



Children's Health Fund

MISSED OPPORTUNITIES

29 States earning “F” or “D” Grades, Failing to Mandate Screening for Health Barriers to Learning



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About Children’s Health Fund



Children’s Health Fund (CHF) is a national nonprofit committed to ensuring high quality healthcare to the nation’s most medically underserved children. CHF does this through a National Network of partners that directly reaches over 90,000 children and family members annually, delivering health care where children live, where they learn, and where they play. Each year, CHF serves more than 360 sites including schools, head start programs, homeless shelters and community centers. CHF achieves its mission by:

- Expanding access to innovative and comprehensive primary care under an “enhanced medical home model”
- Reducing the impact of Health Barriers to Learning, which are health conditions that interfere with child development and school performance, through innovative services and training
- Responding to the needs of vulnerable children impacted by major public health crises, and
- Advocating for policies and programs that improve the health and well-being of all children

Introduction

The long-term prospects of the United States are wholly dependent on the educational success of its 74 million children. To ensure future prosperity, governments must set the necessary conditions that present all children with opportunities to succeed. Yet, a recent study by Children's Health Fund indicates that significant policy gaps in more than half of US states may prevent millions of children from reaching their true potential.

The original study, entitled *Missed Opportunities: Do States Require Screening of Children for Health Conditions that Interfere with Learning*, published in PLOS ONE, explored which states mandate schools to require health screenings of their students and the extent to which seven specific health conditions, known as health barriers to learning (HBLs), were included. The seven health conditions included have been shown to substantially impede a child's ability to learn in school. The conditions are:

- uncorrected vision problems,
- unaddressed hearing difficulties,
- uncontrolled asthma,
- dental pain,
- persistent hunger,
- exposure to lead and
- unaddressed behavioral/mental health issues.

With nearly one in five US children not receiving a well-child check up in the past year, millions of children limited by these conditions go undetected¹. The children at greatest risk—due to highest prevalence of disease, lack of diagnosis, and burden of untreated or undertreated HBLs—are those living in poverty².

The results of the study are staggering. Authors found that only 24 US States plus Washington DC mandate that schools require students to have comprehensive health examinations at any point in the child's enrollment. For the 26 remaining states, the study could not identify any requirements for health screenings at all. When mandated, student health examinations are typically only required at school entry. Washington DC is the only US government entity assessed that requires student health screenings annually. Of states that mandate schools to require student health assessments, only 12 plus DC require specific records to capture vital health information about each student. These records are known as school health forms, or school screening forms. However, the content included on these forms varies dramatically. No state requires screening for all seven of the HBLs listed above.

¹ Cohen RA, Martinez ME, Zammiti EP. Insurance Coverage: Early Release of Estimates From the National Health Interview Survey 2015. National Health Interview Survey Early Release Program. (Available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201605.pdf>)

² Delaney Gracy, Anupa Fabian, Virginia Roncaglione, Katie Savage and Irwin Redlener, *Health Barriers to Learning: The Prevalence and Educational Consequences in Disadvantaged Children* (Children's Health Fund, 2016), 5.

Federal regulations do not require health forms or screenings for students in school. However, state and local governments possess the lion's share of authority over education policy in the United States. The methodology of this study suggests that significant gaps may exist at the state level which indicates that millions of children may be attending school with unidentified and untreated health conditions that impede learning.

Requiring the completion of a health form encourages every child to have a check-up, and promotes this to parents and caregivers as a priority relevant to their child's education. Schools are a logical and critical access point for children which can be leveraged to maximize effective health screenings for HBLs.

The purpose of this report is to build on the scholarly research referenced above, and to create an individual score to measure each state's school health screening and examination policies. The scores are based on the school health examination requirements which were identified for each state and place a particular emphasis on the HBLs identified above.

With a uniform standard to measure policies regarding school health examinations, researchers and advocates can identify which states are implementing policies to break down barriers to learning, and which are failing to do so. Ultimately, the hope is that the scoring helps raise awareness, increase understanding, and drive positive change at the state level.

