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Asthma Inhalers in Schools: Rights of Students with Asthma to a Free Appropriate Education

Sherry Everett Jones, PhD, JD, MPH, and Lani Wheeler, MD

Students who possess and self-administer their asthma medications can prevent or reduce the severity of asthma episodes. In many states, laws or policies allow students to possess and self-administer asthma medications at school.

In the absence of a state or local law or policy allowing public school students to possess inhalers and self-medicate to treat asthma, 3 federal statutes may require public schools to permit the carrying of such medications by students: the Individuals With Disabilities Education Act, Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act. Local policies and procedures can be based on these federal laws to ensure that students with asthma can take their medicines as needed.

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MORE THAN 6 MILLION AMERICAN children aged younger than 18 years have asthma, making it one of the most common chronic diseases among children.[1] In 2001, more than 4 million children younger than 18 years had an asthma episode in the previous year (a rate of 57/1000), suggesting that many young people with asthma may not have their asthma under control.[1] As many as an estimated 1.4% of all American children experience some level of limitation owing to asthma, such as an inability (or limited ability) to engage in school or play activities.[2] Young people with asthma miss an estimated

14 million days of school each year because of the disease,[3] and some children's school performance consequently suffers.[4]

Provided parents or guardians and a health care provider, preferably with input from the child's school and especially the school nurse, deem it appropriate for a student to self-medicate and have granted authorization, it is beneficial to students with asthma to have unobstructed access to their medication before, during, and after school.[5,6] Students who self-administer their asthma medications can prevent or reduce the severity of asthma episodes.[7] However, some schools perhaps as part of a drug use prevention program or in hopes of minimizing liability claims, do not allow students to carry their inhalers in school.[8,9] In 2000, students were allowed to self-medicate with prescription inhalers in 68% of all schools nationwide (79% of middle/junior and senior high schools).[10]

Restrictions on students carrying their inhalers may preclude the immediate use of medication at the onset of symptoms. For example, the room in which the medication is kept may be too far from the student's classroom or playing field, some students may believe it is too disruptive to go to another part of the school building to take their medication,[11] and many students are embarrassed about needing to take medications.[12] Restrictions on the use of inhalers may ultimately compromise medication adherence, increase the risk of a full-blown asthma episode, and cause unnecessary suffering, emergency treatment, and asthma-related school absences.[2,8,13]

In 2000, approximately 223 children aged 0 through 17 years died as a result of asthma (a rate of 0.3/100 000).[1] Furthermore, asthma results in substantial increased use of the health care system. In 2000, children aged 0 through 17 years had an estimated 4.6 million asthma-related outpatient visits to doctors' offices and hospital outpatient departments (a rate of 649/10 000), approximately 728 000 asthma-related emergency department visits (a rate of 104/10 000), and approximately 21 000 asthma-related hospitalizations (a rate of 30/10 000).[1] Asthma-related missed school days among children aged 5 through 17 years resulted in an estimated cost of $726.1 million in caretakers' time lost from work.[14]

By knowing the rights of students with asthma, school administrators, educators, physicians, and other health care providers can help ensure that students have appropriate access to medications. This article explores state laws and policies that allow students to carry and self-administer asthma inhalers in school and federal statutes that may, under certain circumstances, require schools to allow students to do so.

STATE LAWS AND POLICIES ALLOWING INHALERS

As of April 2004, 38 states allow self-medication among students at school. Twenty-three states (Alabama,[15] Delaware,[16] Florida,[17] Georgia,[18] Illinois,[19] Kentucky,[20] Maine, [21] Massachusetts,[22] Michigan,[23] Minnesota,[24] Mississippi,[25] Missouri,[26] New Hampshire,[27] New Jersey,[28] New York,[29] Ohio,[30] Oklahoma,[31] Rhode Island,[32] Tennessee,[33] Texas,[34] Utah,[35] Virginia,[36] and Wisconsin[37]) have enacted legislation specifically to allow students with asthma to possess and self-administer inhaled asthma medications while at school. These laws require parental consent and permission from a physician or other health care provider. Also, the School Health Policies and Programs Study 2000 found that an additional 10 states (Kansas, Louisiana, Maryland, Nebraska, New Mexico, North Dakota, South Carolina, South Dakota, Vermont, and Washington) have adopted policies allowing students to self-medicate at school with prescription inhalers.[38] Five other states (California,[39] Connecticut,[40] Indiana,[41] Iowa,[42] and Oregon[43]) have laws broadly providing for the self-administration of medications. Because state laws are often changing, interested readers can access the National Conference of State Legislatures Web site to monitor legislative action related to asthma, including self-medication laws (http://www.ncsl.org/programs/esnr/asthmamain.htm).

