

Effective health care for the homeschooled child requires understanding of the issues, an open line of communication to parents, and the vigilance to ensure that children not covered by the safety net of school screening get the care they need.

The United States Department of Education estimates that 1.1 million students were homeschooled in 2003. 1,2 Other estimates put the number as high as 1.7 to 2.1 million, and the rate of homeschooling is increasing at an estimated 7% per year. 2,3 Pediatricians and other child health-care providers who care for homeschooled children need to understand the controversies surrounding homeschooling, be sensitive to the value that families place on homeschooling, engage families in nonjudgmental dialogue about homeschooling, and ensure that homeschooled children receive the health care they need.

The American Academy of Pediatrics (AAP) makes no recommendation about homeschooling for normal, healthy children; it addresses the issue only with regard to children who are medically

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unable to attend school. The AAP states that "all school-aged children are entitled to obtain their education in a school setting..." based on both legal mandates and the "social and developmental advantages the school setting provides all children, including those with special needs."4

## **Demographics of homeschooling:** Who and why

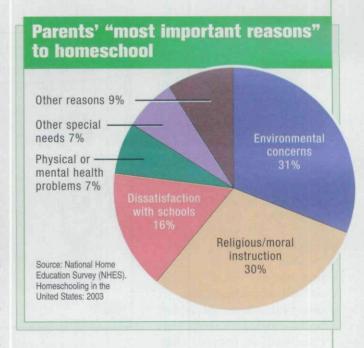
The most recent data on the prevalence of homeschooling and characteristics of homeschooled children is derived from the 2003 National Household Education Surveys Program (NHES). The NHES report, "Homeschooling in the United States: 2003," considered a child to be homeschooled if parents reported that the child was taught at home, was not enrolled in public or private school for more than 25 hours a week, and was not homeschooled solely because of temporary illness.5

The 2003 NHES survey was based on interviews with parents of students between 5 and 17 years of age. Of the 11,994 children included in the study, 239 were homeschooled-a 29% increase from the 1999 survey ("Homeschooling in the United States: 1999")-and a rise in the homeschooling rate from 1.7% in 1999 to 2.2% in 2003.5,6

The survey asked parents to identify all the reasons they chose homeschooling and also state the most important reason. Parents often gave multiple reasons, including:

- environmental concerns, such as safety, drugs, and negative peer pressure (85% of parents)
- desire to provide religious or moral instruction (72%)
- dissatisfaction with academics at other schools (68%)
- child's physical and mental health problems (15.9%)
  - child's other special needs (28.9%)
- other reasons, including the child's choice, flexibility, and greater parental control over education (20.1%).

When parents were asked to state the single most important reason for homeschooling, the reasons they gave most often were environmental concerns (31.2%) and a desire to provide religious and moral instruction (29.8%) (see the figure, above). The National Center



for Education Statistics plans to collect and report data about homeschooled students every four years, with the next survey scheduled for 2007.

Many of the 2003 survey findings about student and family characteristics paralleled the findings of the 1999 survey:

- White students were about four times more likely to be homeschooled than Hispanic students
- Students in households with three or more children were about twice as likely to be homeschooled as students with no siblings
- Students in two-parent households in which one parent was in the labor force were about five times more likely to be homeschooled than students in twoparent households in which both parents were in the labor force
- Students who had at least one parent with postsecondary education were more likely to be homeschooled than students whose parents' highest level of education was a high school diploma or less
- 82% of students were homeschooled only, whereas 18% were enrolled in public or private schools part time.5

# The controversies—and your role

Many people, including many pediatricians, are skeptical of homeschooling. As a society, Americans place a great deal of value on, and trust in, public schools, which are subject to public oversight, have established standards, and provide a secular environment. Parochial schools are also well-regarded because they have a long history of acceptance and their academic standards are subject to public regulation.

