connecticut IAQ TfS Success Stories

Waterford

- **Reduction of 74% in the number of IAQ health complaints** in one elementary school, from **152** to **40** the year after TfS was implemented.
- **Decrease in IAQ health complaints of 66% or greater** in 9 out of 13 elementary classrooms which was representative of the other district schools.

Hamden

- **Absenteeism cut by more than half** after TfS was implemented in one elementary school, from **484 days** to **203 days** in one year.
- **Marked decrease in the use of student inhalers**

North Haven

- **Decrease of 48%** (256) in number of reported cases of respiratory-related illnesses.
- **Number of clinic visits decreased by 4,978** (11%) two years after TfS was implemented.

Chester

- **Number of asthma-related health office visits decreased dramatically** over a period of 4 years from **463** before TfS to **82** after major TfS recommendations implemented.
- **Decrease in health office visits** related to headaches, dizziness and sinus difficulties (students and staff).

Hartford

- **Number of asthma incidents declined 21.2 %**, from **11,334** to **8929** in one year, after TfS was implemented in most schools.
- **Improvements to school buildings** that included: carpet replaced with tile, elimination of area rugs, repair of leaking pipes, new roofs and roof repairs, and cleaning boiler rooms.

Amity Region 5

- **Reduction in number of IAQ complaints** from **70** (2003-2004) to **3** (2005-2006).

Schools are saving money: The CT Interlocal Risk Management Agency (CIRMA), a CT insurance provider, reviewed 47 member school districts with TfS. Fifteen districts (32%), saw a decrease in IAQ claims frequency. The average decrease was 3.6 claims. The severity of claims decreased 87%, for a total savings of \$56,705.

For more information about the EPA *IAQ Tools for Schools* Program in Connecticut, contact Kenny Foscue at 860-509-7740 or kenny.foscue@ct.gov.

National IAQ TfS Success Stories

More than 30,000 schools nationwide are managing IAQ and seeing results.....

Improved Health Outcomes

- A reduction in IAQ complaints from one per month to three per year. (Shamona Creek Elementary School, PA)
- A 25 percent reduction in the number of visits to the school nurse with complaints of stomach aches and headaches within the first 5 months of implementation of TfS (Little Harbour School, NH).
- A 50 percent reduction in visits to the office for the use of asthma inhalers (G.W. Carver Elementary School, CA).
- A reduction from 75 complaints related to health and faulty equipment to fewer than 15 from 1994—1999 (Okaloosa County School District FL).

Cost Savings

- Since the implementation of TfS in 1998, only \$400 has been spent on IAQ consultants, as compared to an estimated \$250,000 prior to 1997. (Hillsborough County Public School District, FL).
- Nearly \$100,000 was spent to correct mold and flooding problems before TfS, after which minimal investment solved IAQ problems uncovered while implementing TfS. (Janvier Elementary School NJ).
- An analysis showed that if an elementary school had spent \$364 per year on preventive maintenance, \$1.6 million in repairs could have been avoided. (Washington DC)

Good Public Relations

- “We received some great press from implementing the TfS Kit—the local newspapers wrote several articles about our Health School Team (District Health Official, Boston, MA).

Other Considerations

- A recent critical review of the literature confirms that poor IAQ in schools adversely impacts student health and productivity. Poor IAQ can reduce academic performance by 2 to, as much as, 6 percent. (Mendell & Heath, 2005; *Indoor Air*; 15 (1):27-52).
- There is a significant relationship between facility condition and student achievement, based on test scores in 139 public schools in math, science, language and social studies. (Milwaukee, WI)

School nurse and TfS coordinator: “We continue to have a *Tools for Schools* team in place and are performing the *Tools for Schools* program again this year. I am a believer in *Tools for Schools*, as this program has no doubt benefited our schools and students.”

Source: Environmental Protection Agency, Office of Air and Radiation Indoor Environments Division, *Indoor Air Quality Tools for Schools Program: Benefits of Improving Air Quality in the School Environment*, EPA 402-K-02-005, February 2003.