



Guide:

How Dirty Restrooms Can Negatively Impact Student Health and Learning

EXPLORING FACILITY
MANAGEMENT PROBLEMS AND
SOLUTIONS IN PRIMARY AND
SECONDARY INSTITUTIONS

PREPARED BY
SaniGLAZE International

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TILE & HARD SURFACE RESTORATION
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HOW AVOIDING SCHOOL RESTROOMS IMPACTS STUDENT HEALTH

Parents send their children to school with the expectation they will receive an education, and they'll remain emotionally and physically safe while that happens. Because of this, many restroom facilities in K-12 schools are a constant source of trouble. From unsanitary conditions, to being a prime bullying location— all the way to the long term health effects of avoiding restrooms —dirty restrooms can have a significantly detrimental effect on student health and learning.

“79% of respondents recognized the link between poor toilets and poor health, and 84% felt toilet-related health issues have a negative effect on children’s learning.”

— A survey of schools and school nurses, ERIC, 2010.

Given how often adults avoid unsanitary public restrooms, it makes sense that students often avoid school restrooms. However, while adults often have the ability to choose and visit a restroom of their choosing, students are, on average, at schools for 7 hours a day with only school restrooms to use. Avoidance of restroom use because of sanitation issues can negatively impact both health and learning.

Nursing Times reports, “A survey of schools and school nurses conducted by ERIC in 2010 found 79% of respondents recognized the link between poor toilets and poor health, and 84% felt toilet-related health issues have a negative effect on children’s learning.”

Policies on restroom visits and the conditions of the restrooms themselves can both deter students from using them. In 2018, a survey created by the Society for Women’s Health Research revealed a majority of school nurses said their schools lacked written policies regarding students’ restroom use. In addition, the condition of school restroom facilities and frequency of their maintenance can vary widely from one district to another. Unlike adults, school children often have no say in the cleanliness of the restrooms they have access to.

Dehydration can cause serious symptoms that detract from learning: fatigue, dizziness, poor concentration and reduced cognitive abilities.



EXAMPLES OF HEALTH EFFECTS

When students avoid unsanitary and smelly restroom facilities, it can create a variety of problems. Students may be tardy after searching out a cleaner restroom. They may avoid eating or drinking so as not to use the restroom during school. They may even “hold it” for long periods of time, which can lead to LUT and gastrointestinal health issues, as well as decreased focus and poorer learning outcomes.

Dehydration

Visits to the restroom can be difficult for students. Students are often expected to fit water and restroom breaks in the short times they are given to travel to their next class. Crowded hallways or a visit to their locker can make this even more challenging.

To avoid restrooms deemed unsanitary and to avoid being late, many students report reducing their intake of water or other drinks, potentially leading to dehydration.

Dehydration can cause serious symptoms that detract from learning: fatigue, dizziness, poor concentration and reduced cognitive abilities. The human brain is made up of 80% water, and as a result water is essential in neurological transmissions. On a cellular level, poor hydration reduces the brain’s ability to transmit and receive information.

Once a student is dehydrated enough to notice they are thirsty, their mental performance including memory, attention and concentration have all decreased by as much as 10 percent.

Urinary Health Issues

Even when students are hydrated enough, avoiding urination can also cause problems, such as lower urinary tract health issues, not to mention affecting a student’s ability to concentrate in class.

According to the Urology Care Foundation, the bladder stays healthy when it fills and empties without getting overfull. And holding urine for too long too often can cause lifelong problems carried into adulthood.

While educational institutions can have several areas of concern in regards to urinary health, restrooms play a vital role. A 2014 electronic cross-sectional survey among teachers, as reported in the National Center for Biotechnology Information, indicated 88 percent of respondents (4,166 teachers) encourage students to hold urine, which “can promote or exacerbate LUT dysfunction.” The survey also reported dirty restrooms as an issue by a third of respondents.

Gastrointestinal Health Issues

The avoidance of restrooms can also lead to gastrointestinal issues, such as chronic constipation or incontinence, in younger school children. Stinky toilets, no supplies, dirty floors and walls, and lack of privacy are all reasons children give pediatricians for not using school toilets. This can be problematic both in the classroom and at home, because it can set back potty training behaviors and mean a resurgence in accidents.

Spread of Germs

Unhealthy conditions lead to unhealthy schools thanks to the accelerated transmission of germs and bacteria. Given what goes on in restrooms, toilets, floors and tiled walls can harbor a whole host of bacteria, such as Norovirus, E. coli, Shigella, and Streptococcus. But avoiding restrooms can lead to an additional issue: A lack of hand washing.