The score also creates a baseline understanding by which future reforms—whether good or bad—can be assessed at the state level. The scores clearly display which states necessitate increased advocacy attention, and which can serve as models for others.

Health Barriers to Learning



Poor educational attainment has its roots in early childhood. Many children are not adequately prepared to read at grade level or keep up in other subjects in the early elementary years. This often translates to subsequent struggles in middle school and an inability to graduate from high school on time. Many factors contribute to less than optimal academic performance, especially for children who live with persistent adversities or chronic stress, and unrecognized or undermanaged health conditions are often among these

reasons. Yet many such conditions represent basic health needs, which can be identified relatively easily and can be treated or addressed by a medical professional.

Left untreated or undermanaged, Health Barriers to Learning can adversely affect children's ability to see, hear and pay attention in the classroom, their ability and motivation to learn, their attendance, their academic performance, and even their chances of graduating from high school. The particular HBLs discussed in the original study and this report have been identified due to their prevalence, evidence of their link to learning, and availability of effective screening and treatment approaches.³

Summary of Results from the Study of States

The original study referenced above explored which states require schools to document health screenings for students, which states make use of health assessment forms to support this screening, and the extent to which 7 important Health Barriers to Learning are included. Investigators reviewed websites of state departments of health and state departments of education, aggregate reports on screening requirements and practices, and also relevant legislation for all 50 states and the District of Columbia. For states with mandated screenings and a specific, required form, investigators assessed inclusion of the HBLs.

The major results of the study highlighted the following findings:

- Only 24 US states (or 49%) required comprehensive school health examinations even once (typically at school entry) for each child
 - Of these, only 12 plus DC were identified with a specific, required health assessment form.
 - Only DC required annual comprehensive examinations of students
- 26 US States (or 51%) did not require any comprehensive school exams
- Researchers were unable to identify any state (including DC) that mandates school screening for all 7 HBLs at any point in a child's attendance
- When including states without comprehensive school health examination requirements, the most common individually required HBL screenings were for vision (82% of states; includes DC), hearing (75% of states; includes DC) and dental (22% of state; includes DC).

The information that follows is based on the data in that original study and additional data collected for the purpose of this report.

³ Gracy, Fabian, Roncaglione, Savage and Redlener, *Health Barriers to Learning*, 5.

Scoring of States and DC: Methodology

To best serve the goals of this report, authors used comparable methodology to collect supplemental data to that described in the original research study. A detailed description of methods is included in the attached Appendix.

All 50 states and DC were scored to answer the following questions, based on the following criteria:

Do states require screening for any of the Health Barriers to Learning?

Lead: *Is there state mandated lead screening at school entry?*

Score: 0=No mandate found

1=Yes

Vision, Hearing, Dental, Mental Health/Behavioral, Asthma, Hunger:

For each HBL, is there state mandated screening, and how often?

Score: 0=No mandate found

1=Once

2=Periodically

3=Annually⁴

Do states mandate schools to require comprehensive health examinations for students?

Health Exam: *Is there a state mandated student comprehensive health examination?*

Score: 0=No mandate found

1=Yes

TOTAL SCORE: Scores for each element were added to give a total score. The maximum possible score was 20 and the minimum possible score was 0. Grades were assigned based on the total scores with the following breakdown:

F = 0

D = 1-4

C = 5-9

B = 10-14

A = 15+

⁴ Hearing was an exception to annual screening being the threshold for receiving a score of 3 for this category. American Academy of Pediatrics Bright Futures guidelines recommend hearing screening for children at least 7 times between the ages of 4 and 18, with assessment of risk factors in between. Therefore, states were awarded a score of 3 in the hearing category if they required hearing testing of students 7 or more times. Source: American Academy of Pediatrics Recommendations for Preventive Pediatric Health Care. Referenced June 28, 2017 https://www.aap.org/en-us/Documents/periodicity_schedule.pdf

