

## National Preparedness Month — September 2016

Throughout September, CDC and approximately 3,000 global, national, regional, and local government organizations, as well as private and public institutions, will promote the importance of being ready for emergencies (1–3). For Preparedness Month 2016, CDC's Office of Public Health Preparedness and Response will focus on the power of preparedness globally and locally and actions that can be taken collectively and individually (1).

Being prepared saves lives. Public health emergencies might take the shape of an emerging or rapidly spreading disease, a natural disaster, or an act of bioterrorism. While the nature, timing, and location of the next threat cannot be anticipated, developing programs to prevent, detect, and respond to public health emergencies can mitigate the impact of the unknown (2). Persons can take action now by having a family reunification plan and an emergency kit with basic supplies, medicines, and local emergency telephone numbers.

During preparedness month, CDC's *Public Health Matters* blog (3) will feature stories about how countries are partnering to advance health security, how emergencies prompt innovation and training, how states respond to new disease threats, and how every person plays a powerful role in protecting our communities and families. Preparedness Month will include infographics, social media, and a Twitter chat on September 27 @CDCEmergency. The month culminates with National PrepareAthon! Day on September 30. Additional information about CDC's Preparedness Month is available at <http://www.cdc.gov/phpr/npm>.

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## School District Crisis Preparedness, Response, and Recovery Plans — United States, 2012

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The unique characteristics of children dictate the need for school-based all-hazards response plans during natural disasters, emerging infectious diseases, and terrorism (1–3). Schools are a critical community institution serving a vulnerable population that must be accounted for in public health preparedness plans; prepared schools are adopting policies and plans for crisis preparedness, response, and recovery (2–4). The importance of having such plans in place is underscored by the development

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of a new *Healthy People 2020* objective (PREP-5) to “increase the percentage of school districts that require schools to include specific topics in their crisis preparedness, response, and recovery plans” (5). Because decisions about such plans are usually made at the school district level, it is important to examine district-level policies and practices. Although previous reports have provided national estimates of the percentage of districts with policies and practices in place (6), these estimates have not been analyzed by U.S. Census region\* and urbanicity.† Using data from the 2012 School Health Policies and Practices Study (SHPPS), this report examines policies and practices related to school district preparedness, response, and recovery. In general, districts in the Midwest were less likely to require schools to include specific topics in their crisis preparedness plans than

districts in the Northeast and South. Urban districts tended to be more likely than nonurban districts to require specific topics in school preparedness plans. Southern districts tended to be more likely than districts in other regions to engage with partners when developing plans. No differences in district collaboration (with the exception of local fire department engagement) were observed by level of urbanicity. School-based preparedness planning needs to be coordinated with interdisciplinary community partners to achieve *Healthy People 2020* PREP-5 objectives for this vulnerable population.

SHPPS is a national survey conducted every 6 years by CDC to assess school health policies and practices at state, district, school, and classroom levels. This report uses school district–level data from the 2012 survey (6). A two-stage sample design was used to generate a nationally representative sample of public school districts in the United States. Seven district-level questionnaires (each assessing different aspects of school policies and practices) were administered in each sampled district; this report provides results from the healthy and safe school environment questionnaire. Respondents were asked whether their school district required schools to have a comprehensive plan to address crisis preparedness, response, and recovery that included four specific topics identified in PREP-5: family reunification procedures, procedures for responding to pandemic influenza or other infectious disease outbreaks, provisions for students and staff members with special needs, and provision of mental health services for students

\* [https://www.census.gov/geo/reference/gtc/gtc\\_census\\_divreg.html](https://www.census.gov/geo/reference/gtc/gtc_census_divreg.html).

† <http://www.census.gov/geo/reference/urban-rural.html>.

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and staff members after a crisis. Respondents also were asked whether the district collaborated with specified categories of partners (e.g., local fire department or local mental health or social services agency) in developing crisis preparedness plans.

A single respondent identified by the district as the most knowledgeable on the topic responded to each questionnaire module. During October 2011–August 2012, respondents completed questionnaires via a secure data collection website or paper-based questionnaires. Among eligible districts, 697 (66.5%) completed the healthy and safe school environment questionnaire. Additional data regarding SHPPS methods are available online (6). Data were weighted to provide national estimates and analyzed using statistical software that accounted for the complex sample design. School districts were categorized by geographic location into one of the four U.S. Census regions (Midwest, Northeast, South, and West) and by level of urbanicity (urban or nonurban). Prevalence estimates and 95% confidence intervals were computed for all point estimates. Significant differences were evaluated by census region and urbanicity by t-test, with significance set at  $p < 0.05$ .

