

Improving the Grade

How Localities (in States that Penalize School Absences) Can Support Student Health, School Attendance, and Educational Achievement

A Guide for Local Policymakers and Advocates



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Law & policy innovation for the common good.

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Prepared by Bruce D. Baker, Rutgers University

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INTRODUCTION

When average daily attendance (ADA) is used as a factor to determine funding levels for school districts, those districts that serve low-income and chronically ill children are placed at a significant disadvantage compared to districts serving wealthier, healthier children. This brief has three primary aims: first, to provide local policymakers with an overview of the different student enrollment count methods that can be used to determine school financing; second, to illustrate how chronic health conditions influence student attendance; and third, to present recommendations for local actions that can mitigate the impact of ADA-based school funding formulas.

The brief begins by discussing the reasons why children miss school. Next, we provide an overview of the types of enrollment count methods that exist across state school finance systems and briefly touch on how each of these methods favor or disfavor schools that serve low-income and chronically ill children. We then review the states that use average daily attendance measures to calculate school financing and estimate the magnitude of aid losses and district budget reductions that result from the application of ADA-based funding criteria. We explore the connections among student absences, chronic health conditions, and childhood poverty. Finally, we conclude with a discussion of policy recommendations for mitigating budgetary shortfalls that result from ADA-based funding formulas.

WHY CHILDREN MISS SCHOOL

In policy literature, the prevailing assumption is that school absences are due primarily to truancy (or other types of voluntary choices made by students or parents). Some literature examines the psychological causes of truancy, including reasons why children don't like to come to school, or how difficulties at home may interfere with their desire to attend.¹ A different body of literature has, to some extent, addressed the relationship between children's health and school attendance, focusing primarily on the co-occurrence of asthma and obesity with childhood poverty.² But there exists no thorough and consistent examination of how children's health impacts "truancy," nor has there been any rigorous accounting of the myriad other causes of non-attendance.

In 2009, the National Center for Education Statistics proposed a taxonomy for school district absence accounting, including absences due to: a) non-instructional activity recognized by the state or school; b) religious observation; c) illness, injury, or health treatment or examination; d) family emergency or bereavement; e) disciplinary action; f) legal or judicial requirement; g) family activity; h) student employment; i) lack of available transportation; j) truancy; and k) unknown.³ Clearly, there exist many causes for school absences (as well as variation in state policies as to what constitutes an excused versus an unexcused absence). But there is very little data on which to base assumptions about the proportion of absences that are due to truancy rather than to chronic health conditions or other causes. Similarly, there is a dearth of hard data on how or why absence rates correlate to family economic circumstance.

More research is needed but some basic facts are well-established. Low-income children are most likely to be chronically absent from school⁴ and to suffer from chronic health conditions.⁵ Therefore it is reasonable to assume that when a state financing system penalizes a school district that serves a large population of low-income children for high rates of absenteeism, the state is penalizing both schools and students for some circumstances that are largely out of their control.

Research on asthma and student absences illustrates why it is important to consider the health-related causes of absences, particularly in poorer school districts. In 2008, asthma accounted for approximately 14.4 million lost school days.⁶ A study of over 9,000 students in a predominantly African American urban school district in St. Louis, Missouri found that students with any degree of asthma experienced, on average, 30 percent more absent days than those without asthma. Students with moderate to severe asthma experienced, on average, 4.3 times the number of absences of non-asthmatic children.⁷ In a smaller study of 528 students in an inner-city school in Los Angeles, younger students with known asthma missed, on average, two more days of school than children without known asthma.⁸ Using data from a state-wide survey, researchers in California found that students who attended schools with the highest concentrations of low-income students were more likely to miss school because of asthma than those at schools where the concentration of low-income students was lower. Noting that California schools receive funding based on average daily attendance, the researchers suggested that schools with a large proportion of low-income students may receive fewer state funds because their children are more likely to miss school because of asthma. They also suggested that school-level interventions that help children manage their asthma may decrease school absenteeism.⁹

HOW SCHOOL ATTENDANCE AFFECTS SCHOOL FINANCING

The following methods are used for counting students and determining levels of state aid to school districts. These methods may include single or multi-day counts:

- **Fall Enrollment Count:** Fall enrollment is generally based on the number of students either enrolled or in attendance on a specific date early in the fall of the school year. In other words, the figure may be based on the number of students enrolled in a district, or on the number who actually attended on the specified date. These fall single-day student counts are sometimes reconciled with a spring/January recalculation, triggering adjustments in remaining aid payments.
- **Average Daily Attendance:** Average daily attendance (ADA) counts are based on the numbers of children actually in attendance in a school or district each day, and then, typically, averaged on a bimonthly or quarterly basis.
- **Average Daily Membership:** Average daily membership (ADM) or average daily enrollment (ADE) measures the numbers of children enrolled to attend a specific district throughout the year, and may also be periodically reconciled.

(Appendix 1 examines the basic state school financing formula template, and illustrates how the formula works with concrete examples.)

It is important to note that if states use average daily membership or average daily enrollment to calculate aid, districts receive funding based on the number of students who are *enrolled* in class rather than the number of students that *attend* class.

