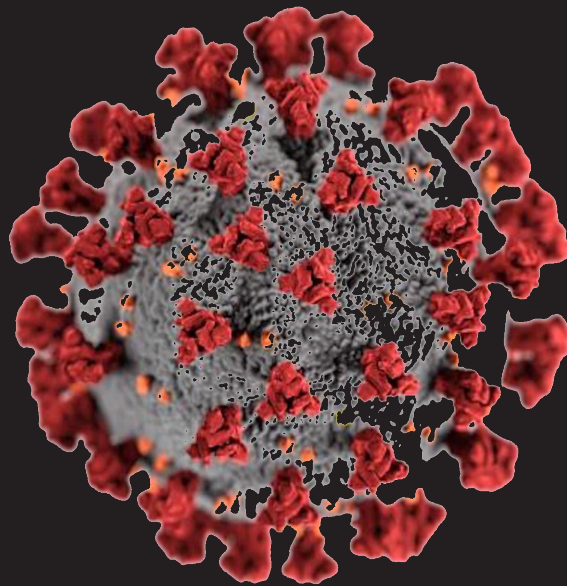


~Horry County Schools~ COVID-19 Reported Cases Among Students and Employees

(An update as of January 27, 2021)



February 1, 2021

by

David C. Wilson

Founder / CEO

Wilson Consulting Services, LLC

Conway, South Carolina

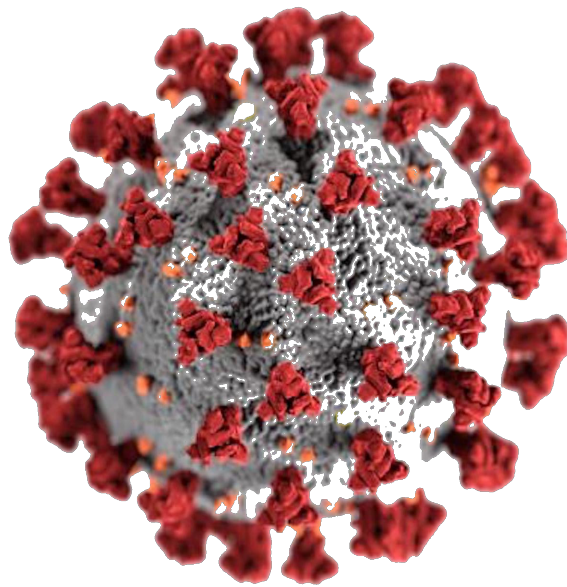


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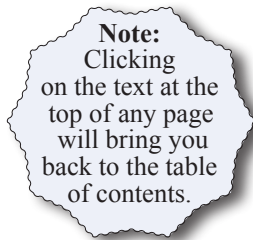
[Wilson Consulting Services, LLC](#)

Conway, South Carolina



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A copy of this report can be viewed and/or downloaded:
https://www.wilsonconsultingservices.net/wcs_hcs12921.pdf

Executive Summary

- Of the 58 public and charter schools cited in this report, 42 (72.4%) reported zero cases of students testing positive for COVID-19 in the past 30 days.
- Of the 58 public and charter schools cited in this report, 43 (74.1%) reported no or zero cases of employees testing positive for COVID-19 in the past 30 days.
- Of the 58 public and charter schools cited in this report, only 15 (25.9%) reported between one and four cases of students and employees testing positive for COVID-19 in the past 30 days.
- Of the 58 public and charter schools cited in this report, only one (1.7%) reported five or more cases of students testing positive for COVID-19 in the past 30 days.
- Of the 58 public and charter schools cited in this report, zero (0.0%) reported five or more cases of employees testing positive for COVID-19 in the past 30 days.
- Of the 58 public and charter schools cited in this report, 16 (27.6%) reported five or more cumulative cases of students testing positive, and seven (12.1%) reported five or more cumulative cases of employees testing positive for COVID-19 since SCDHEC added these data to its reporting summaries.
- Of the 14 public and special high schools, seven (50%) had a cumulative count of COVID-19 student cases, and two (14.3%) had a cumulative count of COVID-19 employee cases that were equal to or greater than five cases.
- Of the 13 public middle schools, five (38.5%) had a cumulative count of COVID-19 student cases, and zero (0%) had a cumulative count of COVID-19 employee cases that were equal to or greater than five cases.
- Of the 31 public elementary and charter schools, only four (12.9%) had a cumulative count of COVID-19 student cases, and only five (16.1%) had a cumulative count of COVID-19 employee cases that were equal to or greater than five cases.
- Of the 58 public and charter schools, high school students exhibited the highest percentage (65.3%) reported cumulative COVID-19 positive tested cases, followed by middle school students (20.4%) and elementary school students (14.4%).
- Of the 58 public and charter schools, employees at the elementary schools exhibited the highest percentage (76.7%) of reported cumulative COVID-19 positive tested cases, followed by employees at the high (23.3%) and middle school employees (0%).
- When viewed through the lens of two subpopulations (students and employees) of Horry County Schools, the number of cumulative positive COVID-19 cases for students is 3.7 cases per 1,000 and for employees is 6.3 cases per 1,000. Hence, the employee rate of infection is higher than that of students by about 68.8%, a significant difference. [See Figure 3.1 \(Page 10\) in this paper.](#)