District requirements for school plans varied by specific topic and region, ranging from 87.8% in the South for provisions for students and staff members with special needs to 57.9% in the Midwest for procedures for responding to pandemic influenza or other infectious disease outbreaks (Table 1). Overall, 79.9% of school districts required provisions for

students and staff members with special needs; 67.8% required plans that addressed family reunification procedures, 69.0% required procedures for responding to pandemic influenza or other infectious disease outbreaks, and 69.3% required plans for provision of mental health services for students, faculty, and staff members after a crisis. For all four of the topics, the percentage of school districts requiring schools to address the topic was lowest in the Midwest.

By urbanicity, on average, urban districts required schools to include more of the four topics in their preparedness plans than did nonurban districts (3.1 versus 2.7 specific topics,  $p < 0.05$ ). Urban districts also were significantly ( $p < 0.05$ ) more likely than nonurban districts to require schools to include family reunification, provisions for students and staff members with special needs, and provision of mental health services in their plans (Table 1).

Analysis of responses regarding district collaboration with community partners found differences in practices for preparedness planning by census region, although only one significant difference was found by urbanicity (Table 2). Across all districts, >90% worked with 1) staff members from individual schools within the district, 2) local fire departments, and 3) local law enforcement agencies. In contrast, 16.6% of districts (range = 12.0%–20.8%) worked with a local public transportation department<sup>§</sup> (Table 2).

<sup>§</sup>Sixty two percent of districts did not have public transportation departments.

**TABLE 1. Percentage of school districts that require schools to have a comprehensive plan to address crisis preparedness, response, and recovery\* that includes specific topics, by U.S. Census region and urbanicity — School Health Policies and Practices Study, United States, 2012**

Specific topic	Census region <sup>†</sup> % (95% CI)				Urbanicity % (95% CI)		Total % (95% CI)
	Midwest	Northeast	South	West	Urban	Nonurban	
Family reunification procedures	60.2 <sup>§</sup> (52.8–67.3)	72.0 <sup>¶</sup> (62.3–80.0)	71.6 (63.7–78.4)	73.6 <sup>**</sup> (63.1–82.1)	78.0 <sup>††</sup> (71.5–83.4)	61.5 (55.8–66.8)	67.8 (63.5–71.9)
Procedures for responding to pandemic influenza or other infectious disease outbreaks	57.9 <sup>§</sup> (50.2–65.3)	75.2 <sup>¶</sup> (67.7–81.5)	79.4 (72.5–84.9)	68.5 (56.3–78.6)	72.9 (66.1–78.8)	66.5 (60.6–71.8)	69.0 (64.7–73.1)
Provisions for students and staff members with special needs	72.2 <sup>§</sup> (64.3–79.0)	87.6 <sup>¶</sup> (80.9–92.1)	87.8 <sup>§§</sup> (82.4–91.7)	73.0 <sup>¶¶</sup> (63.9–80.5)	85.8 <sup>††</sup> (80.6–89.7)	76.3 (70.8–81.1)	79.9 (76.0–83.3)
Provision of mental health services for students, faculty, and staff members after a crisis occurred <sup>***</sup>	60.1 <sup>§</sup> (52.7–67.1)	80.4 <sup>¶</sup> (72.6–86.4)	72.7 (65.7–78.6)	71.6 (60.7–80.4)	77.1 <sup>††</sup> (70.6–82.5)	64.4 (59.0–69.4)	69.3 (65.2–73.2)

**Abbreviation:** CI = confidence interval.

\* In the event of a natural disaster or other emergency or crisis situation.

<sup>†</sup> [https://www.census.gov/geo/reference/gtc/gtc\\_census\\_divreg.html](https://www.census.gov/geo/reference/gtc/gtc_census_divreg.html).

<sup>§</sup> Significant difference ( $p < 0.05$ ) between Midwest and South districts.

<sup>¶</sup> Significant difference ( $p < 0.05$ ) between Northeast and Midwest districts.

<sup>\*\*</sup> Significant difference ( $p < 0.05$ ) between West and Midwest districts.

<sup>††</sup> Significant difference ( $p < 0.05$ ) between urban and nonurban districts.

<sup>§§</sup> Significant difference ( $p < 0.05$ ) between South and West districts.