THE IMPACT OF USING AVERAGE DAILY ATTENDANCE TO CALCULATE FUNDING FOR LOCAL SCHOOL DISTRICTS

School districts must plan to serve all students who are eligible to attend (i.e., enrolled in school), not merely those accounted for by the average rate of attendance. While some children are absent more than others, 100 percent are likely to attend at some point during the year and on any given day there must be desks, chairs, materials, supplies, and equipment available for each enrolled child. Districts cannot be expected to function with resources to serve only 90 percent of their eligible children, though this is what ADA-based accounting requires.

Because some states have created “exception policies” that exclude certain types of days from their ADA calculations, the use of ADA as a basis for determining funding can also have unintended consequences. For example, days when schools are closed because of bad weather are not factored into average daily attendance. Therefore, some districts may choose to declare more school closure days in order to reduce the risk of a low average daily attendance figure. School districts might, for example, choose to close for more days during flu season, as attendance drops off. The number of weather-related closures may increase as well (with some districts more affected than others in this regard), as fewer children may come to school in inclement weather even when school remains open. If a district cancels school on bad-weather days, postponing school for better-weather days, they can maintain a higher ADA. In this way, ADA-based funding measures may create an “itchy trigger finger” on school closures.¹⁰

WHY STATES USE AVERAGE DAILY ATTENDANCE

The education policy community has long recognized that financing on the basis of attendance measures systematically reduces funding in high-poverty settings.¹¹ This is why few policy experts advocate such approaches. But recent fiscal pressures on states and their school funding systems have incentivized policymakers to cut corners, with little regard for the needs of children in high-poverty districts. Legislators in the State of Washington recently tried to shift toward ADA-based school district funding, but their efforts failed.¹² Meanwhile, New Jersey officials introduced an “attendance factor” to their state school funding formula through the executive budget, reducing aid for at-risk student populations below levels set by the state’s School Funding Reform Act of 2008.¹³

When pushed to rationalize ADA-based school financing, state policymakers often suggest that such policies create an incentive for school officials to increase attendance rates.¹⁴ This argument is specious for a number of reasons:

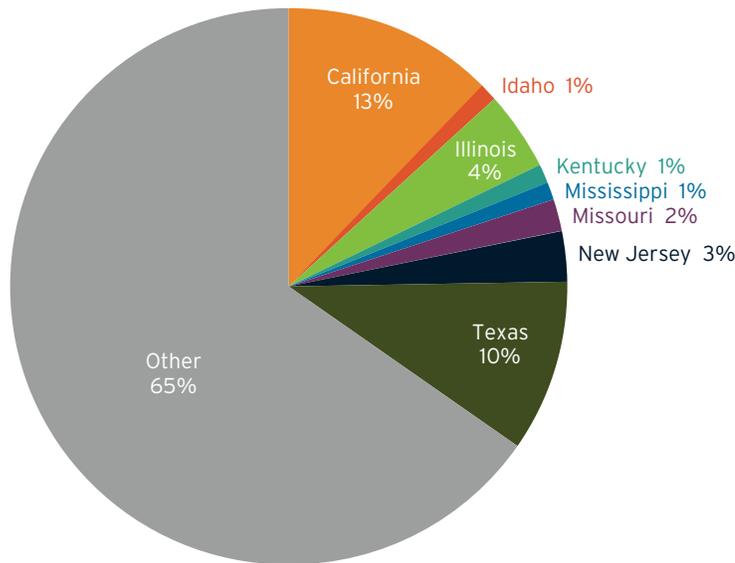
- First, depriving local public school districts of state aid lessens their capacity to provide interventions that might lead to improved attendance rates.
- Second, many school absences are simply beyond the control of local public school officials. This is particularly the case for poverty-induced, chronic health condition-related absences.
- Finally, there exists little or no sound empirical evidence that ADA-based financing provides an effective incentive.¹⁵

Also, as noted above, local public school districts are responsible for providing the resources to educate all eligible enrolled children. While only 90 percent may be in attendance on any given day, and while some children may be absent more than others, the same 90 percent are not in attendance every day. In all likelihood, 100 percent of eligible enrolled children attend at some point (at least) in the year.

WHICH STATES USE AVERAGE DAILY ATTENDANCE

Only seven states rely on a measure of average daily attendance for funding purposes; however those seven states account for more than 1/3 of all enrollments nationally, as they include California, Texas and Illinois. Also, New Jersey uses an attendance factor that is very similar to ADA.¹⁶ Figure 1 lists the states (including New Jersey) that use ADA measures in their state school finance systems. Idaho and Illinois use modified ADA counts, which permit districts to report their best three months (Illinois) or best 28 weeks (Idaho), thereby mitigating aid reductions. Nonetheless, other characteristics of the formulas employed by these states lead to overall regressive patterns; that is to say, schools that serve poorer communities receive less funding. It is important to evaluate the overall fairness of a state school finance system. In some cases, use of ADA measures in aid formulas can be more harmful than in others, because the overall formulas may include reinforcing and/or counterbalancing factors.¹⁷