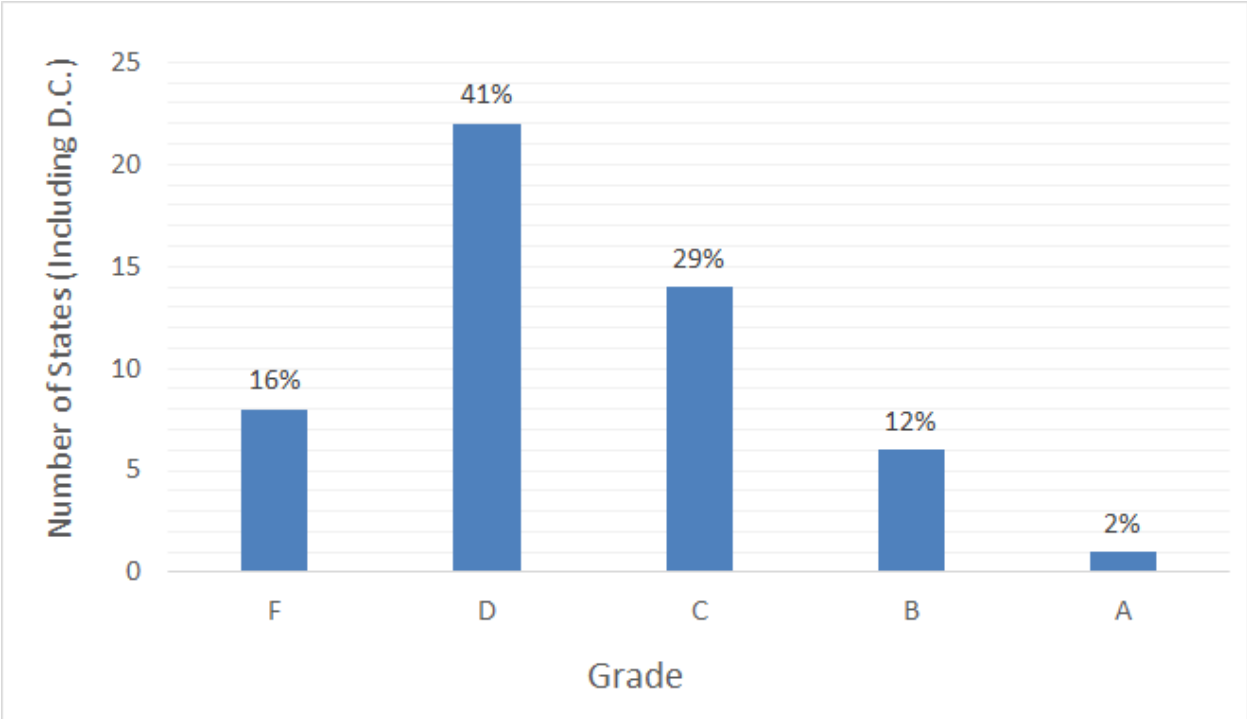
Scoring Table

State	Vision	Hearing	Dental	Mental Health	Asthma	Hunger	Lead	Health Exam	Total Score	GRADE
Idaho	0	0	0	0	0	0	0	0	0	F
Mississippi	0	0	0	0	0	0	0	0	0	F
North Dakota	0	0	0	0	0	0	0	0	0	F
South Carolina	0	0	0	0	0	0	0	0	0	F
South Dakota	0	0	0	0	0	0	0	0	0	F
Wisconsin	0	0	0	0	0	0	0	0	0	F
Wyoming	0	0	0	0	0	0	0	0	0	F
Alabama	0	0	0	0	0	0	0	0	0	F
New Hampshire	0	0	0	0	0	0	0	1	1	D
Utah	1	0	0	0	0	0	0	0	1	D
Alaska	1	1	0	0	0	0	0	0	2	D
Arizona	0	2	0	0	0	0	0	0	2	D
Missouri	2	0	0	0	0	0	0	0	2	D
Montana	0	2	0	0	0	0	0	0	2	D
Tennessee	2	0	0	0	0	0	0	0	2	D

