

22

REASONS SCHOOL DISTRICTS INSTALL PURIFAN CLEAN AIR SYSTEMS IN CLASSROOMS

(AND HOW THIS CAN RETURN 10 TO 25 TIMES THE COST)

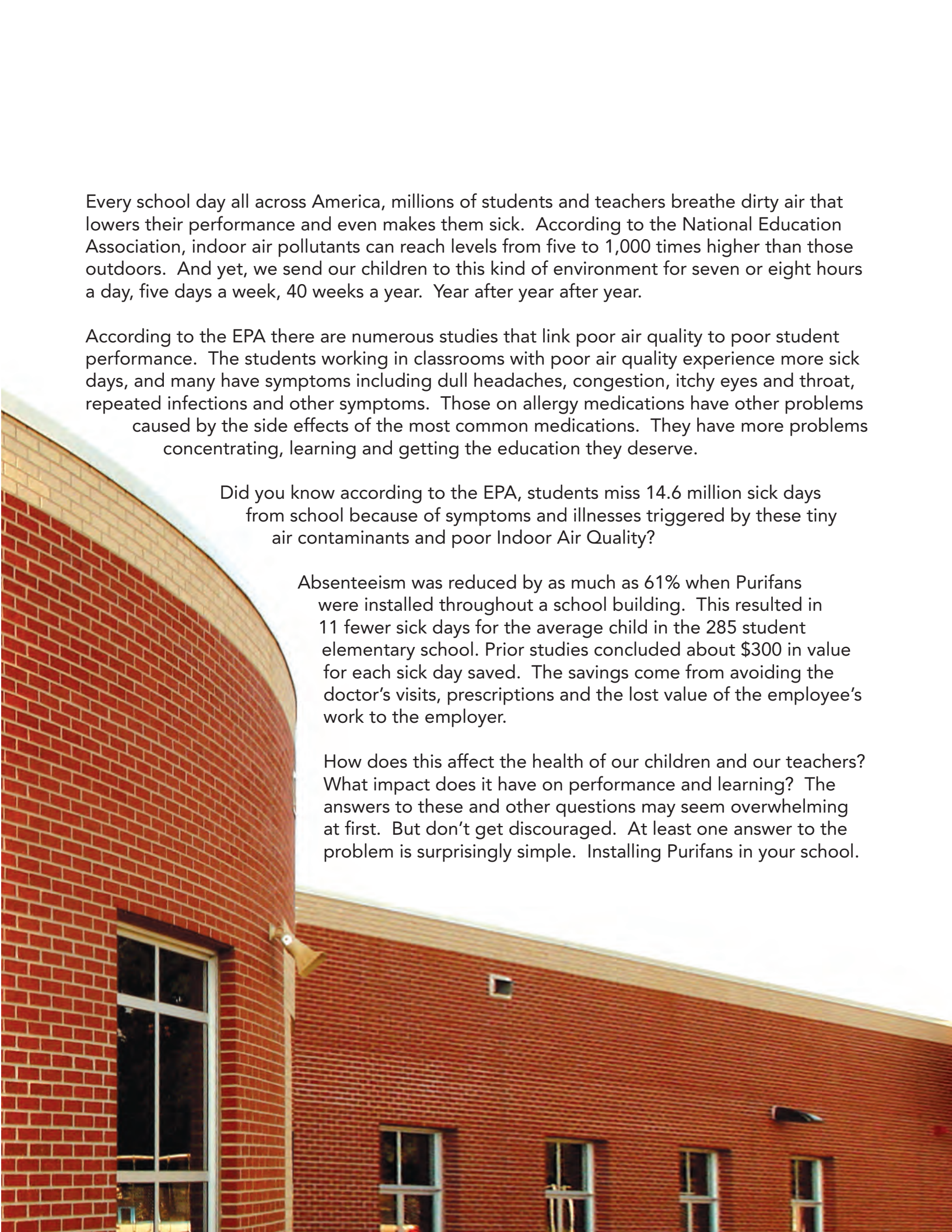


After you read through these classroom air-quality issues,
you will probably have some more

QUESTIONS.

If you're a parent or a teacher,
you're going to demand some

ANSWERS.



Every school day all across America, millions of students and teachers breathe dirty air that lowers their performance and even makes them sick. According to the National Education Association, indoor air pollutants can reach levels from five to 1,000 times higher than those outdoors. And yet, we send our children to this kind of environment for seven or eight hours a day, five days a week, 40 weeks a year. Year after year after year.