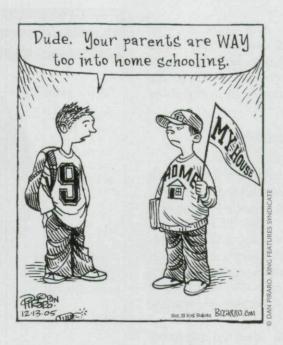
Although no evidencebased research exists to prove the value of homeschooling, a number of surveys indicate that homeschooled children do well academically and get into good colleges.7 Moreover, homeschooled students perform well on national stan-

dardized tests: On the 2005 American College Test (ACT), they had an average composite score of 22.5, compared to 20.9 for public school students. Similar results have occurred each year since 1996.8

Other areas of skepticism center on the strict religious framework of some homeschooling, concerns that homeschooling may jeopardize children's socialization, and lack of resources for special needs children, which public schools can provide.

In some ways, the skepticism arising from lack of scientific data about homeschooling is similar to doubts about alternative medicine. Physicians initially resisted alternative approaches to health care until studies showed that most were not harmful and some were beneficial. As physicians recognized that many parents were using alternative medicine without their counsel, and as public awareness increased parental demand, pediatricians became more receptive to considering alternative medicine.

Many pediatricians now inquire in a nonjudgmental way whether families are using alternative medicine and support its use, as long as there is no evidence that it is harmful. Acceptance of alternative approaches by pediatricians has had positive outcomes: It allows a more reasoned dialogue between parents and physicians and empowers parents to care for their children in the way they believe is best.



Similarly, until more is learned about homeschooling, it is best to remain openminded and nonjudgmental toward parents who homeschool their children. These parents are acting in what they believe is their child's best interest. Of course, if you believe that homeschooling compromises a particular child's interests or health, you should counsel parents against homeschooling, taking care to explain the reasons for your concern. Try to engage the parents in a dialogue that leads to a satisfactory resolution concerning the child's education. Even if

you and the parents "agree to disagree" about homeschooling, assure the family that you will continue to meet the child's health-care needs (immunization, treatment of illness) and are willing to discuss healthcare issues separately from education.

Homeschooled children do not have the benefit of the secondary screening that most public school districts provide. Because teachers spend so much time with students, they can often recognize health and educational problems before parents and physicians notice them. Public schools across the country have taken the responsibility for:

- assessing vision and hearing
- providing sex education
- teaching healthy eating habits and the importance of regular physical activity
- recognizing learning disabilities, behavioral problems or possible abuse
  - ensuring that immunizations are complete.

Without the safety net of school screening, health-care providers must be more vigilant about addressing these issues with homeschooled parents and patients. 9-11

# **Homeschooling laws**

Federal and state laws govern homeschooling, which is permitted in all states. Enforcement of the laws varies not only from state to state but also from one school

#### TABLE 1 **Homeschooling curriculum options Curriculum type** Description Traditional Similar to what is studied in K-12 schools Religious Based on religious foundation and texts Generally covers the same topics studied in K-12 schools with additional religious perspectives Classical Based on 11 subjects of study\* and Great Books of The Western World Co-op Two or more families gather regularly for some group or course or activities Drop-off classes Classes taught by nonparent instructors outside the home Unit-based Covers many aspects of a subject (the unit topic) such as trees, baseball, Charles Dickens, or the Civil War Unschooling Students learn via real-world experiences, mentoring, and apprenticeships in addition to textbooks and lectures Online Uses computer-based course modules Dual credit College classes taken on site or online for credit

\* Subjects include art, cartography, foreign language, geography, history, language arts, literature, math, music, philosophy, and science.

district to another. A helpful resource regarding state and federal laws about homeschooling is the Home School Legal Defense Association Web site. www.hslda.org/.

## **Curriculum: Lots of choices**

Many options for homeschooling curricula exist (Table 1). Commercially available curricula number in the hundreds, and new ones appear on the market every month. Published curricula cover every imaginable school topic for children of different ages, aptitudes, and interests. Parents can design a homeschool curriculum around a child's needs rather than requiring the child to fit into a preset educational program.

Parents who are preparing to homeschool usually refer to resource books that describe available curricula (Mary Pride's Complete Guide to Getting Started in Homeschooling, 12 The Home School Source Book 13). A purchased curriculum is likely to include workbooks, textbooks, tests, quizzes, and answer keys. Many also provide:

- lesson plans and teacher's manuals
- videotapes, DVDs, audiotapes, CDs
- ancillary resources, such as timelines, school supplies, and art supplies
- online or telephone support
- record keeping
- grading services.