I. Introduction to COVID-19 Cases Among Students and Employees by School

The tables and charts shown in this report provide a summary of COVID-19 cases among Horry County Schools (HCS) students and HCS employees as of January 27, 2021.

According to the South Carolina Department of Health and Environmental Control (SCDHEC), counts are based on individuals who attended school or school-sponsored activities during their infectious period. Total cases for a school are only shown if the cases for students and cases for staff are both at least five. School districts may cross-county boundaries and may not reflect county totals. Data are provisional and subject to change.

The less than five cases ($\text{Cases} < 5$) means that any change in cases from one to four is not shown as 1, 2, 3, or 4; rather, it is noted as less than five. However, because SCDHEC does list zero for no cases, the less than five equates to from one through four or ($0 < \text{Cases} < 5$) as shown in the column chart.

The cumulative total number of cases represents the number of cases to date, including the past 30 days count. For example, if the cumulative count were two cases and the 30 days rolling increase were two, the cumulative count would still show $2 + 2 = 4$; hence, the count would be shown as less than five or ($\text{Cases} < 5$), and the past 30 days count would still be shown as less than five or ($\text{Cases} < 5$). On the other hand, if the cumulative count were to show four, which is less than five (< 5), and the 30 days increase by three (3), then the cumulative will equal seven ($4 + 3 = 7$); therefore, the cumulative will be shown as the following: cumulative = 7 and the 30 days rolling average would be shown as less than five or ($\text{Cases} < 5$). Please keep in mind that the 30 days rolling average is included in the cumulative. However, if the cumulative is from one to four, it will be shown with the inequality symbol of < 5 in the tables and charts in this report and the SCDHEC website. For example, see Table 2.1.

Note:
SCDHEC provides COVID-19 data, for every school, both cumulative and rolling 30-day counts of cases among students and employees who physically attend school on a regular basis. The SCDHEC report is updated periodically.



II. Tabular Analysis of COVID-19 Cases Among Students and Employees by School As of 1/27/2021

Table 21. Tabular distribution of COVID-19 cases among students and employees by school

List of District Schools	COVID-19 Cases Among School Students		COVID-19 Cases Among School Employees	
	Cumulative	Past 30 Days	Cumulative	Past 30 Days
South Carolina	6,739		2,620	
Academy For Arts/Science/Tech	< 5	< 5	< 5	0
Academy for Tech & Academics	< 5	0	0	0
Academy of Hope Charter	< 5	0	< 5	0
Aynor Elementary	5	0	< 5	0
Aynor High	8	< 5	5	0
Aynor Middle	< 5	0	< 5	< 5
Black Water Middle	0	0	0	0
Bridgewater Academy Charter	0	0	0	0
Burgess Elementary	< 5	0	< 5	< 5
Carolina Forest Elementary	< 5	0	< 5	0
Carolina Forest High	23	5	5	< 5
Conway Elementary	< 5	< 5	0	0
Conway High	14	< 5	< 5	< 5
Conway Middle	< 5	0	< 5	< 5
Daisy Elementary	0	0	< 5	0