<sup>¶¶</sup> Significant difference ( $p < 0.05$ ) between West and Northeast districts.

<sup>\*\*\*</sup> For example, to treat post-traumatic stress disorder.

## Discussion

Children represent approximately one fourth of the U.S. population and are separated from their caregivers while attending school. They have unique physiological, psychological, and developmental attributes that make them at heightened risk during disasters (1–3). Particular challenges for school-based preparedness are planning for children with special needs (e.g., disabilities or functional or medical needs), chronic conditions, or limited English proficiency (1,2,4,7). Effective readiness can be hampered by compartmentalized planning that overlooks the unique vulnerabilities of children in and following public health disasters (8). Broader community participation in school-based disaster planning can ensure that relevant stakeholders have a common framework and understanding to support response and recovery following a disaster.

Although SHPPS found that more than two thirds of districts require schools to include specified topics in their crisis plans, these requirements do not necessarily exist at the state level. A 2014 National Report Card evaluated state-level standards

for preparedness planning for children and found that only 29 states met the basic standards for safety of children during an event (9). However, the National Report Card focused primarily on disaster planning standards for children in child care facilities with only one standard specific to K-12. A state level approach to disaster preparedness planning is needed for both child care facilities and schools.

The findings in this report are subject to at least three limitations. First, the “yes or no” responses do not provide insight into the relevance of the specific topics in the preparedness plan or whether plans were exercised or evaluated to identify areas for improvement. Second, SHPPS data are collected every 6 years, and the most recent district data are from 2012. It is possible that some districts have updated their policies and practices related to preparedness since the data were collected. Finally, SHPPS data are self-reported and as such there might be opportunity for misclassification because of respondent interpretation of a particular question.

**TABLE 2. Percentage of school districts that collaborated with school or community partners to develop preparedness, response, and recovery plans,\* by planning partner type, U.S. Census region, and urbanicity — School Health Policies and Practices Study, United States, 2012**

Partners engaged	Census region <sup>†</sup> % (95% CI)				Urbanicity % (95% CI)		Total <sup>§</sup> % (95% CI)
	Midwest	Northeast	South	West	Urban	Nonurban	
Staff members from individual schools within district	93.0 (88.3–95.9)	97.4 (92.3–99.1)	96.9 (92.7–98.7)	95.7 (87.6–98.6)	97.1 (94.0–98.6)	94.3 (91.1–96.5)	<b>95.4 (93.2–96.9)</b>
Students or their families	33.5 <sup>¶</sup> (27.4–40.1)	47.0 <sup>**</sup> (36.7–57.6)	50.9 (43.5–58.2)	43.8 (34.2–53.8)	42.8 (36.2–49.8)	43.0 (39.9–48.3)	<b>42.8 (38.7–46.9)</b>
Local fire department	90.9 (86.2–94.1)	95.8 (90.3–98.2)	91.7 (86.4–95.0)	89.3 (80.8–94.4)	94.7 <sup>††</sup> (90.8–97.0)	90.1 (86.6–92.7)	<b>91.9 (89.4–93.9)</b>
Local law enforcement agency	93.8 (89.4–96.5)	100 <sup>***,§§</sup> (100–100)	94.0 (89.0–96.8)	91.7 <sup>¶¶</sup> (83.1–96.1)	96.7 (93.5–98.3)	93.7 (90.4–95.9)	<b>94.8 (92.6–96.4)</b>
Local emergency medical services	80.0 (73.6–85.2)	86.0 (78.4–91.2)	87.4 (81.0–91.9)	75.6 (63.2–84.8)	82.3 (76.0–87.2)	83.2 (78.6–86.9)	<b>82.8 (79.2–85.9)</b>
Local public transportation department	12.0 <sup>¶</sup> (8.1–17.4)	20.6 (13.4–30.4)	20.8 (15.5–27.4)	13.7 (8.2–22.1)	20.7 (15.4–27.2)	14.0 (10.7–18.2)	<b>16.6 (13.7–20.0)</b>
Local health department	62.4 (55.4–69.1)	69.1 (58.9–77.8)	69.1 (61.5–75.7)	60.9 (49.5–71.3)	68.9 (61.9–75.2)	63.5 (58.1–68.7)	<b>65.6 (61.3–69.6)</b>
Local mental health or social services agency	41.0 (34.5–47.9)	51.8 (43.3–60.2)	48.5 (40.7–56.4)	46.1 (34.3–58.4)	49.9 (43.1–56.7)	43.8 (38.4–49.3)	<b>46.1 (41.9–50.4)</b>
Local hospital	39.7 (32.5–47.3)	36.7 <sup>§§</sup> (27.6–46.8)	50.3 <sup>***</sup> (42.4–58.2)	32.1 (23.3–42.3)	42.8 (35.7–50.1)	40.1 (34.8–45.7)	<b>41.2 (36.9–45.6)</b>
Local homeland security office or emergency management agency	36.9 <sup>¶</sup> (29.8–44.6)	51.6 <sup>**</sup> (41.9–61.3)	58.0 <sup>***</sup> (49.6–66.0)	29.4 <sup>¶¶</sup> (20.7–39.8)	49.2 (42.2–56.2)	41.8 (36.0–47.9)	<b>45.1 (40.6–49.7)</b>
Other community members	61.4 <sup>¶</sup> (54.5–67.9)	70.8 (61.6–78.5)	76.7 <sup>***</sup> (69.0–83.0)	58.6 (47.6–68.9)	66.1 (59.5–72.2)	67.7 (62.2–72.7)	<b>67.4 (63.2–71.3)</b>