Most parents begin with a complete preorganized curriculum from one of the many companies that sell them. As the child progresses academically and the family's comfort level increases, parents start to mix and match elements of many different curricula to better meet the strengths and needs of the child.

Basic curricula range from \$200 to \$1,000 or more. The average annual cost per child is \$300 to \$500. Online curricula are also available, but a full grade-level of the more expensive high-school courses can cost families as much as \$2,500 per year. A more cost-conscious option can be found at local public libraries, where the books required to complete units of study for particular grade levels can be checked out for free. Parents can also obtain used curricula at curriculum swaps and through online forums, such as www.home-school.com/forum/.

### What about socialization?

Perhaps the most hotly contested issue in homeschooling is socialization. Many critics insist that homeschooled children do not get enough exposure to peers and cannot form the relationships that are essential to normal development. They also argue that homeschooled children are not as well equipped as public or private school students to deal with the social aspects of college and daily life.

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Analytical research data on this important issue is limited. A 1997 study commissioned by the Home School Legal Defense Association found that 98% of 1,926 homeschooled children were involved in two or more extracurricular activities; 80% played outside the home with peers and attended field trips with other homeschooled children.14 Common activities included scouting, 4-H, sports, music, dance, and community service. A 2003 survey of 7,300 adults who had been homeschooled. conducted by Brian D. Ray, PhD, president of the National Home Education Research Institute, found that 71% continued to participate in community service activities, such as coaching a team, volunteering at a school, or working with a church or neighborhood association, compared to only 37% of all US adults.15

To promote healthy socialization, encourage homeschooled students to participate in extracurricular activities. Some school districts permit homeschooled children to participate in public school extracurricular activities such as sports teams, science laboratories, and social organizations; you can recommend that parents inquire whether these options are available in the local public schools. A state-by-state listing of homeschool support groups can be found online at www.home-school.com/groups/.

## Special-needs children

Very little research exists regarding the impact of homeschooling on special-needs children, and the issue remains controversial. Supporters of homeschooling for special-needs children contend that, because no one knows the strengths and weaknesses of a special-needs child better than the parents, homeschooling allows parents to enhance the developmental strengths of their child rather than focus on weaknesses. Opponents of this viewpoint argue that homeschooling cannot begin to provide the abundance of resources that a school district can offer to a special-needs child.

School districts receive state funds to provide services for special-needs children; homeschooling families usually pay for education out of their own pocket, although they often succeed in petitioning the school district to provide services and resources for their child

# In other words ...

When a family decides to homeschool their special-needs child, understanding why they have made that choice can provide insight into the home environment, which can help you participate more effectively in the overall care plan for the child.

at no cost to the family. From a quality standpoint, public school educators are licensed and certified, whereas most homeschooling parents have no formal training in education.

Regardless of whether the child is being educated in school or at home, it is your job to see that the child's health needs are met. When a family decides to homeschool their special-needs child, you need to understand why the parents have made that choice. Understanding parents' motivation can provide insight into the home environment, which can help you participate more effectively in the overall care plan for the child. You can also refer parents to resources such as a psychologist for testing and a behavioral developmental pediatrician for complex behavior management issues.

## Measuring success: How well do homeschooled children perform?

In most states, homeschooled children are not required to take any formal examinations. Testing and evaluation are at the discretion of the parent or instructor. Only 16 states mandate that homeschooled students take academic proficiency tests (Arkansas, Colorado, Florida, Georgia, Hawaii, Minnesota, Nevada, New York, North Carolina, North Dakota, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, and Virginia). Until recently, the required

tests were nationally-standardized achievement tests. However, a growing number of states now have their own assessment exams. The exams are often given in the third or fourth grade, possibly in the sixth or eighth grade, and sometimes as a high school exit exam. Most include a writing sample.