New Mexico	2	0	0	0	0	0	0	0	2	D
Oklahoma	2	0	0	0	0	0	0	0	2	D
West Virginia	1	1	0	0	0	0	0	1	3	D
Oregon	2	0	1	0	0	0	0	0	3	D
Georgia	1	1	1	0	0	0	0	1	4	D
Maine	2	2	0	0	0	0	0	0	4	D
Michigan	2	2	0	0	0	0	0	0	4	D
Minnesota	2	1	0	0	0	0	0	1	4	D
Indiana	2	2	0	0	0	0	0	0	4	D
Louisiana	2	1	0	1	0	0	0	0	4	D
Nevada	2	2	0	0	0	0	0	0	4	D
Texas	2	2	0	0	0	0	0	0	4	D
Vermont	2	2	0	0	0	0	0	0	4	D
Washington	2	2	0	0	0	0	0	0	4	D
Arkansas	2	2	0	0	0	0	0	1	5	C
Colorado	2	3	0	0	0	0	0	0	5	C
Florida	2	2	0	0	0	0	0	1	5	C
Nebraska	2	0	2	0	0	0	0	1	5	C

New Jersey	2	2	0	0	0	0	0	1	5	C
Iowa	2	0	2	0	0	0	1	0	5	C
Ohio	2	3	0	0	0	0	0	1	6	C
Delaware	2	2	0	0	0	0	1	1	6	C
North Carolina	1	1	0	1	1	0	1	1	6	C
Virginia	2	2	0	1	0	0	0	1	6	C
California	2	2	1	0	0	0	1	1	7	C
Hawaii	1	1	0	2	2	0	0	1	7	C
Kentucky	2	1	2	2	0	0	0	1	8	C
Maryland	2	2	0	1	1	0	1	1	8	C
New York	2	2	2	0	0	0	1	1	8	C
Connecticut	2	2	0	2	2	0	1	1	10	B
Massachusetts	2	2	0	2	2	0	1	1	10	B
Kansas	2	2	3	1	1	0	1	1	11	B
Illinois	2	2	2	2	2	0	1	1	12	B
Pennsylvania	3	2	2	2	2	0	0	1	12	B
Rhode Island	2	2	2	2	2	0	1	1	12	B
D.C.	3	3	3	3	3	0	1	1	17	A

Results at a Glance



Grade	Score	Number of States (Including D.C.)	Percent of States (Including D.C.)
F	0	8	16%
D	1-4	21	41%
C	5-9	15	29%
B	10-14	6	12%
A	15+	1	2%

Top of the Class



Washington DC: Washington DC deserves special mention as the shining star that emerged in the original study and also in this assessment, with a score of 18. Though at times difficult to categorize and discuss in language describing 'states,' nonetheless, DC represented the only government entity that mandated schools to require **a comprehensive** health screening of their students on an **annual** basis. Additionally, DC had a fairly comprehensive, annually required school health form, only lacking assessment of hunger.

Absent

Idaho, Mississippi, North Dakota, South Carolina, South Dakota, Wisconsin, Wyoming, Alabama: These are the lowest performing states in the assessment. All scored 0.



Authors were unable to identify any legislation in these states that requires a comprehensive physical examination, a student health form beyond immunizations, or screening for any health barrier to learning for students. This represents a major missed opportunity for these states to maximize the learning potential of each student.

Attendance and learning suffer when health barriers to learning are unidentified, unmanaged, and untreated. The first step toward ensuring the removal of these barriers for children is for schools to require health screenings that include the Health Barriers to learning at recommended intervals. By the standards of this assessment, these States fail to do so at all levels.