ASTHMA AS A DISABILITY: FEDERAL STATUTES

In the absence of a state or local law or policy allowing students to possess inhalers and self-medicate, health care providers and parents might be able to use 1 of 3 federal statutes that, under certain circumstances, will provide the legal justification requiring schools to allow students with asthma to do so. Those laws are the Individuals With Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973 (Section 504), and Title II of the Americans With Disabilities Act (Title II of ADA).

INDIVIDUALS WITH DISABILITIES EDUCATION ACT

The purpose of IDEA is to partially fund states to develop special education programs "to ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for employment and independent living."[44]

IDEA applies only to children who meet the definition of a *child with a disability,* that is, a child with "mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (hereinafter referred to as emotional disturbance), orthopedic impairments, autism, traumatic brain injury, *other health impairments,* or specific learning disabilities; and who, by reason thereof, needs special education and related services" (italic added).[45]

The implementing regulations further define *other health impairment* as "having limited strength, vitality or alertness, in-

cluding a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that–(i) *Is due to chronic or acute health problems such as asthma* . . . ; and (ii) Adversely affects a child's educational performance (italic added)."[46]

To be classified as disabled under IDEA, a child with asthma must fall under the *other health impairment* category and require special education because of the asthma or have some other disabling condition under IDEA and require special education because of that disability. In either case, modifications must be made for that student that are determined necessary by the child's individual education program team and allow the student to receive a "free appropriate public education" (defined as education and related services provided at the public's expense, which meet the standards of the state educational agency, include an appropriate preschool, elementary, or secondary school education in the state involved, and are consistent with the student's individual education plan[47]), including "related services" designed to meet the child's unique needs.[44,48-50] Such related services might include allowing a student to carry an asthma inhaler.

SECTION 504 OF THE REHABILITATION ACT OF 1973

The purpose of Section 504 is to eliminate discrimination on the basis of a disability: "No otherwise qualified individual with a disability in the United States . . . shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. . . ."[51] Under this law, *disability* is more broadly defined than under IDEA and, consequently, covers a large number of youths with disabilities who attend federally funded programs not covered under IDEA. The federal regulations promulgated under Section 504 define a disabled person as one who "(i) has a physical or mental impairment which substantially limits one or more major life activities, (ii) has a record of such an impairment, or (iii) is regarded as having such an impairment."[52] The term *physical impairment* encompasses respiratory disorders or conditions. *Major life activities* refers to functions such as caring for oneself, breathing, and learning.[52] Section 504 is broader than IDEA because it applies to not only the education program, but also to other nonacademic and extracurricular activities.[53,54]

As with IDEA, the regulations promulgated under Section 504 require school districts to provide a "free appropriate public education" to children with disabilities.[55] In the context of Section 504, this requirement means that "the provision of regular or special education and related aids and services . . . designed to meet individual educational needs of handicapped persons [must be as adequate as those designed to meet] the needs of nonhandicapped persons. . . ."[56] Of note, some case law is in conflict with the Section 504 regulations requiring a free appropriate education. Some courts, including the US Supreme Court, have held that Section 504 does not impose an obligation for a free appropriate public education despite federal regulations to the contrary.[57] What this conflict means for future lawsuits is unclear. In accordance with the language of Section 504, courts consistently hold, however, that Section 504 requires that schools make reasonable accommodations to allow disabled students to gain equal access to educational opportunities provided at that school.[57]