No short- or long-term controlled scientific studies have evaluated the performance outcomes of children who are homeschooled compared to those who attend public or private schools. Consequently, little is known about homeschooled students' comparative educational achievement, emotional well-being, and quality of life.

What comparisons have been published of homeschoolers and their public school peers are mostly cross-sectional and descriptive. They report that homeschoolers:

- perform better academically
- score higher in all standardized grade level tests
- attend college at the same rate as their public school peers (a 1997 study by the Home School Legal Defense Association found that 69% of homeschooled children went to college, compared with 71% of public school graduates). <sup>14</sup>

A 1997 survey by Dr. Ray of 16,000 homeschooled children in grades K-12, found that the students' scores on nationally-normed standardized achievement exams were above the national average, and 54.7% had individual scores in the top 25% of the population.<sup>14</sup>

# Going to college

Most colleges and universities require homeschooled students to show proof that they have completed certain courses required for graduation by most high schools and to take either the Scholastic Aptitude Test (SAT) or the ACT. Some colleges also require SAT II subject tests. 16,17

In recognition of the varied curricula available to homeschooled students, some colleges and universities also request a portfolio of a homeschooled student's accomplishments in lieu of a public or private school transcript. The portfolio allows homeschooled students to give an expanded view of what they studied and to display their talents in areas outside the traditional academic curriculum. <sup>16,17</sup>

Although parents normally do not write letters of

#### TABLE 2

## The homeschooled child: A checklist for pediatricians

- Respect the family's decision to homeschool
- Perform thorough annual screenings (such as vision, hearing, scoliosis)
- Ensure that all immunizations are complete and up-to-date
- Perform careful developmental assessment (look for subtle learning problems and evaluate psychological well-being, for example)
- Offer age-appropriate sex education
- Emphasize bicycle, skateboard, and car safety (such as use of helmets and seat belts)
- Ask about high-risk behaviors and offer preventive advice
- Encourage socialization through extracurricular activities
- Refer the family to other medical and educational resources as needed
- Be familiar with your state and local laws and regulations regarding homeschooling

recommendation to college for their children, it is common and accepted for homeschooling parents to do so. It is advisable to submit additional letters from other adults who know the homeschooled child through academic or extracurricular activities. <sup>16,17</sup>

To help homeschooling families understand and prepare for the college admissions process, the Home School Legal Defense Association has published "Preparing for College" (HCLA Current Issue Analysis, October 27, 2003). 18

# Vigilant health care needed

More than 1 million children in the US are homeschooled, a number that increases every year. Relatively little is known about the benefits and drawbacks of homeschooling, and well-designed research in this area is needed.

Because homeschooled children do not have access to the extra health and learning screening provided by schools and teachers, you must be vigilant in following your patients' health care and monitoring their socialization. You can also direct parents of children with special needs to resources in the community that might otherwise be provided by schools. Most important,



maintain a nonjudgmental attitude toward parents who choose homeschooling, so that you can keep the lines of communication open and foster trust.

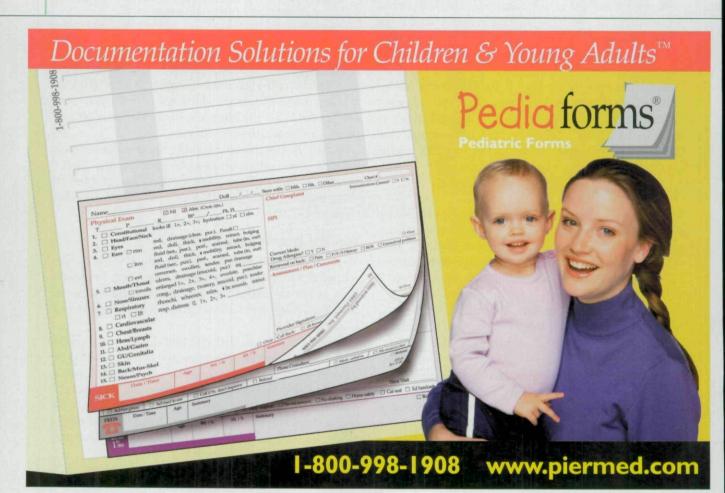
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