Washing your hands after you use the restroom isn't just for germs introduced in the restroom – washing your hands after using the restroom is a way to ensure that the germs and bacteria that get on your hands in day-to-day activity are removed throughout the day.

With nearly 22 million U.S. school days lost to the common cold each year and 38 million lost to the flu, it's within educators' best interests to invest in procedures and policies that keep school restrooms safe and sanitary throughout the school year.



Caught in a Catch 22: How Both Using and Avoiding Dirty Restrooms Creates Problems

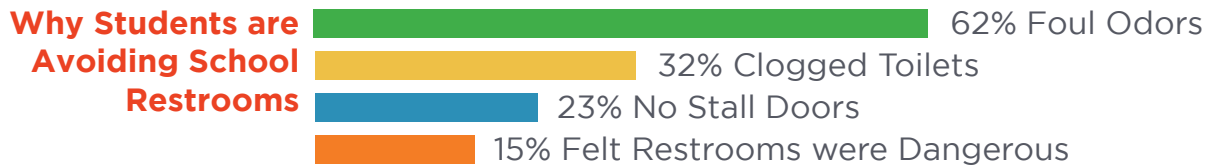
Students aren't the only ones with problems: Often administrators want to fix the issue, but lack the means and/or a clear path forward.

Schools across the country are being faced with serious restroom issues. In both rural and urban environments, schools are faced with reduced budgets and restrooms with conditions that prompt avoidance – and sometimes even prompt abuse.

And if unpleasant smells are being created and toilets are getting clogged, that means some students are using them and leaving them in less than appealing conditions.

If students do use unsanitary restrooms, whether they are forced or choose to, a new crop of problems emerges. Using restrooms means increased bacteria and odor. Transmission of that bacteria increases with the number of people using that restroom, and the potential for infectious illness rises dramatically.

When tight budgets negatively impact teaching salaries and student resources – sometimes prompting state walkouts and protests – it’s a safe bet school maintenance budgets are suffering as well. Because of the attention on education, unsanitary restrooms – and the problems they can cause – have become a more visible issue for schools and parents nationwide.



Promoting Bad Behavior, Undermining Positive Change

In addition, unkempt restrooms often seem to operate along the “broken windows” theory. This criminology theory states that an environment with visible signs of disorder invites further rule breaking and antisocial behavior. In the same way a broken window in a building can inspire vandalism, grimy restrooms can encourage visitors to defile them even further, and some school children seem perfectly willing to oblige. It’s a vicious cycle, it’s hard to always know where to place the blame.

“It’s filthy, sometimes smelly,” Joseph Norton, co-president of the PTA at a New York City school, said in an article addressing an aging urban school. “They claim the kids mess the restroom up, that they take the paper towels and throw them against the wall. That was one claim they made as to why there aren’t any paper towels in the restroom. But water rises to its level. If you treat these kids like animals, they behave like animals.” For that school, discussions between concerned parents and city leaders were more likely to be about restroom conditions than curriculum or academics.

“As one New York Times article put it: Dirty restrooms beget dirtier restrooms.”

Unsanitary restrooms can also undermine school wellness initiatives. Forcing students to endure incontinence issues at school because restrooms are disgusting, or even dangerous, is certainly not productive and can lead to bullying and behavioral problems.

At the same time, many schools will promote hydration for good health and encourage students to drink more water. If access isn’t restricted, this leads to more restroom breaks. However, while many schools offer kids unlimited access to water, very few offer unlimited access to restroom breaks. Either way, problems will persist until the restrooms are cleaned and/or renovated, and then maintained properly.



THE ISSA CLEAN STANDARD — MEASURING FOR SUCCESS

In order to provide school facilities managers and custodial staff a framework for cleanliness, The ISSA Clean Standard for K-12 schools was developed by a variety of industry experts, including those from facility management and school communities.

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Together, they worked with ISSA and the Cleaning Industry Research Institute (CIRI) to create the Clean Standard, which is essentially a methodology for measuring the efficacy of cleaning.

The Standard uses ATP* measurements to provide “ranges of clean,” which is paired with traditional, on site audits. The goal of using the Standard methodology is to ensure school facilities remain safe and sanitary for students and faculty, as well as providing codified corrective actions when the appropriate level of cleaning is not being achieved.

The ISSA Clean Standard for K-12 schools is built around these actions:

- Build an audit to measure levels of cleanliness of sites at a specific school.
- Periodically measure the effectiveness of cleaning methods through the use of ATP* meters.
- Create and implement corrective procedures when the desired level of sanitation is not being achieved.