TITLE II OF THE AMERICANS WITH DISABILITIES ACT

ADA extends Section 504 to public accommodations in the private sector and state and local public agencies that do not receive federal funding (the discussion of which is beyond the scope of this article).[58] In the context of disabled students attending public schools, Section 504 and Title II of ADA are similar. Title II of ADA prohibits any public entity (e.g., public schools) from discriminating on the basis of a disability.[59,60] Congress intended Title II of ADA and its implementing regulations to be consistent with Section 504,[54,61–63] although the federal regulations and the US Department of Education, Office for Civil Rights have interpreted Section 504 more broadly than Title II of ADA.[57] Under both Section 504 and Title II of ADA, recipients of federal funds and public entities must address the disability-related needs of disabled students so they can participate in services or programs to the extent necessary to avoid discrimination.[54] The definition of *disability* under Title II of ADA is identical to that of Section 504. Under the regulations of Title II of ADA, a school must "make reasonable modifications in policies."[54] A school that refuses to administer medication because of a student's disability would be in violation of Title II of ADA.[48]

HOW THESE FEDERAL STATUTES HAVE BEEN APPLIED

A clear demarcation indicating at what point a child's asthma rises to the level of a disabling condition is not available. Presumably, when a child's asthma significantly interferes with breathing, the child would be considered to have a disability.[58] Parents and the child's health care provider, along with teachers, the school nurse, and other school officials, are in the best position to evaluate the effect a child's asthma has on a child's health and academic performance. Gelfman and Schwab recommend that health professionals document the following: "(1) how the disability interferes with 1 or more life functions [e.g., breathing, learning]; (2) how the disability affects the student's functioning (e.g., energy level, exercise needs, medication effects, etc); and (3) what individualized

supports or accommodations in school the student requires in order to access an appropriate education."[58(p337)]

When a child's asthma is disabling to the extent that the child needs "special education and related services,"[45,46] under IDEA a school is obligated to offer that student sufficient specialized services (e.g., allowing a student to carry an asthma inhaler) so that the student may benefit from his or her education.[50,64] During 2000–2001, the US Department of Education estimated that 292 000 children aged 3 to 21 years were served under IDEA as a result of a disability categorized as "other health impairment."[65] The US Supreme Court, in *Cedar Rapids Community School District v Garret F,* established that under IDEA, those services may go as far as providing a full-time, one-on-one nurse or health assistant.[66] If a student has no other disability and the student's asthma does not affect his or her educational performance, IDEA does not apply.[67] However, students who need access to an asthma inhaler because their asthma places a substantial limitation on major life activities (i.e., the child is disabled because of his or her medical condition) but do not need special education remain qualified under Section 504 and Title II of ADA[68,69] and may avoid being labeled as children who need special education.

To succeed in a Section 504 or Title II of ADA claim alleging that an accommodation was not granted, the claimant must show that the accommodation was denied because of the student's disability (i.e., was discriminatory).[54,70,71] In *East Helena (MT) Elementary School District # 9,* the school district refused to either administer or ensure that the student took asthma medication prescribed and filled by a naturopathic physician.[70] Instead, the school offered to allow a family member to administer the child's medication. In refusing to administer the medication, the school district was following a state law that prohibited the administration of medication unless the prescription was filled by a pharmacist. In that case, the court upheld the policy because the refusal applied to all students regardless of disability status.

Similarly, in *DeBord v Board of Education of the Ferguson-Florissant School District*[54] and *Davis v Francis Howell School District,*[71] schools refused to administer a prescription medication (methylphenidate [Ritalin] for attention deficit hyperactivity disorder) because the doses exceeded that recommended by the *Physicians' Desk Reference.* Both school districts had policies prohibiting schools from administering such prescriptions, although both were willing to let a parent or designee come to the school to administer the medication. The schools argued that the policies were to protect students' health and minimize potential liability. Courts in both cases found that because the school policies were neutral and applied to all students regardless of disability status, no discrimination had taken place. *DeBord, Davis, and East Helena* are examples of situations in which the claimant could not show that the school district's refusal to accommodate the child was based solely on a disability; therefore, no violations of Section 504 or Title II of ADA were found.[54,70,71]

Although some school policies that forbid staff to administer medications to students have been upheld by courts if uniformly applied, it is unlikely that a "no medications" policy (i.e., a policy that denies the administration of any and all medications at school) applied to all students would stand up in court because those policies have the effect of denying children with disabilities the free appropriate public education to which they are entitled under IDEA and perhaps Section 504, or reasonable accommodations under Section 504 and Title II of ADA.[57,72,73] A free appropriate public education must be specifically designed to meet the unique needs of the child,[74] and consequently, related services, including medications, must accompany that design.[55,56,66] Likewise, under Section 504, health services provided as part of related services must be individually evaluated and prescribed.[58]