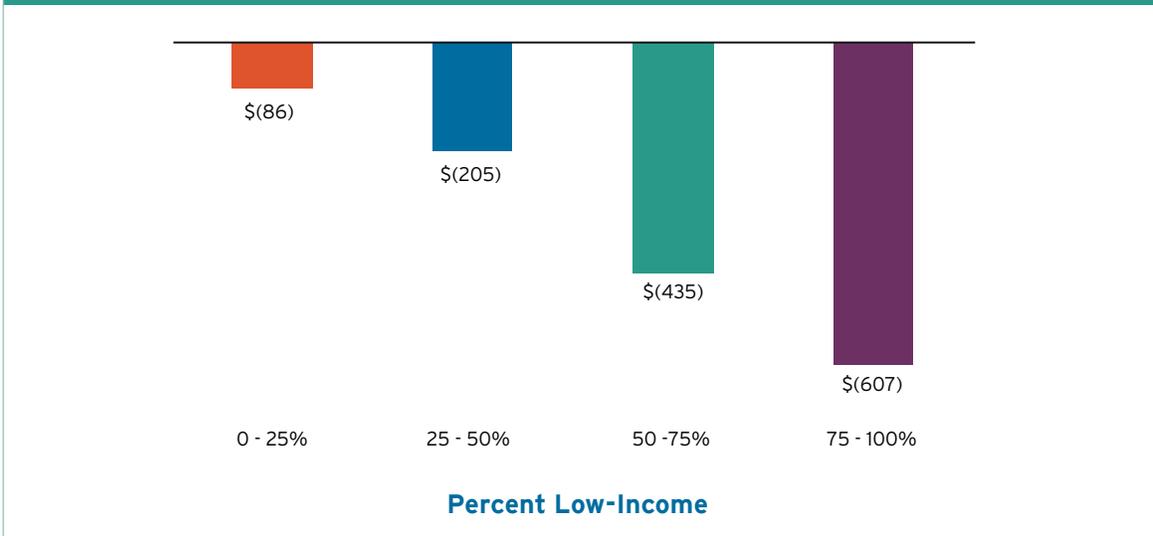
FIGURE 1. NATIONAL ENROLLMENT SHARE OF CHILDREN IN STATES USING ADA FOR FUNDING PURPOSES
U.S. CENSUS FISCAL SURVEY 2010-11



An “adequacy budget” or “adequacy target” refers to the amount of per-student funding required to provide essential school resources and meet the basic educational needs of all students. (An adequacy budget generally also includes considerations of the specific needs of the student population served by a district.) However, in the face of state aid reduction, despite the “realities on the ground,” adequacy budgets are often forced to shrink. Figure 2 below starkly illustrates the highly regressive and disproportionate impact of New Jersey’s “attendance factor” on the adequacy budgets of New Jersey school districts that serve higher numbers of low-income children.

Figure 2 shows actual estimates of reductions in target adequacy budgets per pupil that New Jersey districts faced under the Governor’s 2013 budget. Districts with high concentrations of low-income children saw their adequacy budgets reduced by over \$600 per pupil, almost entirely due to reductions in state aid, whereas districts with low concentrations of low-income children saw their adequacy budgets reduced by under \$100 per pupil, with little to no loss in state aid, because their local contribution represents a much higher share of their district budgets. Low-poverty districts fund their adequacy budgets mostly through local taxes and other local funding; thus they remain relatively buffered from the effects of state aid cuts. More specifically, Camden City schools saw their adequacy budget reduced by \$1,000 per pupil, Newark by \$919 per pupil, and Trenton by \$1,173 per pupil, while affluent districts such as Livingston, Alpine, and Mendham saw no reductions at all.

FIGURE 2¹⁸
PER-STUDENT ADEQUACY TARGET REDUCTIONS RESULTING FROM ATTENDANCE ADJUSTMENT TO NJ STATE AID FORMULA (BY COMMUNITY INCOME BRACKET)
FY 2013



These patterns of target budget reduction and aid loss are typical.

HOW CHILD POVERTY AND CHRONIC HEALTH CONDITIONS RELATE TO ATTENDANCE

As mentioned at the outset of this brief, a common argument in favor of attendance-based funding is that it provides an incentive for local public school districts to engage more actively in improving student attendance. This incentive argument is built on the unfounded assumption that lagging attendance is entirely (or primarily) voluntary, and that the primary cause of attendance variation across districts is truancy.

If non-attendance results primarily from voluntary truancy, then local school officials might have significant control over improving attendance through both reactive and proactive policies. For example, local school officials might work to establish closer relationships with families of children at greater risk of skipping, checking in more frequently and providing additional supports. Local school officials might also seek to make school a more friendly, positive, and interesting place to be for those children who have become disengaged.

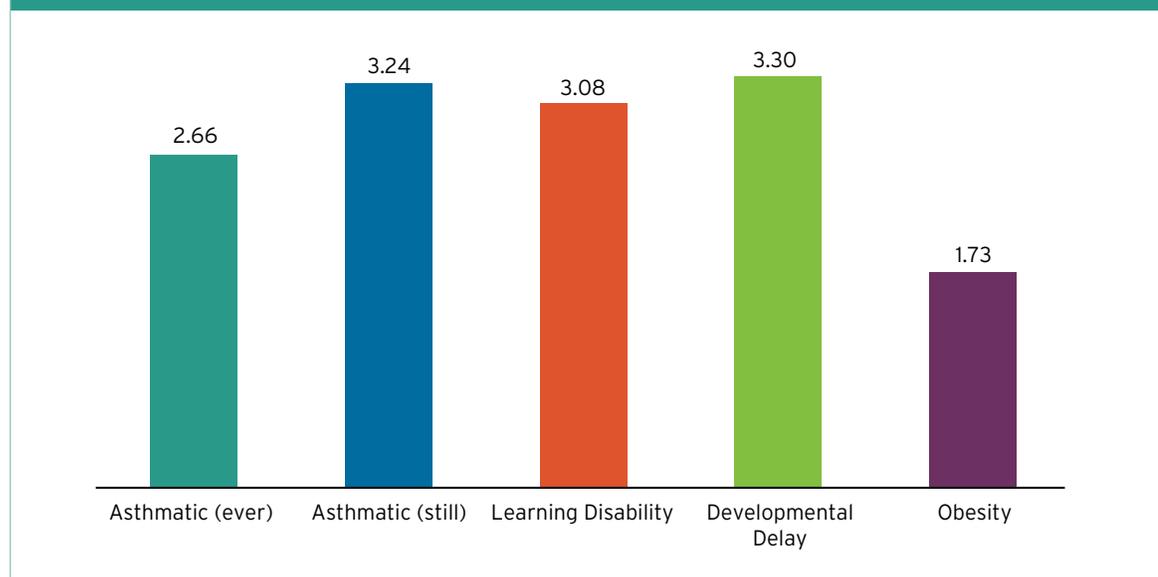
However, there are a variety of causes for variations in attendance rates, including family economic conditions, housing instability, access (or lack thereof) to transportation, and differing ability of parents to support school participation and help their kids get to school on time (either by driving them or making sure they catch the bus).¹⁹ Access to social services on school grounds may help to mitigate some of these challenges. But social services are less likely to be efficacious where non-attendance is due to chronic illness.