According to the EPA there are numerous studies that link poor air quality to poor student performance. The students working in classrooms with poor air quality experience more sick days, and many have symptoms including dull headaches, congestion, itchy eyes and throat, repeated infections and other symptoms. Those on allergy medications have other problems caused by the side effects of the most common medications. They have more problems concentrating, learning and getting the education they deserve.

Did you know according to the EPA, students miss 14.6 million sick days from school because of symptoms and illnesses triggered by these tiny air contaminants and poor Indoor Air Quality?

Absenteeism was reduced by as much as 61% when Purifans were installed throughout a school building. This resulted in 11 fewer sick days for the average child in the 285 student elementary school. Prior studies concluded about \$300 in value for each sick day saved. The savings come from avoiding the doctor's visits, prescriptions and the lost value of the employee's work to the employer.

How does this affect the health of our children and our teachers? What impact does it have on performance and learning? The answers to these and other questions may seem overwhelming at first. But don't get discouraged. At least one answer to the problem is surprisingly simple. Installing Purifans in your school.

HERE ARE 22 REASONS SCHOOLS INSTALL PURIFANS

1. BOOST ATTENDANCE AND ATTENDANCE-BASED FUNDING

Purifans have reduced absenteeism for students by 61% and teachers by 50%. Students bring many particles into the room including mold, pollen, pet dander, insect particles, chalk dust, construction dust and other particles that are strong allergy triggers. These particulates trigger many common allergy, asthma and respiratory illnesses in students and teachers. Reducing respiratory illnesses by over 50% means Purifans return more than 500% in financial savings to the families and teachers in their first year. In states that fund based on daily attendance the 1% increase in attendance will pay for the Purifans in one year. Existing schools have achieved 2% to 6% increases in attendance. Total Financial Return in the first five years can add up to more than 10 to 25 times the total cost of purchase and filter changes.

2. LOWER HEALTH CARE COSTS FOR TEACHERS

All Districts are looking for ways to control their rising health care costs for teachers. Purifans offer a way to help teachers stay healthier and spend less which saves the District money on health insurance costs.



3. STUDENTS WHO FEEL BETTER, PERFORM BETTER AND TEST HIGHER

Cleaner classroom air means students and teachers will have fewer allergy symptoms and headaches. Students have a better attitude when they feel better and they learn more. Fewer classroom disruptions from students coughing and sneezing make it a better learning environment. Students who miss fewer days due to sickness will keep up with classroom material and build a stronger knowledge base for future topics

4. REDUCES THE SPREAD OF CONTAGIOUS ILLNESSES

Floating dust particles in the classroom air help transmit contagious respiratory illnesses like flu, whooping cough, SARS, TB and common colds to others in the room. Purifans capture and remove these particles which can help reduce the spread. Purifans capture germs, viruses and bacteria in their five-stage filters. Purifans have the ideal room airflow pattern to capture moisture droplets from coughs and sneezes.

5. PURIFANS CAPACITY TO PROVIDE 40 AIR CHANGES PER HOUR

The CDC says the primary performance parameter of any air cleaner is the number of Air Changes per Hour. Scientific studies show if the air cleaner doesn't exceed 10 to 12 air changes per hour, you will not get the symptom reductions of allergies and asthma.

6. TEACHERS DESERVE & APPRECIATE HEALTHIER AIR QUALITY

Cleaner classroom air reduces teacher sick days, doctor's visits and drug costs – healthier lungs can fight off attacks from germs, viruses and classroom illnesses. BCBS reports more than 50% of the annual health care costs for teachers are related to respiratory problems. Offering teachers healthier classroom air helps your district recruit and retain quality teachers.



7. PURIFANS SAVES ON HEATING AND COOLING ENERGY

Studies show ceiling fan air flow reduces heating and cooling costs from 4% to 12% depending on the climate. Purifans provide all of the air flow benefits of a ceiling fan. It pulls hot air down from the ceiling in winter months and eliminates all the hot and cold spots in the rooms. In warmer months you get wind-chill cooling from the air motion in the room.

8. PURIFANS ARE QUIET

The Purifan is quiet and won't bother classroom activities. The EPA says most floor air cleaners are so noisy they cannot be operated in a classroom setting without interfering with teacher communications. Purifan is quieter than a ceiling fan.