INDIVIDUAL EDUCATION PROGRAMS

Under IDEA, a "child with a disability" must be provided with an appropriate individualized educational program (IEP).[49,75] Federal regulations promulgated under Section 504 indicate that schools may use IEPs or other plans as a means of meeting free appropriate public education requirements included in those regulations[55] (whether Section 504 includes such requirements is less clear[57]). An IEP is a written statement designed to identify a child's educational needs and other programs and related services the child requires to progress in the general curriculum.[49] IEPs are developed by an IEP team that typically includes the disabled child's parents, regular and special education teachers, and other representatives from the local education agency who are best suited to assist the child in meeting his or her educational needs.[49] A school nurse may be part of the IEP team when school health services (e.g., administration of medications) are necessary.[76] This team, created specifically for each individual child, ensures that all aspects of the child's educational and related services needs are tailored to that child. This team, along with consultation from the child's health care provider, is best equipped to determine on a case-by-case basis whether self-medication using asthma inhalers is appropriate.

For students with asthma, an *asthma management plan* (Table 1) is an appropriate part of an IEP.[5] Health care providers give instructions on how best to manage the child's asthma during the school day. For a student with asthma, it is helpful if part of the IEP (or 504 plan or individual health service plan or asthma management plan) includes specific information about where, when, and how each asthma medication is to be taken, including when medication possession

TABLE 1—Elements of Typical Asthma Management Plan

- Student's asthma history
- Student's asthma symptoms
- How to contact student's health care provider and parent or guardian
- Signatures of physician and parent or guardian permitting use of medications in school
- List of factors that make student's asthma worse
- Student's best peak flow reading (if student uses peak flow monitoring)
- List of student's asthma medications
- Student's treatment plan, including actions school personnel can take to help handle asthma episodes

Source. NIH Publication 95-3651.[5]

and self-administration provisions are appropriate.

It is best if asthma management plans are on file in the school office or health services office and available to teachers and coaches. From a legal perspective, it is recommended that the asthma management plan include parental permission for the plan to be shared with relevant school personnel to avoid possible violations of the Family Education Rights and Privacy Act of 1974 (FERPA), which prohibits the unauthorized disclosure of confidential information in education records (including school health records in most cases).[77,78] However, under FERPA education records may be released to school officials without written consent of students' parents, including to teachers within the educational institution or local education agency, who have a "legitimate educational interest."[79] Under FERPA, it is important to note a narrow emergency exception whereby a school may disclose personally identifiable information to appropriate parties in connection with an emergency if knowledge of the information is necessary to protect the health or safety of the student.[77,80]

OVERCOMING POTENTIAL DISADVANTAGES

Although many advantages to self-medication exist, families and schools need to recognize some theoretically possible disadvantages of students' being responsible for carrying and administering their own medication. These disadvantages can be minimized, however. First, students may unintentionally leave their inhalers at home or misplace their inhalers at school. One possible solution is to keep a spare inhaler in a school nurse's office or health room.

Second, self-medication may make it more difficult for the school to keep medication records. Such documentation ensures that medication adherence can be communicated to parents and children's health care providers; documentation might be required as part of an IEP or Section 504 plan or might be recommended by school boards as a way to monitor the health and safety of students. To solve this problem, schools could require that students report each inhaler use to a school nurse or record each medication use in a diary.

Third, students may not be well educated about when to take their medications,[8,81] may be embarrassed to take their medications in front of peers,[8] or may lack the maturity to use their medications appropriately (e.g., most elementary school students). Health care providers and parents are primarily responsible for teaching children about administering asthma medications and determining on a case-by-case basis whether the student has reached a level of maturity necessary for self-medication. School-based programs can supplement student education by helping students with asthma understand their disease and the importance of asthma self-management[82,85] as well as destigmatize the need for using asthma inhalers during the school day.[83]