* Adenosine triphosphate (ATP) is a molecule found in and around living cells, and as such it gives a direct measure of biological concentration and health. The ATP test is a process of rapidly measuring actively growing microorganisms through detection of ATP. ATP tests can be used to: Control biological treatment reactors, Guide biocide dosing programs, Determine drinking water cleanliness, Manage fermentation processes, Assess soil activity, Determine corrosion / deposit process type, Measure equipment or product sanitation.

Turner, D. E., Daugherty, E. K., Altier, C., & Maurer, K. J. (2010, March). Efficacy and limitations of an ATP-based monitoring system. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846007/>

“ATP sanitation monitoring systems can be utilized with accompanying data processing software to upload testing site information and to download testing results—using this combination allows for the tracking and analysis of a facility’s testing results.”

— Infection Control Today.

About the ISSA Clean Standard

The Standard does not prescribe any specific products or processes; it simply provides a measurement and monitoring framework. Schools can choose to use any ATP system they desire to gauge cleanliness, along with accompanying software for tracking data.

“ATP sanitation monitoring systems can be utilized with accompanying data processing software to upload testing site information and to download testing results—using this combination allows for the tracking and analysis of a facility’s testing results,” reports Infection Control Today.

The Standard was developed to deliver scientific validation of cleaning effectiveness. So, data collection and tracking are an essential part of using the system. On site audit results can be compared to various “ranges of clean,” which were developed using ATP measurements of high-touch surfaces from within numerous schools nationwide.

Restrooms and the ISSA Standards

With the implementation of the ISSA Clean Standard, K-12 schools can not only improve their restroom sanitation and maintenance practices, they can also rely on program data to calm parents’ concerns about school conditions, validate performance and value, and even justify budget expenditures and increased cleaning frequency.

In the restroom survey, several things are checked, some that are within the realm of custodial staff and other things that are in the jurisdiction of physical plant or building operations staff -- but many fall in the gray area in between.

For instance, it’s clear that a custodial staff can’t be expected to address water faucets, toilets or urinals that aren’t operating properly. However multiple standards address restroom items that are expected to function properly and be free of soil and dust.



Good Intentions Gone Wrong: Effects of Heavy Decontaminant Usage

Unfortunately, issues can arise even when restroom cleanliness is taken seriously. In an effort to ensure dangerous germs and bacteria are removed, harsh chemicals can be used to the point of damaging the tile and hard surfaces making them more susceptible to harboring future germs and bacteria.