Data from the National Health Interview Surveys (NHIS) provides significant evidence that childhood chronic health and psychological conditions are strongly associated with school absences:

- Children who are obese are 1.7 times more likely to have 10 or more school absences in a given year than their non-obese peers at the same poverty level, of the same gender, and in the same region and year.
- Children with developmental delays are 3.3 times as likely to have 10 or more school absences as their peers at the same poverty level, of the same gender, and in the same region and year.
- Children with learning disabilities are 3.1 times as likely to have 10 or more absences as their peers at the same poverty level, of the same gender, and in the same region and year.
- Children with persistent asthma are 3.2 times as likely to have 10 or more absences as their peers at the same poverty level, of the same gender, and in the same region and year.
- Children who have ever been identified as having asthma are 2.7 times as likely to have 10 or more absences as their peers at the same poverty level, of the same gender, and in the same region and year.

Figure 3 below provides a visual depiction of the odds ratios described above. The bars illustrate that children with chronic conditions are statistically more likely than their peers to miss school 10 or more times during the school year. For example, the leftmost bar shows that a child who has had asthma in the past is 2.66 times as likely to miss school 10 or more times as a child who has never had asthma, while the next bar illustrates that a child who currently has asthma is 3.24 times as likely to miss school 10 or more times as a healthy child.

FIGURE 3
ODDS OF GREATER THAN 10 ABSENCES PER SCHOOL YEAR
NATIONAL HEALTH INTERVIEW SURVEY
(CONTROLLING FOR CHILD AGE, REGION, GENDER, AND YEAR OF DATA)



Data Source: Centers for Disease Control, National Health Interview Survey. www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm#2012_NHIS Specific values in chart estimated by author. The author controlled for child age and year of data.

The same data source, the National Health Interview Survey, also indicates a strong link between child poverty and chronic health conditions:

- Children from families in poverty are 86 percent more likely to be obese than their non-poor peers of the same age, of the same gender, and within the same geographic region.
- Children from families in poverty are 22 percent more likely to be identified as having developmental delays than their non-poor peers of the same age, of the same gender, and within the same geographic region.
- Children from families in poverty are 73 percent more likely to be identified as having learning disabilities than their non-poor peers of the same age, of the same gender, and within the same geographic region.
- Children from families in poverty are 34 percent more likely to have been identified at some point as having asthma and 47 percent more likely to still have asthma than their non-poor peers of the same age, of the same gender, and within the same geographic region than their non-poor peers.

The health and poverty statistics above are sobering. Although school financing mechanisms are complex, local policymakers can take actions to prevent or mitigate the funding disparities caused by ADA-based funding policies. The next section discusses possible strategies.

A GUIDE FOR LOCAL ACTION AND ADVOCACY

Below are suggestions for local actions and strategies to improve children's health, increase awareness about the connection between children's health and school attendance, and thereby mitigate financial losses that result from poor ADA rates.

EDUCATE STATE POLICYMAKERS ABOUT HARM CAUSED BY AVERAGE DAILY ATTENDANCE MEASURES

While state policymakers may be reticent to undertake the difficult task of redrafting their state aid formulas in order to remove socioeconomically discriminatory factors, local policymakers and advocates should not sit idly by. At the very least, local policymakers and advocates should carefully monitor any proposed changes to enrollment count methods in state aid formulas, taking action to prevent further expansion of attendance-based count methods.

Further, as we discuss below, local policymakers and advocates are well-positioned to educate state and federal officials about how families and students are impacted by state and federal policies.

ADVOCATE FOR LOCAL POLICIES THAT PROMOTE CHILDREN'S HEALTH

If changing the state aid formula is not possible, localities can take steps to promote student health and address chronic disease, which will in turn improve attendance and mitigate financial harm.

Track the Causes of School Absences

First and foremost it is important that local officials and advocates develop a nuanced understanding of the causes of school absences, in part by better tracking those causes. It is especially important to distinguish between those absences which are variations of "truancy" (or children's and parents' voluntary decisions not to attend) and absences due to other causes, such as health issues or other barriers to attendance. Truancy remediation strategies alone are insufficient for mitigating all school absences.