Discussion

The overall scores suggest that a significant gap exists between the number of US children who live in states that emphasize adequate school health screenings and the number of children who do not.

Overall, 41,799,998 children live in states that scored between 0 and 5. This is more than 57% of all children in the United States.

By contrast, 8,935,080 children live in states that scored between 10 and 17. This represents 12% of all children in the United States.⁵

⁵ Kids Count Data Center, A Project of the Annie E. Casey Foundation. (Available at <http://datacenter.kidscount.org/data/tables/99-total-population-by-child-and-adult-populations?loc=1&loct=1#detailed/2/2-52/false/573/39/416>)



Eliminating Health Barriers to Learning: critical to student and school success

Identification of Health Barriers to Learning can be the first step on the pathway to positive classroom experiences for both teachers and children, and ultimately for successful educational outcomes. The most efficient and effective first step towards decreasing the impact of Health Barriers to Learning is to have consistent, minimum standards

of screening for all students. Screening can be effectively done through community partners, on-site at schools, or through any number of combined approaches. Regardless, the critical driving force that ensures action, minimum standards, and consistency is state-level legislation with associated funding support to the schools for implementation and management.

It is important to note that schools face many challenges in meeting educational goals, standards and requirements, and the diverse needs of their students. Schools serving high numbers of children in poverty are generally underfunded already. With so many competing priorities and limited funding, schools often struggle to carry out their primary mission—to help children meet their full educational potential. However, assurance that children are not further hindered by Health Barriers to Learning is a critical step in their success.

Schools as critical health care access points for children

Health barriers to learning can and should be regularly screened for, identified and managed as part of high quality primary care for children. However, as mentioned in the introduction, many children do not currently get regular primary care, for a variety of reasons. The unparalleled contact that schools have with children offers a unique access point to support good health, which in turn, supports educational success. Health exams and HBL screenings required by schools, particularly when facilitated by a standardized form, can drive families into care. School-based screening programs, when appropriately funded, can support access for children who face financial, geographic, and other barriers to traditional health care.

Vision, hearing, and dental problems are currently the HBLs most likely to be addressed with legislation outside of a requirement for a comprehensive physical examination. Though achievable through a required form completed by a community health care provider, many schools do implement on-site vision and/or hearing screening, and/or require proof of a dental exam—though rarely for all grades or on an annual basis. Vision and dental issues in particular, are particularly dynamic, so screening at school entry alone will be insufficient to identify children as problems arise or needs change. As evidenced by the results above, most states are under-utilizing school screening mandates as opportunities to drive children to needed care.

Asthma and mental health/behavioral problems, if mentioned in state legislation at all, were primarily addressed at the state-level through inclusion in a comprehensive physical examination and corresponding form. Whereas these 2 HBLs can be effectively identified through school screening programs, parental engagement necessary for the medical history can be particularly problematic in younger children. Both, however, are commonly undiagnosed, undertreated, and may require accommodation at school. Often, support in getting families to comprehensive medical care can be the most effective route.

Lead exposure has one of the strongest links to impaired learning. Slightly different than the other HBLs, it is most relevant in children younger than 6. To some degree, most states promote screening of underserved children through Center for Medicare and Medicaid Services (CMS) mandates for children on Medicaid insurance plans. However, this is not linked to school entry requirements—and thus does not lead to testing in children who aren't accessing primary care and are arguably among the highest at-risk. More and more, schools are testing their own drinking water for lead. While important, this is not a substitute for the screening of younger children for evidence of lead exposure through systematic risk assessment and/or blood testing.

Hunger was not identified in any state health screening legislation nor was it included in any of the school health examination forms found as part of this assessment. While addressed by schools in part by free and reduced-price lunch and breakfast programs, chronic hunger remains an issue for children who may not fully access these services for various reasons (stigma, lack of transportation that ensures access to breakfast programs, etc). Solutions, such as breakfast in the classroom, exist, but a growing understanding and response to the prevalence of chronic hunger in children and the impact on educational success is needed.