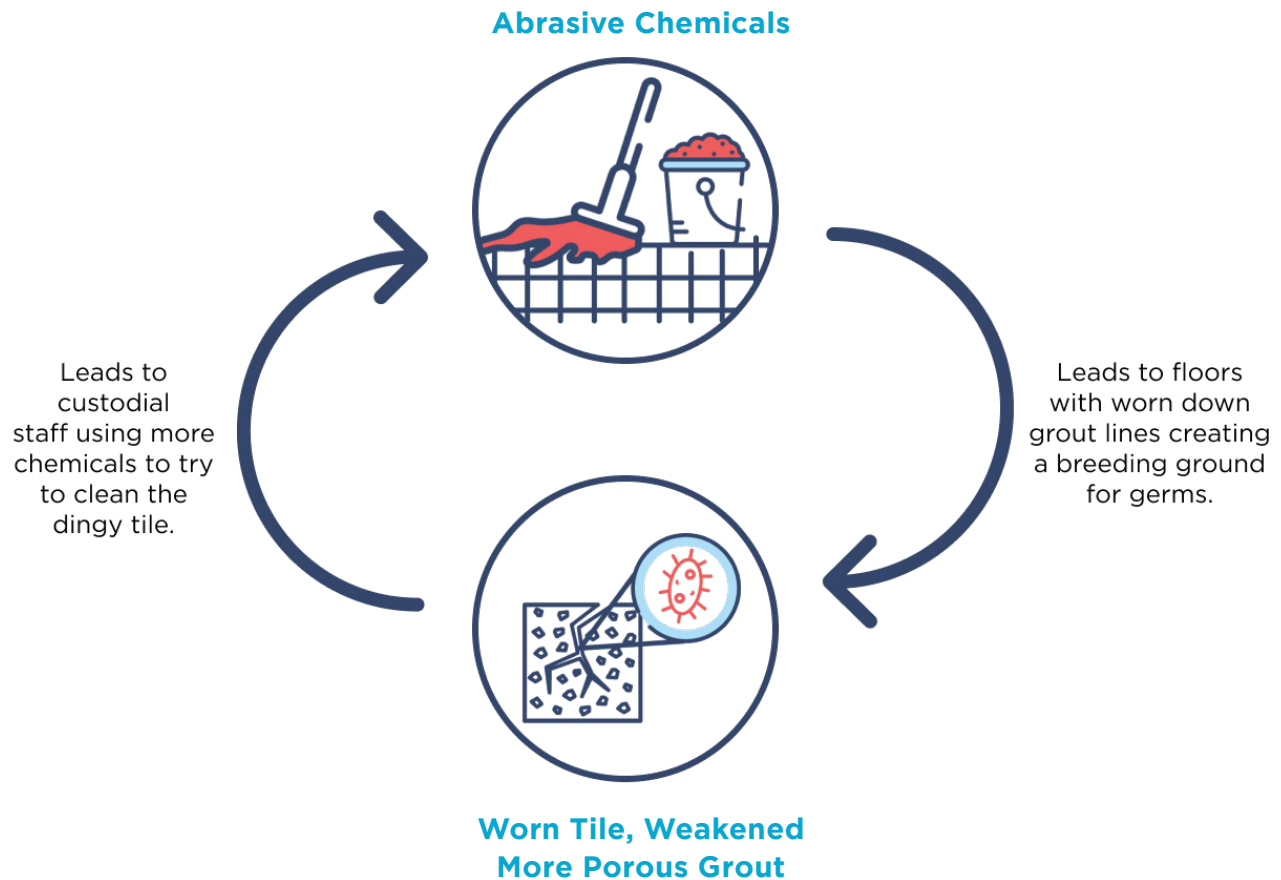
The potential presence of human excrement often compels staff to sanitize flooring with harsh chemicals, like bleach, or other decontaminants. But despite the best intentions, this practice can be counterproductive. Longterm, a strong chemical disinfectant isn't always the best solution.

Products that are incompatible with certain types of flooring can not only cause discoloration and fading, but they can also damage the surface itself and leave floors vulnerable to becoming hotbeds for bacterial growth.

Although early damage from harsh chemicals may still be invisible to the naked eye, any slightly pitted or corroded areas invite bacteria to enter and breed. Improper management of dilution ratios and dwell times may also contribute to the damage disinfectants can cause.

Because of this, it is important that custodial staff have access to and are trained on using the proper decontaminants and that damage from long-term heavy disinfectant use is resolved.

THE DANGEROUS CYCLE OF USING THE WRONG CLEANING METHODS ON TILE AND GROUT.





SHEDDING A LIGHT IN DARK PLACES: VIRAL COMPLAINTS IN THE AGE OF INFORMATION

Students today are more tech-savvy and activism oriented than ever before, which can be problematic for schools. Although modern media mixed with a focus on creating a better world offers endless learning opportunities for students, it's also there to allow them to broadcast what they perceive as a school's failures and shortcomings.

*Some students are jumping onto platforms like YouTube, TikTok or Twitter to shed light on the **disgusting restroom** conditions they are expected to deal with **on a daily basis**.*

Today's youth are not strangers to activism, whether that's promoting change nationwide or within their own schools. Some students are jumping onto platforms like YouTube, TikTok or Twitter to shed light on the disgusting restroom conditions they are expected to deal with on a daily basis.

Thanks to technology such as smart phones and media platforms like Facebook, a complaint and firsthand account can be spread to viewers across the world in a matter of minutes. Often, students take matters into their own hands, creating online and video surveys of other students' perspectives and how issues affect them.

Other times, it's parents and student activists shedding light on problems they feel must be corrected. Between outraged parents and dramatic teenagers, the videos are sometimes humorous, but the potential problems they create for schools and administrators are no laughing matter.

When smelly, unsanitary restrooms are a daily occurrence at a school, a single photo or video can spark controversy – especially when students or their advocates are unhappy.

After several years of tough budget cuts, schools all over the nation are struggling to find funding for maintenance and renovations, and dealing with the resulting fallout when poor conditions come to light. With the prevalence of social media, the sanitation and safety issues impacting today's school children are getting more attention, for better or for worse.



BREAKING THE CYCLE OF SOILING: USING SANIGLAZE TO SEAL OUT CONTAMINANTS AND ODOR

SaniGLAZE has been used by educational facilities for decades as a way to dramatically improve the condition and appearance of their tile and hard surfaces—for a fraction of the cost of replacement.

