The restraint and seclusion of individuals—practices usually associated with highly restrictive environments—are extreme responses to student behavior used in some public schools (see Box 1). This brief aims to answer important questions about the extent and use of restraint and seclusion in schools. Do rates of restraint and seclusion vary based on the disability status of students? How frequently do schools restrain and seclude students? Do trends of restraint and seclusion vary across district poverty rate and racial composition? This brief draws on data from the 2009–2010 Civil Rights Data Collection (CRDC) and the 2009 Small Area Income and Poverty Estimates (SAIPE).

**Restraint and Seclusion Practiced Much More Frequently on Students With a Disability**

Schools use restraint or seclusion much more frequently with students identified as having an educational disability (see Figure 1). On average across school districts, there were 2.6 instances of restraint for every 100 students with a disability for the 2009–2010 school year, compared with only 0.1 instances for every 100 students without a disability. Seclusion rates follow very similar patterns. We focus the remainder of this brief on students with a disability because they are considerably more likely to experience restraint or seclusion than students without a disability. Students with a disability are a heterogeneous group of individuals, and those who exhibit externalizing behaviors likely face a higher risk of being restrained or secluded. However, it is beyond the scope of this study to explore data disaggregated by disability type.
Most School Districts Do Not Restrain or Seclude Students With a Disability

The majority of U.S. school districts do not use restraint or seclusion on students with a disability; 59.3 percent of districts report no instances of restraint, while 82.5 percent report no instances of seclusion. Districts that practice seclusion typically also practice restraint, as 85.4 percent of districts that report at least one case of secluding a student with a disability also report at least one case of restraining a student with a disability. Even in the districts that reported using restraint or seclusion, high rates are relatively rare. As Figure 2 shows, over 95 percent of districts report fewer than 10 instances of restraint or seclusion per 100 students with a disability. Viewed another way, this figure also reveals that a small but meaningful minority of districts report exceedingly high rates. Fewer than 1 percent of districts (0.8 for restraint and 0.6 for seclusion) report restraint rates higher than 50 incidences per 100 students, or one for every two students. Although this is a relatively small percentage, given there are more than 14,000 school districts in the United States, this still amounts to a considerable number of schools where students are commonly restrained or secluded. Moreover, such high rates are likely not merely a product of having a modest total number of restraints or seclusions on a very small population of students with a disability. For instance, 14 of the 19 districts that ranked high in restraint rates reported more than 100 total cases of restraint, and 7 of these districts reported more than 1,000 cases of restraint. Similarly, 18 of the 20 districts ranking highest in rates of seclusion reported more than 100 total instances of seclusion.

Comparing High-Poverty, High-Diversity Districts to Low-Poverty, Low-Diversity Districts

In order to further understand how restraint and seclusion are practiced in school districts across the United States, we now examine how rates vary across school types. We find that higher concentrations of poverty and larger black and Hispanic populations are associated with lower rates of restraint and seclusion. Specifically, average rates of restraint and seclusion are more than twice as high in districts of low poverty and low diversity than in high-poverty, high-diversity districts. Because average rates are skewed due to a minority of districts with very high rates, we also examine a range of restraint rates. Figure 3 shows the rates of restraint for districts in the 50th, 75th, 90th, 95th, and 99th percentiles for restraint rates in each of the two groups. Again, rates are substantially lower in high-poverty, high-diversity districts throughout the distribution of districts. For instance, a district at the 90th percentile

BOX 1: DEFINITION OF THE TERMS RESTRAINT AND SECLUSION

Restraint: A practice that uses physical or mechanical means to restrict a student’s freedom of motion. The CRDC does not consider physical escorts and the use of appropriate prescribed devices (such as seat belts and orthotics) to be instances of restraint.

Seclusion: A practice that usually involves the involuntary isolation of a student for a period of several minutes. The CRDC does not consider instances of “time-outs,” whereby, as part of an approved behavioral management plan, a student is placed in a non-locked setting for the purpose of calming, to be instances of seclusion.

FIGURE 2: PERCENTAGE OF DISTRICTS REPORTING RESTRAINT/SECLUSION FOR STUDENTS WITH A DISABILITY

[Graph showing the percentage of districts reporting restraint and seclusion for students with a disability]
of restraint for a low-poverty and low-diversity district reports 6.9 restraints per 100 students with a disability. This compares with only 2.7 in a high-poverty, high-diversity district at the 90th percentile. Seclusion follows a similar pattern across these two district types.