Screening alone will not overcome Health Barriers to Learning: It is important to acknowledge that screening does not equal intervention or successful management of Health Barriers to Learning. For example, of school-based vision screening programs across the states, about 70% of children identified do not ultimately receive the services needed to adequately correct the problem (reference). Implementable

solutions that enable children with Health Barriers to Learning to successfully access appropriate services will need to be part of a meaningful intervention. This may be possible by bringing services, such as follow up optometry services and glasses, to school sites to complete the process, but appropriate staff, funding, and community partnerships are needed for this type of approach. Alternatively, many screenings can be done in the primary care venue, with the school screening requirement prompting action, but carried out off-site. This process may

facilitate treatment/mitigation of the health barrier to learning. However, many families experience access barriers to primary care services, including cost and transportation, so this may not be a viable option for all families.

Intervention through school services: Many schools are already attempting to address some of the Health Barriers to Learning through targeted intervention programs, such as free and reduced priced lunch and breakfast, asthma programs, and on-site mental health support. Though a tremendous step towards addressing particular Health Barriers to Learning, this does not preclude the importance of school wide screening, which is necessary to ensure that all kids needing such services are identified. For instance, children who need glasses often do not know it. Children and teens who are depressed may not act out or speak up in ways that prompts their ad hoc identification.

Screening is part of the arc that must ultimately culminate in schools having the support to be able to facilitate interventions when needed, either onsite or through community collaboration, to ensure that when at school, children have what they need to optimally benefit from their educational experience, facilitate the learning and environment of their peers, and meet their highest potential.

Driving change at the state level: To optimally support children in schools across the country, action must be taken at all levels. Language in the 2016 reauthorization of Federal legislation for the Every Student Succeeds Act (ESSA) now allows for certain funding streams through Title I and Title IV to cover health and mental health screening and support services at schools, but needs allocated funding. Clinicians and others in the healthcare sector need to proactively engage with local schools to support health promotion, and ensure appropriate screening and management of potential health barriers to learning in their patients. Student health and mental health screening and management programs need to be prioritized and funded at the state and district, level. School administrators, teachers, and parents need better information about the importance of health and it's potential to impact each child's educational trajectory, and an understanding of actionable steps that can make a difference.

This document focuses primarily on action at the state level, however, as from a policy standpoint, the cascade towards large gains can be initiated with relatively straightforward regulatory changes.

Conclusions and Recommendations



Too many states do not recognize the impact of HBLs in achieving educational success for all students. The fact that more than 27 million children live in states which, according to this data, do not place adequate emphasis on school health screenings represents an endemic failure of state-level policies to give children ample opportunities to succeed in school and later in life. The need to raise awareness about the impact of Health Barriers to learning and to advocate for major state-level reforms of school

health screening requirements is widespread and necessary.

Failing to require annual screenings for HBLs at the school level is an unleveraged opportunity for a majority of US States. Integration of health screenings must become a priority for governors, state legislators and state-level education officials throughout America.

Given the critical impact these health conditions can have on the educational success of children and the vital need for children to gain skills that lead to graduation and future employment, we make the following recommendations to states:

1. Awareness of the importance of Health Barriers to Learning should be integrated as a priority in the state education plan.
2. Every state should mandate that schools require comprehensive health screening of students.
3. The comprehensive health screening should be annual.
4. The health screening should include minimum standards. Among these should be the age-appropriate screening for each of the Health Barriers to Learning.
5. State-level, required screening forms are arguably the most straightforward to clearly define the expectations in a way that will promote consistency and quality of screening for all children, and to facilitate sharing of appropriate information among the parent/caregiver, the health care provider, and the school. This would not preclude supplemental, tailored content to be added at the district or school level.
6. Even if the screenings are completed outside of the school, most likely by community providers, management of logistics and application of the information to support child health and services at the school-level will require accessible funding.
7. Schools and communities will need the ability to support families with access barriers to care that preclude their ability to obtain the required screenings and related services/interventions. Appropriate systems should be developed, funded, and supported to facilitate care for these children without resulting in exclusion from school, or school-related activities.

