

NORTH EAST INDEPENDENT SCHOOL DISTRICT

Making the Connection Between Asthma and IAQ to Proactively Manage Environments

PROGRAM RESULTS

In 2006 the North East Independent School District (NEISD) recognized the link between IAQ management and asthma control, as a large number of students with asthma were visiting the school nurse regularly for reliever inhaler doses and missing school. Once the connection was made to student health and productivity, NEISD's IAQ management program took on new urgency. By developing the Department of Environmental Health, the district sought to improve its control over IAQ in its classrooms through reducing airborne pollutants and other asthma triggers. NEISD strives to maintain a sustainable and institutionalized IAQ management program, while continuing to transform its mission — to create healthy buildings for all students and staff.

Organize for Success — Empower an IAQ Leader: To create a proactive and focused IAQ management program, NEISD needed a leader to prioritize the district's IAQ needs and make important decisions. As NEISD's Executive Director for Facilities Maintenance and Support, Ron Clary fits this role and leads three departments that are dedicated to maintaining healthy buildings: the Department of Environmental Health, the Department for Custodial Support and the Department for Facilities Maintenance. He also created the IAQ Committee, which works across these departments to synergize their efforts and ensure that all IAQ issues are resolved quickly and completely.

Organize for Success — Build an Effective Team: NEISD joined building and human health specialists under one umbrella, the IAQ Committee, to create an effective group that looks at all aspects of IAQ in a classroom. The team members have the credibility and the authority to implement corrective actions at all levels — both in the classroom and in the health clinic. *“We have great individual expertise and programs, so when we work together and include input from both sides of the health equation, it makes a world of difference in our school environments and our student health.”* — Jerry Lamping, Director for Indoor Air Quality

NEISD captures cost savings from facility upgrades and improvements, tracks student health and performance and monitors IAQ parameters.

- ▲ Installed Web-based HVAC software, which cut energy costs by 9.4 percent in 2009, saving \$1.3 million.
- ▲ Increased State of Texas Exemplary and Recognized rated campuses to 87 percent of all schools and received a Recognized rating for the district three years in a row.
- ▲ Converted to Green Cleaning custodial products, which resulted in a six-fold decrease in VOC levels in classrooms and reduced costs by 30 percent.
- ▲ Adopted LEED and CHPS school design recommendations and purchased low VOC emitting furnishings.
- ▲ Moved over 200 classrooms from temporary wood framed buildings to eight new two-story brick face permanent buildings.

COMMUNICATE WITH EVERYONE, ALL THE TIME: Make IAQ Meaningful

“IAQ management was never a question, it was an answer. It supports the health of our students, so they can attend school and meet their full potential. It supports the health of our staff, without whom educating students is impossible. Finally, it helps me as an administrator run a more efficient school district, where I can stretch my budget further and channel limited resources where they are needed most: in the classroom.”

— Richard Middleton,
Superintendent of Schools

Assess Your Environments

Continuously — Walk the Grounds: NEISD conducts routine environmental health assessments, which are based on safeguarding the health of students and staff by monitoring the conditions within the classrooms. During regular walkthroughs, airborne contaminants, such as particles and volatile organic compounds (VOCs), are measured as primary indicators of the room environment using portable IAQ test instruments. In addition, reliever inhaler usage by children with asthma and IAQ-related symptoms they experience are recorded and tracked. If the IAQ Committee notices a high rate of reliever usage in one school, it is a red flag that there may be an environmental issue.

Plan Your Short and Long-Term Activities — Plan for the Future: To ensure future IAQ protection and continue best management practices, NEISD is designing and constructing new school buildings that can be certified under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building rating systems. Safe and effective practices, such as low VOC emitting tested materials and high efficiency rated air filtration devices, are being included in all classroom project specifications and design plans.

Communicate with Everyone, All the Time — Make IAQ Meaningful: Using CDC's “Asthma Friendly Schools Toolkit” as a model, NEISD educated teachers and other school building occupants about the importance of IAQ. Communicating and educating building occupants about asthma gave environmental management clear meaning and importance to everyone. Teachers understood the connection between their actions and student health — becoming active stewards of their classroom environment. *“Teachers love their kids; they*

don't want to do anything to hurt them. Many of our teachers simply didn't know about asthma triggers. Armed with this education, they were more than willing to change their classrooms to eliminate asthma triggers.” — Diane Rhodes, Director for Asthma Education