Impact of the COVID-19 Pandemic on K-12 School Nurses
(2020/2021 School Year)
Survey Research Findings | June 2021

Public health, schools and elected officials need timely, actionable and school-specific data to help prevent the spread of the virus that causes COVID-19 in kindergarten-12th grade (K-12) school settings and to make sure schools can reopen and stay open, safely. In January 2021, the CDC Foundation, in partnership with Deloitte Consulting and the Centers for Disease Control and Prevention (CDC), launched the Monitoring School COVID-19 Prevention Strategies Project to assess school prevention strategies and impacts of COVID-19 on the social, mental and physical health of the school community.

This report provides takeaways from a convenience sample survey of 977 K-12 school nurses in the U.S., conducted between May 27 – June 3, 2021 through a partnership with the National Association of School Nurses. These data provide timely information related to COVID-19 and the changing circumstances in schools, from the perspective of school nurses. This report focuses on job satisfaction and shifts in workload, job responsibilities, involvement in school reopening decisions, prevention policies, adequacy of infrastructure and supplies, nurses’ personal COVID-19 vaccination intentions, general vaccination status of students, school-located vaccination events and impacts on students.

**KEY FINDINGS**
- Nearly all nurses (98%) reported they felt prepared (or equipped) to respond to COVID-19 in their school. However, most nurses reported an increase in work-related responsibilities (68%), hours (73%) or stress (81%) compared to pre-COVID-19 pandemic. 47% of respondents reported they were thinking more often about leaving the profession compared to pre-COVID-19 pandemic.
- Over 80% of nurses reported they participated in the following COVID-19 activities during the 2020-2021 school year: conducting or assisting with contact tracing; conducting symptom screening for students, teachers and staff; communicating or collaborating with the health department; and conducting education or training activities for students, teachers or staff.
- Most nurses (76%) had the opportunity to provide input about COVID-19 prevention strategies in their school’s district plan.
- The most common barriers to schools’ abilities to implement COVID-19 prevention strategies reported by nurses were lack of key staff to support changing circumstances in school, physical infrastructure and HVAC issues, lack of adherence to prevention strategies from students and parents and lack of broadband access to support remote learning.
- Most nurses (90%) reported their school does not have access to a school-based health center; however, 91% of nurses reported having access to student health software or an online system to manage student health information.
- Most nurses (90%) reported they received a COVID-19 vaccine as of June 2021. Additionally, of the nurses who indicated that their school offered influenza or other routine vaccines within the past 2 school years, 48% reported that their school offered COVID-19 vaccines for age-eligible students this school year (2020-2021).
- More than 70% of nurses reported concerns about negative educational impact related to COVID-19 and student mental health. However, most feel confident in their ability to identify students in need of mental health services and their school’s ability to meet those needs.

**IMPLICATIONS & PUBLIC HEALTH ACTION**
Based on key findings, there are opportunities to
- Better understand stressors for nurses during the COVID-19 pandemic and how to support their efforts to manage schools’ COVID-19 prevention strategies and other responsibilities.
- Work with nurses to reduce turnover in the workplace and prevent burnout.
- Address the most prevalent barriers to implementing COVID-19 prevention strategies (e.g., improving ventilation and HVAC systems, hiring more key staff and expanding internet access for remote learning).
- Investigate strategies to address school community’s concerns about prevention strategies in place (e.g., through outreach, communication campaigns).
- Expand equitable access to health services by offering more school-located vaccination (SLV) events, including offering COVID-19 vaccines on site and investigating potential barriers to offering SLV events.
- Investigate ways to address student learning loss, mental health and physical health concerns to ensure students receive the support they need.

**SCHOOL NURSES DEMOGRAPHICS**

Respondent Demographics (n=977)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Tenure as Nurse</th>
<th>Schools Served</th>
<th>Race and Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>99% Female</td>
<td>51 years old (average)</td>
<td>10 years (average)</td>
<td>63% 1 school</td>
<td>90% Non-Hispanic White</td>
</tr>
<tr>
<td>1% Male</td>
<td>24 years old (minimum)</td>
<td>1 year (minimum)</td>
<td>22% 2-3 schools</td>
<td>3% Non-Hispanic Black</td>
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<tr>
<td></td>
<td>76 years old (maximum)</td>
<td>36 years (maximum)</td>
<td>9% 4-5 schools</td>
<td>4% Non-Hispanic Other*</td>
</tr>
</tbody>
</table>

Characteristics of Schools Represented (n=977)

