

Indoor Anti-Virus Air Filtration Systems Can Increase Student Attendance & Health

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General Description:

Improving school Indoor Air Quality (IAQ) has been shown to decrease respiratory-related illness infection rates and positively impact student attendance. This includes reducing rates of COVID-19 but extends to reducing the spread of other respiratory illnesses (common cold, flu, etc.) and reducing the severity of asthma symptoms.

- In Connecticut, adopting a program based on the [Connecticut Indoor Air Quality Program](#) has helped address IAQ problems in more than 850 schools (Connecticut Education Association, 2011):
 - In Hamden (CT), absenteeism rates fell by **more** than 50%
 - In the North Haven (CT) school district, school nurse visits were reduced by 11% and reported respiratory cases declined by 48%
 - In Hartford (CT), the school **district** saw a 21.2% decrease in **asthma** cases within a single year
- After implementing an indoor air quality management program, the Omaha Public School District observed a decrease in asthma attacks' frequency and severity.
- **Lower ventilation** rates have been linked to more missed school days caused by respiratory infections; greater prevalence and incidence of symptoms of sick building syndrome; greater mean number of school nurse visits caused by respiratory symptoms; increased asthmatic symptoms and risk for viral infections; and the transmission of airborne infectious diseases such as chickenpox, measles, and influenza.
- Students' attention processes are significantly slower in classrooms with high CO2 levels and low ventilation rates. Researchers **observed a 5% decrease in response of attention** ² in "poor" ventilation processes in "poor" ventilation classrooms.

Frequently Asked Questions:

1. **Can COVID-19 be transmitted through HVAC (ventilation) systems?** According to [the Centers for Disease Control and Prevention](#), aerosolized COVID-19 particles can remain suspended in the air for long periods, including after an infected person leaves a room. Research shows that upgrading air filtration systems and increasing outdoor airflow into indoor spaces can help prevent the transmission of COVID-19 and other airborne diseases.

2. **Where can I find out more information on ventilation systems and their impact on schools?** For