**Abbreviation:** CI = confidence interval.

\* Among districts that had a preparedness plan or required schools to have a plan.

<sup>†</sup> [https://www.census.gov/geo/reference/gtc/gtc\\_census\\_divreg.html](https://www.census.gov/geo/reference/gtc/gtc_census_divreg.html).

<sup>§</sup> Total refers to the total number of districts that responded to the evaluated question on the healthy and safe school environment module. Districts with missing data were not included in the denominator.

<sup>¶</sup> Significant difference ( $p < 0.05$ ) between Midwest and South districts.

<sup>\*\*</sup> Significant difference ( $p < 0.05$ ) between Northeast and Midwest districts.

<sup>††</sup> Significant difference ( $p < 0.05$ ) between urban and nonurban districts.

<sup>§§</sup> Significant difference ( $p < 0.05$ ) between Northeast and South districts.

<sup>¶¶</sup> Significant difference ( $p < 0.05$ ) between West and Northeast districts.

<sup>\*\*\*</sup> Significant difference ( $p < 0.05$ ) between South and West districts.

**Summary****What is already known about this topic?**

Children represent nearly one fourth of the U.S. population, have unique vulnerabilities, and might be in a school setting, separated from families, when a disaster occurs. The U.S. Department of Education recommends that schools develop and exercise crisis preparedness plans in collaboration with community partners.

**What is added by this report?**

Data from the 2012 School Health Policies and Practices Study indicated that 79.9% of school districts required schools to have a comprehensive plan that includes provisions for students and staff members with special needs, whereas 67.8% to 69.3% of districts required plans that addressed family reunification procedures, procedures for responding to pandemic influenza or other infectious disease outbreaks, and provision of mental health services for students, faculty, and staff members, after a crisis. On average, urban districts required schools to include more of the four selected topics in their plans than nonurban districts. Across all districts, >90% collaborated on plans with staff members from individual schools within the district, local fire departments, and local law enforcement agencies.

**What are the implications for public health practice?**

The deficiencies found in some census regions show a need to strengthen school district–based disaster preparedness planning. These deficiencies need to be addressed to meet the four Healthy People 2020 preparedness objectives (PREP-5).

The U.S. Department of Education's *Practical Information on Crisis Planning: a Guide for Schools and Communities* recommends that school crisis plans be developed in partnership with other community stakeholders (4). In this report, percentages of districts collaborating with school staff members and law enforcement, fire department, and emergency medical services were high across all census regions and levels of urbanicity, although other partnerships need improvement. The American Academy of Pediatrics suggests that additional efforts are needed to address deficiencies in partner engagement for school disaster planning and to address the unique vulnerabilities of children (3). School-based and community-based preparedness planning, training, exercises, and drills to improve emergency response, recovery, and overall community resilience are needed (7).

National and district-specific information on school crisis preparedness planning is required to identify and address critical gaps in preparedness, response, and recovery policies and plans for children. Findings from this report can strengthen school and community preparedness through multi-organizational,

transdisciplinary partnerships engaged in preparedness planning (7). Disaster planning is a shared responsibility (2). The Children and Youth Task Force, Office of Human Services Emergency Preparedness and Response, is promoting a coordinated planning approach involving governmental and nongovernmental organizations and health care providers to improve outcomes and minimize the consequences of disasters on this vulnerable population (7).

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