<table>
<thead>
<tr>
<th>School Types</th>
<th>Grades Represented</th>
<th>School Operation Model</th>
<th>Location</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% Public School (not charter or magnet)</td>
<td>36% Elementary school (grades K-5)</td>
<td>23% In-person</td>
<td>18% Urban</td>
<td>31% Northeast</td>
</tr>
<tr>
<td>6% Private/Parochial/Independent School</td>
<td>15% Middle school (grades 6-8)</td>
<td>75% Hybrid</td>
<td>53% Suburban</td>
<td>23% Midwest</td>
</tr>
<tr>
<td>2% Charter/Magnet School</td>
<td>23% High school (grades 9-12)</td>
<td>3% Remote/virtual</td>
<td>29% Rural</td>
<td>29% South</td>
</tr>
<tr>
<td>1% Boarding or Other School</td>
<td>19% K-12th grade</td>
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<td></td>
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<tr>
<td>8% K-6th grade</td>
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*Note: Results in this report are not generalizable since they are based off a convenience sample survey. The electronic survey was approved by the Independent Review Board (IRB). These data have not been published. Data were not weighted and are therefore not nationally representative of the population of interest. All percentages in this report are rounded to the nearest whole number and thus totals may not add to exactly 100%. Additionally, the views expressed in this survey belong solely to the respondents and do not represent or reflect the view of the CDC Foundation.

*Non-Hispanic Other school nurses includes American Indian or Alaskan Native, Asian or Asian American, Native Hawaiian or Pacific Islander, multiple races and other.
## Job Satisfaction & Shifts in Workload

**Compared to before the COVID-19 pandemic began (February 2020), how much are you experiencing each of the following?**

<table>
<thead>
<tr>
<th>Item</th>
<th>More</th>
<th>About the same</th>
<th>Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duties beyond typical nurse activities</td>
<td>68%</td>
<td>27%</td>
<td>5%</td>
</tr>
<tr>
<td>Work performance challenges/related stress</td>
<td>61%</td>
<td>32%</td>
<td>7%</td>
</tr>
<tr>
<td>Unreasonable workload</td>
<td>53%</td>
<td>39%</td>
<td>8%</td>
</tr>
<tr>
<td>Thinking about retiring or finding a different profession</td>
<td>47%</td>
<td>39%</td>
<td>14%</td>
</tr>
<tr>
<td>Low work morale</td>
<td>47%</td>
<td>36%</td>
<td>17%</td>
</tr>
<tr>
<td>Difficulty staying focused</td>
<td>41%</td>
<td>47%</td>
<td>13%</td>
</tr>
</tbody>
</table>

- Of the nurses who reported on their mental health (n=757), 14% reported frequent mental distress (14+ days of poor mental health) during the past 30 days.
- 23% of nurses reported their school has either developed or expanded a list of available substitute school nurses to help since the COVID-19 pandemic began.
- More than half of nurses were concerned about retention of:
  - Health staff at school (e.g., nurses, substitute nurses) (71%)
  - Behavioral health staff at school (e.g., counselors, school social workers) (57%)

**How concerned are you about the following issues in your school?**

- Health staff retention
  - Concerned: 71%
  - Neutral: 10%
  - A little or not concerned: 19%
- Behavioral health staff retention
  - Concerned: 57%
  - Neutral: 20%
  - A little or not concerned: 23%

## Responsibilities Related to COVID-19

- Of a list of various recommended actions after report of a lab-confirmed COVID-19 case, nurses most often reported they were personally responsible for:
  - Notifying individuals who may have been exposed in school (82%)
  - Clearing positive cases to return to school (80%)
  - Documenting successful notification of close contacts (77%)
- Most common COVID-19 prevention activities conducted were maintenance of isolation spaces for sick students, answering phone calls from parents and others, and tracking positive cases at school.
- 33% of all nurses indicated that they would be in favor of the school administering COVID-19 testing as a requirement for in-person learning. This school year (2020-2021) only about 5% of nurses reported their school required COVID-19 testing for students, teachers and staff.

**Which of the following would you personally be responsible for if a lab-confirmed case of COVID-19 was reported to the school? Choose all that apply.**

- Notification of people who may have had close contact with the positive case in school (e.g., contact tracing) 82%
- Clearing the positive case to return to school 80%
- Documenting successful notification of close contacts 77%
- Notification of local health officials, e.g., by phone or with a reporting form 68%
- Providing contact tracing documentation to the local health department 65%
- Clearing and disinfection of relevant areas 24%
- Notification of all teachers and staff 19%
- Notification of all students, parents, and guardians 15%
- Providing a COVID-19 test to people who may have had close contact with the positive case in school 16%

**During the 2020-2021 school year, what responsibilities and activities have you (or another school nurse) participated in at your school related to COVID-19? Choose all that apply.**