### Discussion

Students with a disability face much more frequent restraint and seclusion than students without a disability. The Individuals with Disabilities Education Act (IDEA) established the principle of serving children with special needs in the least restrictive environment. Schools today are tasked with implementing positive techniques that can effectively manage the difficult and sometimes violent behaviors of the most challenging students with a disability, which might lead some schools to more extreme measures. Many consider restraint and seclusion to be ineffective and dangerous, although too little attention is paid to their effects in schools. However, the cost of restraint and seclusion in health care settings is well documented. The costs due to treatment of injuries, lost work time, liability, and legal fees may be substantial, not to mention the very real emotional damage that may be inflicted on restrained or secluded individuals. The impact of restraint and seclusion from the perspectives of students is a critical next step in order to obtain a more complete understanding of the impact of restraint and seclusion.

The Council for Children with Behavioral Disorders recommends the use of restraint and seclusion only in instances when a child presents an immediate danger to him- or herself or others. Given that the vast majority of districts have near-zero rates of restraint and seclusion, it seems likely that practices in many schools are consistent with this recommendation. However, in some schools restraint and seclusion have been used to address routine behavioral challenges, such as following directions or staying seated.

It may be the case that the small proportion of school districts with very high rates of restraint and seclusion enroll students with particularly challenging behaviors, thus driving up rates in these districts. However, it strikes us as very likely that practitioner response and school attitudes toward student behavior play strong roles when determining whether or not to restrain or seclude students. Research shows that rates of restraint and seclusion decrease when teachers are trained in alternative techniques. Such techniques, which emphasize the teaching and rewarding of positive behavior over the punishment of negative acts, have also been shown to improve attitudes and reduce other negative outcomes. Research should continue to inform discussions pertaining to the best practices in managing challenging student behavior.

One compelling explanation for the tremendous range in rates of restraint and seclusion is profound differences in policy. The preference for restraint and seclusion practices in some districts could be due in part to different interpretations of what is a permissible response to behavior under IDEA. There is a lack of federal regulations pertaining to restraint and seclusion, and a wide variety of divergent state regulations. The federal Achievement Through Prevention Act (S. 541) was introduced in 2011 to promote positive behavioral support and reduce discipline measures such as restraint and seclusion. However, it failed to be passed into law. Therefore, state and local legislation guides practice, and
regulations may vary considerably at both levels. As of 2009, roughly three-fifths of states have some law, policy, or guideline concerning the use of seclusion and restraint in public schools, while fewer than half require that schools notify parents if these procedures are used. Given this, the tremendous variation in rates across districts and even states is not surprising.

We found that high restraint and seclusion districts are more likely to be found in particular school types (low-poverty, low-diversity), and in certain states. If certain disability types elicit more frequent restraint and seclusion, and the frequency of such disabilities differs by school type, this may help explain why rates differ across school poverty and racial composition. Although overall rates of student

If certain disability types elicit more frequent restraint and seclusion, and the frequency of such disabilities differs by school type, this may help explain why rates differ across school poverty and racial composition.

disability are quite similar across school types, studies have shown that certain disability types do differ according to poverty level. Therefore, our findings could be partially explained if students with certain disability types more commonly found in affluent schools are at an increased risk of restraint and seclusion. Other potential explanations for this counterintuitive finding are that the cultural norms in low-poverty, low-diversity school districts lead practitioners to more readily remove students for challenging behavior or that restraint and seclusion are more resource-intensive (in terms of staffing and dedicated rooms) and thus more likely to be used in more affluent schools. It might also be that levels of inclusion of students with a disability differ by both socioeconomic status and diversity, leading to differing opportunities for restraint and seclusion. Reporting may also vary by school characteristics. Overall, the relationships between restraint and seclusion rates, and disability type and school characteristics, warrant further research.

Data

The data are from the 2009–2010 Civil Rights Data Collection (CRDC) and the 2009 Small Area Income and Poverty Estimates (SAIPE). The CRDC is a mandatory data collection that provides district-level information on the instances of discipline for students with and without disabilities, as well as student racial composition for the 2009–2010 school year. A total of 104 districts reported having no students with a disability, and we removed those districts from the sample. Sixty-seven districts had errors in their reporting, and we excluded them as well. This resulted in a final sample of 6,394 school districts. Notably, districts removed from the sample include both the largest (New York City Public Schools) and the only one that reports for the entire state (Hawaii Department of Education), as well as the entire state of Florida.