Incorporate Chronic Disease Prevention Strategies into Local School Wellness Policies

School wellness policies set district priorities related to student health and wellness. As of 2006, all school districts that participate in the National School Lunch Program have been required by federal law to develop and adopt a Local School Wellness Policy. The 2010 Healthy, Hunger-Free Kids Act added new requirements for school wellness policies. The USDA plans to release a final rule on wellness policies in late 2014, so this is a good time to evaluate the content of local policies. Many school districts started reviewing their existing school wellness policies during the 2011-2012 school year, and all districts should plan to have a revised policy in place by the start of the 2015-2016 school year.²⁰

Wellness policies typically include provisions pertaining to: 1) nutrition education and promotion; (2) standards for competitive foods and beverages (i.e., food sold on school grounds separately from school meals); (3) nutrition standards for school meals; (4) physical education (PE); (5) physical activity other than PE; (6) the involvement of stakeholders such as parents, guardians, and school administrators; and (7) wellness policy monitoring, evaluation, and reporting. The provisions that pertain to nutrition and physical activity help to promote student health and reduce risk factors for chronic conditions such as obesity and diabetes.

Although most schools have wellness policies, the comprehensiveness and effectiveness of different policies vary widely. Below, three recommendations are offered for how schools can maximize the impact of their wellness policies and best benefit student health. These recommendations are adapted in part from a series of policy briefs prepared by the Bridging the Gap program at the University of Illinois and the Centers for Disease Control²¹:

- While most schools have instituted nutrition education, far fewer schools have taken additional steps to promote healthy food on campus. Schools can promote nutrition and encourage healthy choices by favorably pricing healthy food options, restricting advertising of unhealthy foods, and developing strategies to encourage students to partake of school meals.²²
- Federal nutrition standards apply to competitive foods sold at school during the school day. School districts can extend these standards to competitive foods sold on campus after normal school hours, when students attend after-school programs or participate in extra-curricular activities. This will further support parents' and schools' efforts to promote a healthy food environment at school and ensure that students have access to healthy foods while engaged in activities during the after-school period.
- Many school wellness policies contain some provisions about physical activity, but only a few include specific requirements as to the number and duration of physical activity breaks per school day. Schools can increase the likelihood that students will get enough physical activity during the day by incorporating, in their wellness policies, specific targets for physical activity breaks.²³

While wellness policies have traditionally addressed physical education and nutrition during the school day, they can also encourage a wide range of healthy behaviors. Safe Routes to Schools initiatives are a good example. A growing body of literature supports the development of walkable communities and increased "active transportation" (walking, biking, skateboarding, etc.) to schools as a means of improving children's (and the community's) health. Active transportation can help reduce the risk of certain chronic diseases. Specifically, recent findings emphasize the positive influence of walkable communities on student obesity, a significant correlate of asthma and school absence.²⁴ Physical activity also improves mental health, attendance, and academic performance.²⁵ School districts can help promote physical activity by including provisions in their wellness policies that encourage active transportation to and from school.²⁶

Push for Local Policies That Support Healthy Choices

Schools play an extremely important role in promoting student health. The food environment in schools has improved significantly over the last decade. At the federal level, school meals standards have been strengthened; "competitive foods" or snack foods sold on school grounds also have to meet stricter standards; and new proposed regulations restrict the marketing of unhealthy food and beverages on school grounds.²⁷ All of these changes will have a positive impact on student health and, in fact, some districts are starting to see lower student obesity rates.²⁸

Unfortunately, these healthy changes are undermined by an unhealthy food environment away from school grounds. Local policymakers can work to align community food policies with school food policies. Sugary beverages provide an example of how this might work. Increasingly, research demonstrates that the consumption of sugary beverages is a major risk factor for obesity and the development of Type II diabetes.²⁹ Many schools across the country have effectively eliminated sugary beverages from their campuses. They are not sold in the school cafeteria or in vending machines. When students leave campus, however, sugary beverages are everywhere. Local policymakers can employ a number of strategies to limit the availability of sugary drinks, promote community health, and harmonize community nutrition standards with school nutrition standards. They can limit the sale of sugary drinks on government property; limit access to sugary drinks in childcare settings; restrict the sale of sugary drinks near school grounds; require that milk or water is the default drink with children's meals at fast food restaurants; and support a tax on

sugary beverages.³⁰ Many communities are considering some or all of these strategies in light of the nation's obesity epidemic.

Institute Local Policies to Improve Housing Conditions

In addition to school and community-based policies, housing policies have a huge impact on children's health. Unhealthy housing conditions, such as poor air quality or pests in the home, can trigger serious health problems for children, including asthma, obesity, and developmental delay.³¹ These common illnesses can in turn lead to school absences. To help improve school attendance, local jurisdictions can adopt policies aimed at preventing some of the housing conditions that are known triggers for illness and disease. Such policies include mold and moisture remediation, integrated pest management programs (IPM), proactive rental inspection, and smokefree housing policies.