No COVID-19 Cases (0)
 1–4 Cases or (0 < Cases < 5)
 Equal to or Greater Than 5 Cases (Cases ≥ 5)

Source: South Carolina Department of Health and Environmental Control



II. Tabular Analysis of COVID-19 Cases Among Students and Employees by School, continued
As of 1/27/2021

Table 2.1 Tabular distribution of COVID-19 cases among students and employees by school, continued

List of District Schools	COVID-19 Cases Among School Students		COVID-19 Cases Among School Employees	
	Cumulative	Past 30 Days	Cumulative	Past 30 Days
Forestbrook Elementary	< 5	0	< 5	< 5
Forestbrook Middle	5	< 5	< 5	0
Green Sea Floyds Elementary	0	0	< 5	< 5
Green Sea Floyds High	9	< 5	< 5	< 5
HCS Early College High	5	5	5	5
HCS Scholars Academy	< 5	0	0	0
Homewood Elementary	< 5	0	< 5	< 5
Kingston Elementary	< 5	0	< 5	< 5
Lakewood Elementary	< 5	< 5	7	< 5
Loris Elementary	< 5	0	< 5	0
Loris High	< 5	0	< 5	0
Loris Middle	5	0	< 5	0
Midland Elementary	5	< 5	< 5	0
Myrtle Beach Child Dev Center	0	0	< 5	0
Myrtle Beach Elementary	< 5	0	< 5	0
Myrtle Beach High	15	< 5	0	0
Myrtle Beach Middle	< 5	< 5	0	0
Myrtle Beach Primary	< 5	0	< 5	0

No COVID-19 Cases (0)
 1-4 Cases or (0 < Cases < 5)
 Equal to or Greater Than 5 Cases (Cases ≥ 5)



Source: South Carolina Department of Health and Environmental Control



II. Tabular Analysis of COVID-19 Cases Among Students and Employees by School, continued
As of 1/27/2021

Table 2.1. Tabular distribution of COVID-19 cases among students and employees by school, continued

List of District Schools	COVID-19 Cases Among School Students		COVID-19 Cases Among School Employees	
	Cumulative	Past 30 Days	Cumulative	Past 30 Days
North Myrtle Beach High	10	0	< 5	0
North Myrtle Beach Middle	5	0	< 5	0
Ocean Bay Elementary	7	0	< 5	0
Ocean Bay Middle	< 5	0	< 5	0
Ocean Drive Middle	< 5	0	< 5	0
Ocean Drive Elementary	< 5	0	< 5	0
Palmetto Academy of Learn/Success	< 5	0	0	0
Palmetto Academy/Motorsports	< 5	0	< 5	0
Palmetto Bays Elementary	< 5	0	< 5	0
Pee Dee Elementary	< 5	0	6	< 5
River Oaks Elementary	7	< 5	< 5	0
Riverside Elementary	< 5	0	< 5	0
Seaside Elementary	< 5	0	< 5	0
Socastee Elementary	< 5	0	8	< 5
Socastee High	9	< 5	< 5	0
Socastee Middle	< 5	0	< 5	0
South Conway Elementary	< 5	0	7	< 5

No COVID-19 Cases (0)
 1–4 Cases or (0 < Cases < 5)
 Equal to or Greater Than 5 Cases (Cases ≥ 5)

Source: South Carolina Department of Health and Environmental Control



II. Tabular Analysis of COVID-19 Cases Among Students and Employees by School, continued
As of 1/27/2021

Table 2.1 Tabular distribution of COVID-19 cases among students and employees by school, continued

List of District Schools	COVID-19 Cases Among School Students		COVID-19 Cases Among School Employees	
	Cumulative	Past 30 Days	Cumulative	Past 30 Days
St. James Elementary	< 5	0	5	0
St. James High	30	< 5	< 5	< 5
St. James Intermediate	< 5	0	0	0
St. James Middle	< 5	0	< 5	0
Ten Oaks Middle	< 5	0	< 5	0
Waccamaw Elementary	< 5	< 5	< 5	< 5
Waterway Elementary	0	0	< 5	0
Whittemore Park Middle	5	< 5	< 5	0

No COVID-19 Cases (0)
 1–4 Cases or (0 < Cases < 5)
 Equal to or Greater Than 5 Cases (Cases ≥ 5)

Source: South Carolina Department of Health and Environmental Control

Table 2.2 Number and percentage of schools with reported COVID-19 cases associated with students and employees (Table 2.1).