The multi-step restoration process allows schools to sidestep the high cost of ripping out and replacing unsanitary, damaged tile.

The multi-step restoration process allows schools to sidestep the high cost of ripping out and replacing unsanitary, damaged tile, and instead remove contaminants and instead remove contaminants, ensuring tile and hard surfaces stay cleaner for longer with the custodial efforts that are already happening day-to-day.

How It Works

Starting with an intense extraction process developed through years of rigorous testing and analysis, SaniGLAZE removes deeply embedded contaminants through a variety of proprietary products and processes.

Extraction removes all the foul liquids and grime (and the odors they breed) from porous grout lines and damaged flooring. A specially formulated Grout Glazing Compound can then be bonded to existing grout. This restorative bonding process returns grout lines to a “like-new” condition—or better, for those opting to upgrade its color.



Beverly Shores Elementary School | Leesburg, FL (Lake County) | Performed by Cubix, Inc.

SaniGLAZE's full line of products can provide sustainable maintenance.

In addition, a SaniGLAZE protective coating can be applied to the entire tile and grout surface. These advanced, proprietary shields can add durability and shine to floors and walls with a clear formulation, or customers can instantly alter a space's eye appeal thanks to new color options and decorative elements.

SaniGLAZE isn't all eye appeal, though. Thanks to the SaniGLAZE restorative bonding process, grout lines are securely sealed – banishing moisture, bacteria and the foul odors they create. Grout, by nature, is porous. Unless it is sealed, water, urine and dirt can become embedded in grout lines – leading to unsightly surfaces and distasteful smells. Frequent cleaning with harsh chemicals to eliminate soiling can hasten grout deterioration, causing soiling to accelerate.

SaniGLAZE products and processes, formulated for heavy institutional use, can fix this and help provide sustainable maintenance solutions that enhance product longevity and cleaning efficiency. Combine that with an assortment of design options – from bright or soothing colors to eye-catching metallic chips – and you have a hard surface solution that offers long-term value in multiple areas. In addition to cleaning and sanitizing, SaniGLAZE allows facilities to update and improve a space's design for much less than it costs to replace problem areas. This not only benefits the budget, it can also positively impact the perceptions of school staff, parents and advocates, and the students themselves.

EXAMPLES OF SANIGLAZE IN EDUCATIONAL FACILITIES

Service providers across North America have helped transform restrooms and floors to create a better looking and better smelling learning environment. Hear from some of the satisfied SaniGLAZE customers!



Sebastian River High School | Sebastian, FL (Indian River County) | Performed by SaniGLAZE Miami



“I want to thank you for your work at our Carmel Elementary School and Smoky Row Elementary School the past two summers.

We have been very pleased with the results of your restoration work. The work in the restroom for the ceramic tile floors significantly improved the appearance of these older floors. I am confident that our school users and patrons find the restrooms much more presentable and their confidence in the cleanliness is dramatically improved.”

Ron Farrand,
Carmel Clay Schools



“I would recommend this product for use in areas that have a high volume of use and need to be cleaned easily and quickly.”

Christopher Mano,
Pinellas County Schools



“We cleaned our tiles the best we could, but we were not happy with the long term results. Typically within months the floors would be dirty again, despite the efforts of our cleaning staff. It was time for us to either replace the tile or take a different direction. Given the options provided to us, the VariGLAZE system was the right choice for us. I would highly recommend their work to any facility looking to restore their existing floors with the SaniGLAZE or VariGLAZE system.”

Clint Smith,
Citrus County Schools

Get Started with SaniGLAZE

Given the school of thought that a broken window on a building will invite vandalism, lackadaisical maintenance of school restrooms can inspire students to be lackadaisical in their willingness to keep things tidy, but the reverse can also be true. Many schools report that after renovating their restrooms, students better maintained cleanliness in those areas. It seems a sense of student pride can extend even to restrooms – when students are provided spaces they are able to take pride in.

Contact SaniGLAZE to schedule a free consultation where you can learn which services are best for your facility's needs, whether that's intense cleaning, advanced floor, and wall shielding, or a myriad of eye-catching design options to brighten the moods of students and staff.

At the consultation, your local SaniGLAZE Service Provider will speak with you about the pressing issues within your facility and suggest possible solutions. In many cases, after a consultation, a SaniGLAZE Demo can be completed in the selected areas so you and your team can experience the difference firsthand.



Contact saniglaze via email, phone or online to learn how our flooring solutions can improve your learning environment today.

Visit www.saniglaze.com or give us a call 1-800-874-5554