Mold and Moisture Policies

Excessive moisture in the home can cause mold growth and provide an environment favorable to dust mites, cockroaches, mice, rats, and other pests. The presence of these allergens may trigger and/or worsen asthma, allergies, respiratory infections, and breathing difficulties.³² Mold and moisture in the home can particularly affect children of low-income tenants, who are known to have the highest rates of asthma.³³ Asthma remains the primary cause of school absences due to chronic disease and also accounts for three times more lost school days than any other illness.³⁴

Local policymakers can adopt many different strategies to address mold-related housing conditions, including: adding specific statutory language to health, housing, and nuisance codes, establishing the presence of mold or excessive moisture as a code violation; training housing enforcement officers to recognize mold as evidence of a moisture problem; requiring sellers and landlords to provide disclosures of the presence of mold with the sale or rental of residential real property; and providing tenants of rental properties with the statutory right to terminate a lease when a mold problem is not remediated.³⁵

Integrated Pest Management

In 2009, the U.S. Surgeon General issued a Call to Action to Promote Healthy Homes, noting in particular that substandard housing conditions (normally caused by neglectful upkeep) often result in pest infestation.³⁶ Pests such as cockroaches, mice, flies, and rats can transmit disease and cause asthma in children.³⁷

It is common for residents in affected units to take pest management measures into their own hands, generally with poor results. Chemical pesticides and rodenticides are often not fresh, or they are used incorrectly, and many leave behind harmful chemical residues on household surfaces and in the air.³⁸ Children are particularly vulnerable to adverse health effects of pesticide exposure, including exacerbation of asthma, delayed neurological development, and even insecticide poisoning.³⁹ Exposure to commonly used home insecticides via inhalation, ingestion, or skin absorption can cause seizures, lethargy, stupor, or coma in children, leading to hospital admission and (of course) absences from school.^{40,41}

Local governments can require rental property owners to employ integrated pest management (IPM). The object of IPM is to manage pest damage by the most economical means and, more importantly, with the least possible hazard to people, property, and the environment.⁴² An IPM approach to pest infestations can eliminate pests while reducing reliance on chemical pesticides,⁴³ thereby reducing the risk of harmful exposure for children.

Proactive Rental Inspection

Code enforcement for rental housing is commonly complaint-based, which means that code enforcement officers are dispatched to a property in response to a resident's complaint about a substandard housing condition. The officer conducts an inspection of the property, and if a violation is found, he or she initiates enforcement proceedings.

Under a proactive rental inspection (PRI) program, rather than wait for complaints, a locality can dispatch enforcement officers to inspect all covered rental housing on a periodic basis to ensure that properties are safe and habitable. A PRI program benefits vulnerable tenants, including children of low-income residents, the elderly, and non-English speaking immigrants who often don't make complaints despite living in the worst housing conditions.⁴⁴ Putting the onus on the government, rather than on tenants, to monitor compliance with housing and property maintenance codes guarantees that children can reside in well-maintained rental units regardless of whether or not their parents lodge complaints about substandard conditions. Providing children with safe and habitable units through a PRI program can decrease the likelihood that they will be absent from school due to illnesses.

Smokefree Housing

Children are acutely vulnerable to the negative health effects of secondhand smoke exposure. Because of children's ongoing lung growth, higher breathing rate, and minimal control over their indoor environments, secondhand smoke can have a severe impact on their physical development.⁴⁵ According to the Environmental Protection Agency, children's exposure to secondhand smoke is responsible for increases in the number of asthma attacks and severity of symptoms in 200,000 to 1 million children with asthma, as well as respiratory tract infections resulting in 7,500 to 15,000 hospitalizations each year.⁴⁶ Exposure to secondhand smoke puts children at greater risk for asthma, respiratory problems such as pneumonia and bronchitis, and ear infections, all of which can cause them to be absent from school.⁴⁷

While most states prohibit smoking in workplaces and public places, they generally do not prohibit smoking in the place where kids spend the most time: their home. Local governments can pass legislation to limit exposure to secondhand smoke in multi-unit housing.⁴⁸ By enacting laws to reduce the risk of children's exposure to secondhand smoke, legislators can eliminate one of the known triggers of illnesses that keep children from attending school.

Invest in School-Based Wellness Case Management

In addition to school and community policy interventions, some schools have established successful case management programs to address chronic disease rates among their students. Three short examples are provided below.

Asthma Case Management - Memphis City Schools, Tennessee⁴⁹

Memphis City Schools started a school-based asthma management program in 1999 to help students with poorly managed asthma take control of their disease. The program consists of weekly meetings between nurse case managers and students with asthma. The focus of the program is: education; weekly monitoring of students' health status; and coordination of care between students, families, school personnel, and medical providers. Researchers evaluating the program found that students in the case management program had 50% fewer school absences than their counterparts, translating to an average of 3.8 more days in school per student. Students in the program also required fewer urgent care or emergency department visits. These results illustrate that targeted disease interventions can have positive effects on school attendance.

Kickin' Asthma - Oakland, California⁵⁰

Since 2002, Oakland Unified School District has offered a school-based asthma education curriculum called "Kickin' Asthma." This curriculum is comprised of four 50-minute sessions on the following topics: lung physiology and asthma; triggers, symptoms, and warning signs; medication; and emergencies and problem solving. Each session is taught by a nurse; the attendees are middle and high school students diagnosed with asthma. By employing this curriculum, Oakland Unified School District was able to realize significant reductions in asthma symptoms, emergency and unplanned health care utilization, school absences, and activity limitations. One year of the intervention reduced the average number of school days missed by a half day. While follow-up is needed to determine whether the intervention has provided lasting health benefits, the program provides an excellent example of how districts can use wellness programs to help combat student attendance problems.