- Maintaining separate space for those who show symptoms or become ill at school 97%
- Answering phone calls from parents or the community related to COVID-19 96%
- Tracking the number of positive cases 93%
- Conducting or assisting with contact tracing for confirmed cases of COVID-19 92%
- Conducting symptom screening for students, teachers, or staff 89%
- Communicating or collaborating with the health department regarding COVID-19 87%
- Caring for ill or symptomatic students, teachers, or staff suspected of having COVID-19 87%
- Conducting education or training activities for students, teachers, or staff related to COVID-19 82%
- Helping develop or update plans relating to returning to school 78%
- Ordering COVID testing or prevention supplies (e.g., masks) 59%
- Conducting education or training activities for parents or the community related to COVID-19 46%
- Tracking vaccination of staff 36%
- Testing students for COVID-19 26%
- Holding virtual office hours or telehealth activities 23%
- Conducting outreach activities for students at increased risk for COVID-19 20%

**Note:** This question is only applicable to nurses who primarily worked in a K-12 school where students were in an in-person or hybrid learning model this school year (2020-2021).
76% of nurses had the opportunity to provide input on COVID-19 prevention strategies in their school district’s plan.

Overall, most school nurses were satisfied with school communications (% satisfied with):
- Communications about COVID-19 exposures at school (83%).
- School decisions requiring students who came in close contact with COVID-19 cases to stay home for a certain amount of time (85%).
- School’s supplies for proper hygiene (93%).

Answer the following questions about your school:

n = 977

Were nurses given the opportunity to provide input about COVID-19 prevention strategies in the district plan?

- Yes: 76%
- No: 21%
- Not sure: 3%

Is there a central location for nurses to go to find information about decisions and meetings related to COVID-19?

- Yes: 75%
- No: 19%
- Not sure: 6%

Have you been satisfied with district decisions related to COVID-19 policies and procedures?

- Yes: 71%
- No: 23%
- Not sure: 6%

INVOLVEMENT IN SCHOOL DECISIONS RELATED TO COVID-19

75% of nurses had the opportunity to provide input on COVID-19 prevention strategies in their school district’s plan.

Overall, most school nurses were satisfied with school communications (% satisfied with):
- Communications about COVID-19 exposures at school (83%).
- School decisions requiring students who came in close contact with COVID-19 cases to stay home for a certain amount of time (85%).
- School’s supplies for proper hygiene (93%).

Most common school or school district opening policies reported:
- Masks required of all students and staff inside the school building (91%).
- At least daily cleaning and disinfection of classrooms (90%).
- Physical distancing at least 6 feet when masks cannot be worn (74%).

Most commonly reported school COVID-19 protocols:
- Isolation and quarantine criteria (99%).
- Contact tracing (96%).
- Limiting large group gatherings (95%).

Nearly all nurses reported their school took the following steps after a lab-confirmed case of COVID-19:
- Required number of days for the positive case to isolate (99%).
- Notification of people who may have had close contact with the positive case in school (98%).
- Cleaning and disinfecting of relevant areas (95%).

Which of the following does your school or district’s opening policy contain? Choose all that apply.*

n = 949

Masks required of all students and staff in school building (91%)

At least daily cleaning and disinfection of classrooms (90%)

Physical distancing of at least 6 feet when masks cannot be worn, such as when eating (74%)

Physical distancing of at least 6 feet between adults (teachers and staff), and between adults and students (72%)

Ventilation (67%)

Physical distancing of at least 3 feet between students (58%)

Masks are optional (5%)

Nearly all nurses reported their school district has an agreement with their state, territorial, local or tribal health department to facilitate systematic contact tracing of students, teachers and staff with COVID-19.

Which of the following does your school or district’s opening policy contain? Choose all that apply.*

n = 949

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Nearly all nurses reported their school took the following steps after a lab-confirmed case of COVID-19:
- Required number of days for the positive case to isolate (99%).
- Notification of people who may have had close contact with the positive case in school (98%).
- Cleaning and disinfecting of relevant areas (95%).

55% of nurses reported that lack of key staff (e.g., teachers, nurses, bus drivers, custodians) impacted their school’s ability to implement prevention strategies.

To what extent has each of the following factors negatively impacted your school’s ability to implement COVID-19 prevention strategies?

n = 977

Lack of key staff (e.g., teachers, nurses, bus drivers, custodians): 53%

Lack of acceptance or adherence to prevention measures from students or parents: 32%

Limiting large group gatherings: 30%

Lack of supplies (e.g., cleaning supplies): 29%

Lack of personal protective equipment for students and staff: 29%

Note: *This question is only applicable to nurses who primarily worked in a K-12 school where students were in an in-person or hybrid learning model this school year (2020-2021).
ADEQUACY OF INFRASTRUCTURE & SUPPLIES

- 90% of nurses reported their school does not have access to a school-based health center.
- 91% of nurses reported having access to student health software or an online system to manage student health information.
- Over 90% of nurses reported they have enough gloves, surgical masks, eye protection, and gowns.
- Of the 949 nurses who primarily work in a school with an in-person or hybrid operation mode, nearly all (98%) reported their school has a designated isolation area for those who get sick or show symptoms of COVID-19 while at school.
- 48% of nurses reported symptomatic people would be isolated together if more than one person requires isolation, while 7% indicated their school does not have a plan in place.