CONCLUSION

Not all students with asthma have their asthma under good control.[1,4] Patient education and medical management about the proper use of asthma medication are crucial to preventing asthma morbidity and mortality.[86,87] For optimal asthma management, it is important that students with asthma not be denied appropriate access to their medications in school.[5,6,11,88,89] Many states have laws or policies that allow students to self-medicate with asthma inhalers at school (there is no evidence on whether state laws or polices are more effective to ensure immediate access for students in schools). In addition, 3 federal laws require schools to accommodate students whose asthma qualifies as a disability under IDEA, Section 504, or Title II of ADA. Such accommodations may include allowing students to carry their asthma inhalers so they can self-medicate as indicated in their asthma management plan. Of note, the US Department of Education, Office of Safe and Drug-Free Schools has issued guidance clarifying that "a student's prescription drugs, and related equipment, are not illegal drugs and are not prohibited by the [Safe and Drug-Free Schools and Communities Act]."[90]

Although these laws and policies are important, they cannot provide an individualized answer to asthma management. Ideally, parents or guardians, the child's health care provider, and school personnel, including the school nurse, will work together as a team to determine the best way to manage a student's asthma in school. Table 2 outlines some factors that should be considered in determining the appropriateness of self-carrying and self-administering inhalers in school. For example, whether a child with asthma should be permitted to self-medicate ought to be determined on a case-by-case basis, based on a child's abilities and interest and maturity and the situation at the school. When that team deems the child skilled and mature enough, the student with

TABLE 2—Elements to Consider When Determining Appropriateness of Self-Carrying and Self-Administering of Inhaler Medication in Schools

Student factors
- Asthma severity and morbidity (hospitalizations, emergency department visits, severe episodes, types of triggers)
- Student's asthma knowledge, attitude, skills, and behavior (awareness of asthma signs and symptoms, desire to self-carry inhaler, willingness to self-administer and report use of inhaler, understanding of importance of not sharing inhaler with other students, correct peak flow and inhaler technique)
- History of asthma episodes at school
- Adherence to school rules regarding medication administration
- Inhaler self-carrying experience in other settings (child care, camp, after-school care, at friends' homes)

Family factors
- Desire of parents/guardians for student to self-carry and self-administer medications with an inhaler
- Collaboration of parents/guardians with school team; permission for physician and school to share information

School factors
- Health staff availability (whether or not there are full-time school nurses or health assistants)
- School size (whether or not there is quick and easy access to health room)
- Ability to reduce student's triggers at school
- Proximity and availability of inhalers from local emergency medical services

Health care provider factors
- Completion of physician's or other health care provider's written asthma management plan and all required forms
- Student's education by physician or other health care provider about asthma generally, controlling asthma, and proper use of inhalers, spacers, and peak flow meters
- Assessment by physician or other health care provider of student's technique for inhaler, spacer, and peak flow meter use

asthma should be allowed to keep asthma inhalers in his or her possession[11,88] to reduce the chances of a full-blown asthma episode, asthma-related school absences, and the need for emergency medical care.[8,86,87] Some students may not want or need to carry their inhalers, for example, when the school building is very small and health staff are available during all school hours. Each student needs individual assessment as part of the implementation of that student's personal asthma management plan.

In some circumstances, parents may need assistance from the child's physician or other health care provider in advocating for the student to gain the right to self-carry an asthma inhaler. By knowing the rights of students with asthma, physicians and other health care providers can help ensure that students have appropriate access to medications at school. An informed health care provider can bring to the attention of school administrators and educators, as well as parents, the legal requirements of schools with students with asthma, and the benefits of self-administration and adequate control of asthma (e.g., improved health and fewer school absences). For example, health care providers can obtain parental permission to send a written asthma management plan to schools including specific guidance about the student's skill and maturity regarding self-administering the asthma inhaler. They can personally contact the principal if there is reluctance to permit self-carrying of inhalers. Students are more likely to be able to control their asthma when school personnel, parents or guardians, and health care providers know about disability laws and about appropriate asthma management. ■

About the Authors

The authors are with the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, Atlanta, Ga.

Requests for reprints should be sent to Sherry Everett Jones, PhD, MPH, JD, Centers for Disease Control and Prevention, 4770 Buford Hwy NE, Mail Stop K-33, Atlanta, GA 30341 (e-mail: sce2@cdc.gov).

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Contributors

S. Everett Jones collected, analyzed, and synthesized the literature and wrote the article. L. Wheeler assisted in synthesizing the literature and contributed to the writing the article.

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