San Francisco Wellness Initiative - San Francisco, California⁵¹

In 1999, San Francisco Unified School District established the Wellness Initiative in order to help foster health and well-being for all high school students. The program operates in 19 schools, and uses health education, counseling, case management, and risk behavior prevention to support students and help them stay in school. In 2011, 75% of teachers reported academic improvements and improved attendance by students participating in the Wellness Initiative. Additionally, in 2013, 81% of students participating in individual counseling said they were coming to school more often. Programs that address the many health concerns of high school students can effectively encourage positive academic performance and increase school attendance.

A NOTE OF CAUTION

It must be noted that the current education policy environment poses a number of challenges to the goal of improving school attendance by strengthening children's health. Recession-related fiscal constraints have left many state legislatures unwilling to target new funds to low-income communities, or to consider significant structural changes to their state school finance systems.

Moreover, other policy trends seem to be in diametric opposition to strategies that promote healthy, active lifestyles. Three education "reform" trends that emerge from a confluence of federal, state, and local policies are problematic from a health standpoint:

- Mass closures of neighborhood public schools⁵²
- Adoption of citywide lottery-based choice models⁵³
- Test-based accountability

First, a number of states have been granted waivers by the U.S. Department of Education to opt out of certain provisions of the No Child Left Behind Act.⁵⁴ In some instances, these waivers have been used to target "low performing" (bottom 5 percent on various test-based metrics) neighborhood schools for closure and/or reconstitution,⁵⁵ leaving many poor urban neighborhoods without any walkable school option.⁵⁶

Large-scale school closure policies are often coupled with open enrollment, lottery-based choice programs that disrupt the connection between neighborhood of residence and school location, resulting in reduced walkability and increased use of passive transportation. While such policies have potential to promote socio-economic and racial integration (a promise largely unrealized⁵⁷), the extra time that children are required to spend on school buses to and from school and the decreased numbers of children who engage in active transportation⁵⁸ are often ignored in broader policy discourse, though these impacts are not lost on affected parents.⁵⁹

Also, rigid test-based measures for determining which schools will be closed and how individual teachers will be rated⁶⁰ have given rise to undue emphasis on test preparation during the school day, reducing time for free play and physical activity, among other things.⁶¹ This may be consequential for children's health.⁶² Disparities in access to (and participation in) extracurricular athletic opportunities have long been correlated with race and financial status.⁶³

CONCLUSION

Put simply, children's health matters. Chronic illness is a significant contributor to school absences and it correlates highly with child poverty. By reducing state aid to schools on the basis of student absences, states are disproportionately (and substantially) penalizing schools that serve children from lower-income families—children who are far more likely to suffer childhood obesity, asthma, and other chronic diseases; and far more likely to be absent from school as a result.

But though these health conditions are largely outside the direct control of local school officials, school districts can implement strategies to mitigate chronic illness and associated school absences. Many school districts and localities are promoting student health with school-based case-management, school district policy, or a combination of both.

APPENDIX 1 HOW ATTENDANCE-BASED FUNDING REDUCES STATE AID

State school finance formulas take many shapes and forms, but many are built on the following basic framework:

Step 1 typically involves the determination of a need- and cost-adjusted spending target for each district:

STEP 1: Target Funding = [Base Funding x Enrollment + (Cost Adjustments for High-Need Children x Base Funding x High-Need Student Enrollment)] x Geographic Cost Adjustments

Calculating the spending target begins with a “base funding” figure which represents the per-pupil costs of providing an adequate education in a district or school that faces no extraordinary costs or needs. Student-need adjustments are often subsequently applied as “weightings” for certain types of higher-need student populations (such as low-income students, children with limited English language proficiency, and children with disabilities). Or, alternatively, some states simply provide categorical grants for populations with needs that go beyond those addressed by the general aid formula.

State aid formulas also often include adjustments for differences in labor market costs (such as geographic variation in competitive wages, requiring higher salaries in some districts than in others) and differences in economies of scale and population density. For example, due to their lack of collective bargaining/volume purchasing power, smaller-population districts may face higher expenses than higher-population districts. Also, rural schools that serve sparsely populated areas may require different teacher-student ratios and more administrative overhead than urban schools, as well as higher transportation costs per pupil.

Once the target funding, or adequacy budget figure, is determined for each district, the second step involves determining the share of funding that will be covered by local taxes and the share to be covered by the state. This step is important because, in addition to facing differing regional needs and expenses, local public school districts also vary significantly in their fiscal capacity to cover those needs and costs on their own.

STEP 2: State Aid = Target Funding - Local Revenue Requirement

The local share to be paid is arrived at usually either by determining the amount of per-pupil revenue that can be generated by a uniform local property tax, or by generating an index of local fiscal capacity that combines measures of local taxable property, wealth, and income.

Table 1 illustrates the impact of using Average Daily Attendance-based criteria in a state school finance system, comparing typical low- and high-need districts. The lower-need district enrolls 20 percent low income children and enjoys a 98 percent attendance rate. The higher-need district enrolls 80 percent low income children and has a 92 percent attendance rate. (As the foregoing brief has shown, it is almost universally the case that school attendance rates increase and decrease in correlation with a district population’s income level/economic status. That is, the more severe the poverty, the higher the rate of school absences.) The hypothetical state in Table 1 operates on a formula with a base funding level of \$8,000 per pupil. In the low-need district, enrollment based funding generates a weighted, fundable pupil count of 11,080:

Weighted Fundable Pupils (11,080) = 10,000 + (.2_{low-income population} x 10,000 x .5_{cost weight}) + (.02_{ell population} x 10,000 x .4_{cost weight})

By contrast, in the high-need district, enrollment based funding generates a weighted, fundable pupil count of 14,800:

$$\text{Weighted Funded Pupils (14,800)} = 10,000 + (.8_{\text{low-income population}} \times 10,000 \times .5_{\text{cost weight}}) + (.2_{\text{ell population}} \times 10,000 \times .4_{\text{cost weight}})$$

If ADA-based funding is applied, the pupil count figure for the low-need district is reduced from 11,080 to 10,858, or about 98 percent, which is the attendance rate. Thus the target funding for the lower-need district is reduced by \$177 per pupil.