COVID-19 VACCINATION INTENTIONS AND BELIEFS

- 90% of nurses have received a COVID-19 vaccine as of June 2021.**
- 92% of nurses reported they are or would be comfortable working at school where students are in-person after fully vaccinated with a COVID-19 vaccine.
- 78% of nurses reported they would be likely to permit mobile COVID-19 vaccination units on school grounds to offer vaccinations to school staff and community members.

GENERAL VACCINATION STATUS OF STUDENTS

- 27% of nurses reported fewer students are up-to-date with required vaccines.
- 46% of nurses reported school-required vaccinations were either a somewhat lower or much lower health priority at school in 2020-21 compared to previous school years.

Based on your school's vaccination requirements, how does students' vaccination compliance status this school year 2020-21 compare to previous years?

- More students are up-to-date with required vaccines
- Vaccination coverage is about the same as previous years
- Fewer students are up-to-date with required vaccines
- I don't know

- Of the nurses who reported fewer students are up-to-date with required vaccines this school year 2020-21 (n=267), nurses reported the top contributing factors are:
  - Parents or guardians who are afraid to take children to a vaccination provider for fear of getting COVID-19 (79%).
  - Physician offices and other vaccination providers in the area closed or made it difficult to get appointments. (67%)
  - Fewer school vaccination requirements or less stringent enforcement of requirements. (36%)
  - Loss of insurance or other financial hardships of parents or guardians. (30%)

Note: *This question is only applicable to nurses who primarily worked in a K-12 school where students were in an in-person or hybrid learning model this school year (2020-2021).

**Respondents were asked whether they "received the COVID-19 vaccine" but no distinction was made between who received just one vaccine shot (for Moderna or Pfizer) versus full vaccination.
How were school nurses involved in vaccination events? Check all that apply

- Being a point of contact for parents/guardians: 78%
- Promoting a school influenza vaccination clinic: 71%
- Distributing or collect consent forms: 69%
- Reviewing consent forms for completeness: 60%
- Managing students in the clinic: 57%
- Reviewing medical information to determine student eligibility for vaccination: 50%
- Escorting students to/from the clinic: 44%
- Entering vaccination information into a database of immunization registry: 32%
- Administering vaccine to students: 28%
- Collecting out-of-pocket fees from parents/guardians: 6%
- Other: 3%

Most nurses who reported their school will likely hold or participate in SLV events to administer vaccines to students in the fall and winter of the 2021-2022 school year (n=441) indicated their school will be offering the following vaccines:
- Influenza vaccine (60%)
- COVID-19 vaccine for staff and teachers (40%)
- Routine vaccines (e.g., measles-containing, Tdap) (34%)

Overall, most nurses reported they would support an SLV event at their school to offer:
- COVID-19 vaccines to age-eligible students (71%)
- Influenza vaccine to students (71%)
- COVID-19 vaccines to eligible family members (61%)
- Routine, non-influenza vaccine(s) (56%)

In the 2021-22 school year, during an SLV event at my school, I support offering:

- Influenza vaccine to students: Agree 71%, Neutral 16%, Disagree 13%
- COVID-19 vaccines to age-eligible students: Agree 71%, Neutral 14%, Disagree 15%
- COVID-19 vaccines to eligible family members (e.g., students' parents): Agree 61%, Neutral 17%, Disagree 22%
- Routine, non-influenza vaccine(s) (e.g., Measles-containing, Tdap) to students: Agree 56%, Neutral 22%, Disagree 22%

How confident do you feel in your school's ability to attend to the mental health needs of students?

- Not confident: 18%
- Moderately confident: 39%
- Confident: 43%

Most nurses feel confident or moderately confident in their ability to identify students in need of mental health services. There were no significant differences in nurses' confidence from pre-COVID-19 pandemic and now.

- Almost all nurses (92%) feel confident or moderately confident in their ability to identify students in need of mental health services.
- While most nurses observed a decline in student mental health, about 80% reported they are confident in their school's ability to attend to the mental health needs of students.

Note: *This question is only applicable to nurses who reported their school held or participated in at least one school-located vaccination (SLV) event within the past 2 school years (2018-2019, 2019-2020).

**School-located vaccination (SLV) is defined as vaccination administered to students on school grounds, either before, during or after school hours, usually during a prescheduled vaccination event. It often involves collaboration between school districts or schools and local public health departments or commercial entities.