Authors' Note: applied research and study limitations

This document is based on information from an original research study, entitled *Missed Opportunities: Do States Require Screening of Children for Health Conditions that Interfere with Learning*, published in PLOS ONE, and original supplemental data. There are several important considerations in interpretation of the data.

was limited to what was publicly available, and discoverable through the search methodology of the study.” To that effect, we welcome additional state-level information that may exist but was not identified with the study’s methodology.

Second, the study focused on state-level screening mandates. City, district, or school-level requirements may and often do exist, but were beyond the scope of the study, and did not represent the wide-reaching policy question being explored. Similarly, it is important to note that the existence of state mandates and/or even specific school health screening forms does not equal compliance. The study did not assess implementation or penetrance of the legislation and mandates studied.

References

Appendix

Technical Notes: Methodology for Scoring of States and DC

Overview: As the goal of this report included scoring and ranking of states, authors chose to supplement the research study information with additional, original data. To do so, we modified the criteria and data collection methodology slightly, where appropriate. Supplemental data focused primarily on state-level requirements for schools with regards to documentation of screening for asthma, mental health, lead, and hunger. Additional information was also used in the scoring for this report when states had a form that was not required, but had legislation requiring equivalency of certain elements. The following describes in greater detail the process and rationale for data collection methods and scoring used in this report.

Information Sources: As in the original research study, authors reviewed websites of state departments of health and state departments of education, aggregate reports on screening requirements and practices, and also relevant legislation for all 50 states and the District of Columbia. For states with mandated screenings, authors assessed inclusion of each HBL, either through use of a required state-level form, requirement of screening and documentation equivalent to that contained in a recommended form, or specific screenings for HBLs defined directly in the legislation.

All 50 states and DC were scored based on the following criteria:

Lead (Lead testing requirement for school entry): As medical recommendations do not advise screening for lead in older children, the point value for lead screening was limited relative to the other HBLs, which optimally require more frequent screening. Therefore a score of 1 was given to states who mandate that schools require documentation of student lead screening upon school entry (or at any other time). A score of 0 was given to states for which legislation or regulations could not be found requiring documentation of student lead screening.

HBL screening (Frequency of screening requirement for each HBL other than lead): A maximum score of 3 was given for each of the remaining 6 HBLs. State legislation and regulations were reviewed to determine whether each HBL was included in a mandated school screening or proof of screening was required at any time(s) during a child's enrollment in the school system. A minimum score of 0 was given if no legislation or regulations could be found for that HBL. A score of 1 was given if screening for that HBL was required only once, or only at entry into school. A score of 2 was given if screening was required periodically, but less than annually. A score of 3 was given if the screening for that HBL was required annually.*

Comprehensive health examination requirements: Authors felt that there was significant added value to a state mandate for schools to require their students to receive a comprehensive health examination by a qualified healthcare provider. Therefore a score of 1 was given to states who mandate that schools require documentation of a comprehensive health exam at least once for every student. A score of 0 was given in this category for states with no identifiable mandate for schools to require comprehensive physical exams.

TOTAL SCORE: Scores for each element were added to give a total score. The maximum possible score was 20 and the minimum possible score was 0. Grades were assigned based on the total scores.

*Hearing was an exception to annual screening being the threshold for receiving a score of 3 for this category. American Academy of Pediatrics Bright Futures guidelines recommend hearing screening for children at least 7 times between the ages of 4 and 18, with assessment of risk factors in between. Therefore, states were awarded a score of 3 in the hearing category if they required hearing testing of students 7 or more times. Source: American Academy of Pediatrics Recommendations for Preventive Pediatric Health Care. Referenced June 28, 2017 https://www.aap.org/en-us/Documents/periodicity_schedule.pdf