9. PRODUCTIVITY AND MENTAL APTITUDE INCREASES IN CLEANER AIR

There are numerous studies that prove that the symptoms created by poor indoor air quality reduce student test performance. In one study reported by the EPA, test scores were 6% higher if the classroom air was cleaner on the day of the test.

10. REDUCE THE NEED FOR MIND-NUMBING ALLERGY MEDICINES

Many of the side-effects of allergy medicines cause drowsiness, lack of concentration and short-term memory loss. These side effects can include more mental errors, mistakes and irritable attitudes or personality changes which reduce the teacher's or student's ability to do well in the classroom.



11. CLEANER AIR REDUCES PERMANENT LUNG DAMAGE ATTRIBUTED TO BREATHING PARTICULATES

Studies reported in NEJM show particles are creating permanent lung damage and reducing healthy lung capacity in children. Damage was proportional to the level of airborne particulates in the air. Purifans can reduce airborne particle levels by 90% when properly installed and operated 24 hours a day.

12. REDUCES THE LONGER-TERM IMPACT OF FLU

Everyone knows as soon as a child's fever is down, the parent will send the child back to school, so they can return to work. The child still coughs and disrupts the rest of the class for days or weeks. If cleaner air reduces the sharing of colds and flu among students and teachers, the total impact on learning can be substantial.

13. PURIFANS REDUCE OR ELIMINATE CLASSROOM ODORS

Classroom odors from body odors, breath odors, soap, shampoo, body sprays, perfume, pesticides, dirty carpet, poor hygiene, perspiration, rodents and decaying skin cells can trigger allergies and Asthma and make it tough for a teacher standing over a student after recess. Purifan's filters use activated charcoal to significantly reduce these undesirable odors.

14. PURIFANS CAPTURE MOLD, POLLEN AND TOXIC PARTICLES

Many school buildings have a history of water damage from roof leaks, storms and floods. The reality is the hidden mold will increase the rate of allergies, asthma and absenteeism. Even after mold remediations, many schools still have complaints from teachers and students. Natural outdoor mold, pollen and vehicle exhaust from trucks, busses and cars can add millions of additional harmful particles. A Purifan filter also captures and eliminates harmful or toxic particles from agriculture or industrial sources upwind of the school.



15. PURIFANS MOUNT IN THE IDEAL LOCATION

Purifans mount overhead in the ideal center-of-the-room location to filter all the air in the room. In fact the full room air flow patterns created by the 360-degree air flow distribution are one of the major reasons Purifans out-perform other air cleaner designs.

16. PURIFANS ARE THE LOWEST COST PER CFM OF FILTERED AIR

Purifans clean 2,000 CFM versus 15 to 200 CFM with floor standing models and Purifans have the lowest filter and energy costs per CFM of air cleaned when you consider purchase price, lifetime warranty, actual operating costs, energy costs and filter replacement costs. Purifans are low-maintenance and don't waste time with weekly requirements to remove and wash electrostatic plates, which is a requirement for smaller floor and shelf air cleaners that are known to produce dangerous ions and ozone in the room. Low-cost, disposable Purifan filters are only changed twice per year in most schools.

17. PURIFANS KEEP THE ENTIRE SCHOOL CLEANER

Purifans capture the dust before it can get into return air ducts, or settle on surfaces, making the school cleaner and requiring less dusting. Particles are captured and eliminated before they clog up cooling ports on computers, projectors and smart-board technology found in many classrooms. Purifans capture dust, pollen and mold that contaminates school ductwork and clogs building HVAC filters reducing the heating and cooling effectiveness, efficiency and saves HVAC maintenance and filter change costs.

18. PURIFANS USE SAFE OZONE-FREE TECHNOLOGY

Purifan use low-cost, disposable, simple paper HEPA filter media and activated charcoal filters. No dangerous ozone or ions. Purifans are made in the USA.

19. PURIFANS HAVE A LIFETIME WARRANTY

Purifans help every student and teacher who uses that classroom in the future.

20. FREE TRIAL PROGRAMS IN YOUR CLASSROOMS

Schools can try Purifans at no charge to let their teachers and students confirm they will work and produce symptom improvements before they buy.