By contrast, the pupil count figure for the high-need district is reduced from 14,800 to 13,616, or 92 percent, which is the attendance rate, and the target funding is reduced by \$947 per pupil.

In the second step described above, the lower-need district, by virtue of its relative wealth and income, is expected to pay 75 percent of the cost of its own target funding, receiving only 25 percent in the form of state aid. This relative “self-sufficiency” serves to buffer this district from losses in state aid that result from attendance-based funding. In effect, the lower-need district only loses the proportion of target-budget funds that are financed through state aid, which is 25 percent of the \$177 reduction, or \$44 per enrolled pupil. By contrast, the high-need district loses 80 percent of the \$947 per pupil, or nearly \$760 per pupil in state aid. In some states, districts might be forced to reduce their per-pupil spending to the new target figure, as necessitated by the loss in per-pupil funding.

**TABLE 1
HYPOTHETICAL IMPACT OF AVERAGE DAILY ATTENDANCE ON DISTRICT FUNDING**

	LOW-NEED DISTRICT		HIGH-NEED DISTRICT	
Step 1a: Weighted Enrollment Calculation	Enrollment	ADA	Enrollment	ADA
Enrollment	10,000	9,800	10,000	9,200
% Low-Income	20%	20%	80%	80%
Low-Income Weight	0.50	0.50	0.50	0.50
% ELL (English Language Learners)	2%	2%	20%	20%
ELL Weight	0.40	0.40	0.40	0.40
Weighted Pupils	11,080	10,858	14,800	13,616
Step 1b: Target Funding Calculation				
Base Cost	\$8,000	\$8,000	\$8,000	\$8,000
Total Cost	\$88,640,000	\$86,867,200	\$118,400,000	\$108,928,000
Total per Enrolled Pupil	\$8,864	\$8,687	\$11,840	\$10,893
Loss (Target Reduction) per Enrolled Pupil		-\$177		-\$947
Step 2: State Aid Determination				
Local Fair Share	75%	75%	20%	20%
State Aid	\$22,160,000	\$21,716,800	\$94,720,000	\$87,142,400
State Aid per Formula Pupil	\$2,216	\$2,216	\$9,472	\$9,472
State Aid per Enrolled Pupil	\$2,216	\$2,172	\$9,472	\$8,714
Loss (State aid Reduction) per Enrolled Pupil		-\$44		-\$758

APPENDIX 2

GLOSSARY OF TERMS

Adequacy Budgets & Target Funding

Adequacy budgets and target funding are often interchangeable terms that pertain to the amount of combined funding required by local public school districts for achieving desired outcome levels (usually benchmarks for college and/or workforce readiness, as measured by state-mandated student assessment tests) a) in the setting in question and b) given the demographics of the student population. As a first step in many school finance formulas, a target level of funding, or adequacy budget, is calculated by adding up the basic costs of regular education programs and the additional costs of meeting the specific needs of the student population served, with additional adjustments for contextual factors that may affect cost (such as economies of scale and regional wage variation).

Average Daily Attendance

Average Daily Attendance counts are based on the numbers of children actually in attendance in a school or district each day, and then (typically) averaged on a bimonthly or quarterly basis.

Average Daily Membership

Average Daily Membership or Average Daily Enrollment measures the numbers of children enrolled to attend a specific district throughout the year, and may also be periodically reconciled.

Fall Enrollment Count

A Fall Enrollment Count is based on the number of students either enrolled or in attendance on a specific single date early in the fall of the school year. The figure may be based on the number of students who have enrolled in a district or on the number of students who actually attended on the specified day. These single-day counts in the fall are sometimes reconciled with a spring/January re-calculation, leading to either upward or downward adjustments in remaining state aid payments.

Fairness Ratio

The “fairness ratio” is the ratio of projected (using a statistical model of national school finance data for the most recent three years) combined state and local revenue per pupil for a school district with 30% children in poverty in comparison to a district with 0% children in poverty. The fairness ratio is a measure of funding progressiveness or regressiveness.

Progressive vs. Regressive Financing (Fairness)

Progressiveness and regressiveness, as these terms pertain to state school finance systems, refer to the relationship between a) the state education funding formula and b) some measure of local economic conditions. In the national report *Is School Funding Fair?*, a “progressive” state school finance system is defined as one in which local public school districts serving higher shares of children in poverty receive systematically higher combined state and local revenue per pupil than do local public school districts serving lower shares of children from families in poverty. A regressive system is the opposite - one in which districts with higher child poverty concentrations have systematically lower per-pupil revenue than districts with lower poverty concentrations.

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When you look at the (difference) between the number of children on the rolls and the number of children in some of these schools, it can be very distressing . . . Pushing these districts to do everything in their power to get kids to attend class is good.
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