Districts sampled in the CRDC were given the option of reporting race by either the traditional five population categories (American Indian/Alaskan Native, Asian/Pacific Islander, Hispanic, black, and white) or the newer seven population categories, which splits Asian/Pacific Islander into separate categories of Asian and Native Hawaiian/Pacific Islander and adds the category of “two or more races.” Because only about one-fourth of districts reported using the seven population categories, we used “Asian/Pacific Islander” as a category in this analysis. We excluded the category of “two or more races” because it was more than zero in only a small minority of districts, and because of its difficulty to interpret.

SAIPE provides information on the number of students in a district living in poverty. The CRDC uses a nationally representative sample, whereas the SAIPE provides information on nearly all districts. We merged these two data sets using the National Center for Education Statistics district ID code. We dropped any districts from the SAIPE that were not included in the CRDC. A small percentage of districts reported inaccurate data and were therefore removed from the data set. The sample used in this brief is essentially a modified district-level data set from the CRDC, with 6,394 districts in total. This is not a weighted sample, and therefore the estimates are not national estimates. This limits the generalizability of these results beyond those districts sampled.
Endnotes

1. We also examined the relationship between district urbanicity and rates of restraint and seclusion. However, urbanicity exhibited a less meaningful relationship to restraint and seclusion than poverty and race did, and differences in rates across urbanicity were generally not statistically significant. Therefore, we do not report here on urbanicity.

2. In this brief, students identified with a disability are referred to as “students with a disability,” and students not identified with a disability are referred to as “students without a disability.”

3. The Civil Rights Data Collection reports on incidences of physical and mechanical restraint in a district. They provide separate measures of restraint for students with and without disabilities. In this study, we define the rate of restraint as the sum of the number of physical and mechanical restraints for every 100 students.

4. These findings are consistent with prior analyses. See Civil Rights Data Collection, “Revealing New Truths About Our Nation’s Schools,” March 2012 Report.


6. Among those districts that report at least one instance of restraint, the average rate is 6.3 per 100 students with a disability. Districts that reported at least one instance of seclusion averaged 9.6 instances per 100 students with a disability.


8. Such high rates could, however, be caused by a small proportion of students with a disability being repeatedly restrained or secluded.

9. We examine these two racial groups together, as both percentage of black and Hispanic students exhibited similar relationships to rates of restraint and seclusion. Of the 6,394 districts reviewed, 426 ranked both in the highest quartile of poverty and the highest quartile of combined black and Hispanic populations. In contrast, 841 districts ranked both in the lowest quartile of poverty (most affluent) and lowest quartile of combined black and Hispanic students.

10. One study found that the aggression that occurs when students are restrained or secluded may actually reinforce such behavior in students. See M. E. May, “Aggression as Positive Reinforcement in People with Intellectual Disabilities,” Research in Developmental Disabilities, 32 (6), (2011): 2214–2224.


15. Ibid.


19. This finding does not suggest that white students are more likely to be restrained or secluded, rather just that schools with large affluent white populations are more likely to have higher rates than poor, diverse schools.

20. The proportion of students with disabilities in school districts is fairly stable across school characteristics such as poverty, race, and urbanicity. For instance, we find that the highest quartile of poverty averaged 13.5 percent of students identified with a disability, compared with 12.5 percent in the most affluent quartile of districts. Such findings are consistent with


About the Authors
Douglas J. Gagnon is a doctoral candidate in education at the University of New Hampshire and a research assistant at the Carsey Institute (djb492@wildcats.unh.edu).

Marybeth J. Mattingly is the director of Research on Vulnerable Families at the Carsey Institute and a research assistant professor of sociology at the University of New Hampshire (beth.mattingly@unh.edu).

Vincent J. Connelly is an associate professor in education at the University of New Hampshire (vincent.connelly@unh.edu).

Acknowledgments
The authors thank Todd DeMitchell in education at the University of New Hampshire; Andrew Houtenville and Mary Schuh at the Institute on Disability at the University of New Hampshire; Rebecca Glauber and Michelle Dillon, both at the Carsey Institute and in sociology at the University of New Hampshire; Barbara Ray at Hired Pen; and Bruce Mallory, Curt Grimm, Laurel Lloyd, and Amy Sterndale, also at the Carsey Institute, for their thoughtful comments and suggestions.