21. PURIFANS CAN REDUCE POTENTIAL PR AND LEGAL PROBLEMS

Asthma is now the number one chronic illness in children and increasing at record rates. Health problems related to asthma attacks, airborne mold in classrooms and many other common classroom air quality problems could cause the school to spend money on PR problems, IAQ testing and lawsuits. The high levels of particulates found in classroom air can create the perception of air quality problems, and serious health risks for teachers and students. Schools have recently lost multi-million dollar lawsuits related to Asthma deaths of students from Asthma attacks triggered by air quality problems.

**BUT THE BEST REASON TO INSTALL PURIFANS IS
THEY MORE THAN PAY FOR THEMSELVES!
SEE REASON 22**



22. PURIFANS CAN RETURN 20 TO 25 TIMES THEIR COST

Most school districts struggle to find the funding for classroom air filtration systems, because budgets are tight and finding funding for new projects can be very difficult. This is why we started the Purifan Clean Air for Kids Program to help schools find the funding needed. Using data supplied by each school district we calculate the potential payback to the families, teachers, school district and even to the state's children's health insurance program. We then use this information to apply for funding from private foundations, corporations, parents and government funding sources.

Q. WHAT DOES IT COST TO PURCHASE, INSTALL AND OPERATE PURIFANS?

Each school should get a custom bid based on their building layout, number of classrooms and special needs. But the average for the typical school installation is the first year install and operation cost is \$100 per student and then it costs about \$12.50 per student for filter maintenance for the following years. That adds up to about \$150 total in the first five years. The financial return from this investment can be more than 25 times this cost. For a 300 student elementary school the total five year cost is about \$45,000. Below are some of the projected financial benefits for the school district, families, employers and health insurance companies.

ATTENDANCE BASED FUNDING IMPACT - \$180,000 a 398% return.

The impact of increased attendance varies from state to state based on the weighting given to attendance. In states like California, Illinois and Texas the average daily attendance (ADA) sets the school funding received. Using \$32.43 per day (\$6,000 per year), and a 185 day school year, a 2% increase in attendance from say 94% to 96% would create \$180,000 in additional funding over the five year period. Actual school results have varied from 2% to over 6%.

IMPACT ON FAMILIES NOT MISSING WORK - \$815,345 or a 1,804% Return

When elementary children get sick, a parent may have to miss work. Using the projected 2% increase in attendance, and an estimated value of \$240 per day for paid sick leave, lost work value and medical costs generated by the illness. A 2% attendance increase is an average savings of 18.5 sick days for each child over the 5 years, valued at \$4,440 per child compared to the \$150 per child cost for the technology. Assuming only 60% of families have to miss work, the total value is still valued at \$815,345 a return of 1,804 percent.

REDUCTION OF TEACHER HEALTH INSURANCE COSTS - \$75,919 or a 168% Return

The 20 district employees in this building have health insurance costs of \$650 per month today, increasing 8% annually. That adds up to \$759,190 in district costs over five years. Since respiratory related illnesses are the most common health cost for teachers, a modest 10% savings would be \$75,919, a 168% return. There would be additional savings to the teachers for co-pays and deductibles. Lowering usage will reduce future insurance rates. Fewer sick days also means lower substitute teacher costs, estimated at \$9,600 (\$85 a day) another 21% return over the five year period.

MEDICAID INSURANCE SAVINGS FOR STATE-INSURED CHILDREN - \$259,773 or a 575% Return

In this example, we assume 40% of the children are insured by Medicaid. It is estimated from current Medicaid numbers that the average per child annual cost will be \$1,845, growing at 8%. That is \$10,824 over the five years for 120 students, or \$1,298,865 in state insurance costs. Since Asthma is the number one chronic illness in children, and rescue inhalers are the number one prescription drug for children in all 50 states, the goal is to save as much as 20% of Medicaid costs. That would add up to \$259,773 or a return of 575%. A 3 day asthma hospitalization now averages \$37,000, and it is not uncommon to find children who use \$300 per month in allergy and asthma medicine. In Purifan equipped schools inhaler use dropped by 70% according to school nurses. There would be similar, or larger, health cost savings for the other 60% covered by private health insurance programs provided by parents and employers.

The BOTTOM LINE is that Purifans more than pay for themselves in many ways. Each school's population is different and costs are unique, so let us prepare a custom payback study to help you find the money. Given these paybacks we believe money should be available from government sources in the form of school improvement grants, from parents and their local employers and from health insurance providers looking to reduce usage and costs. Local employers also want to keep parents at work. Schools can also get funding from foundations, fund-raisers and bond issues.



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