School	Students		Employees	
	Cumulative	Past 30 Days	Cumulative	Employees
Equal to or Greater Than 5 Cases or (Cases ≥ 5)	16 (27.6%)	1(1.7%)	7 (12.1%)	0 (0%)
No Cases	7 (12.1%)	42 (72.4%)	10 (17.2%)	43 (74.1%)
1–4 Cases or (0 < Cases < 5)	35 (60.3%)	15 (25.9%)	41 (70.7%)	15 (25.9%)
Total	58 (100%)	58 (100%)	58 (100%)	58 (100%)

Source: South Carolina Department of Health and Environmental Control



III. Graphical Analysis of COVID-19 Cases Among Students and Employees by School As of 1/27/2021

The graph in Figure 3.1 shows an example of why numbers taken out of context can be misleading and cause unnecessary anxiety to the public. The graph shows the cumulative number of COVID-19 cases of schools with cases equal to or greater than five (Cases ≥ 5). The cumulative count for students is 167 cases and employees 43 cases, respectively. At first glance, it looks as if the students are experiencing significantly more cases than school employees. Misleading indeed! Although the school district is on a hybrid schedule, the subpopulation of each group must be put in context. The subpopulation of students is eight times (Ratio 8:1) greater than that

of employees; therefore, looking through the lens of inferential statistics, the employee rate of infection is about 68.8% higher than its representation within the subpopulation. Therefore, in order for the number of employees testing positive to be on par with the students, their cumulative share of cases in the equal to or greater than category should be about 21 cases, not 43. Statistically speaking, the employee rate of infection is much higher than that of the student in spite of a lower raw number of 43 compared to the student cumulative count of 167.

**Comparison of School Students and Employees
(Cumulative Cases ≥ 5)**

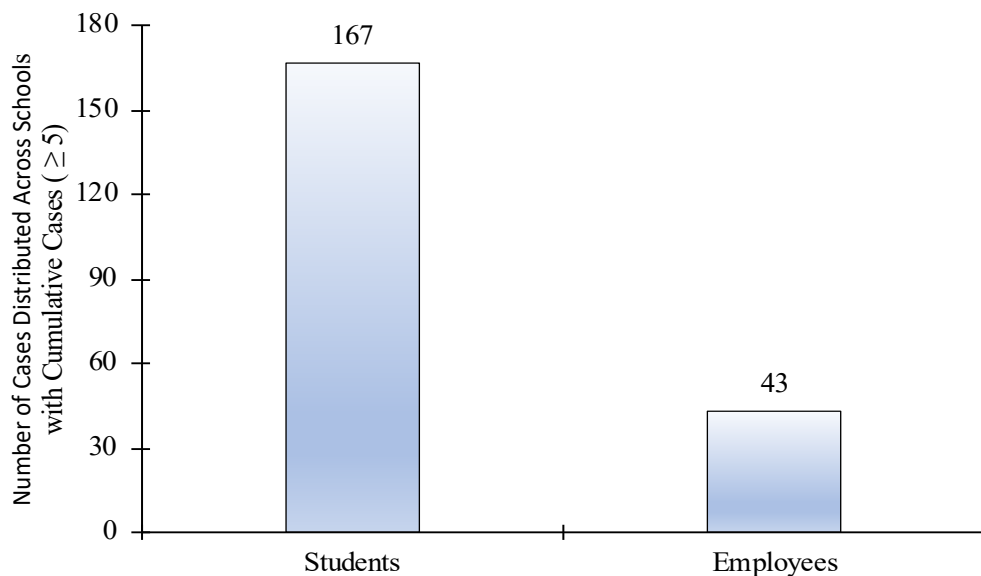


Figure 3.1 Total Number of Cumulative COVID-19 Cases Among Schools—students and employees (cases ≥ 5)

Source: South Carolina Department of Health and Environmental Control

Table 3.1 Cumulative COVID-19 Cases by School

School	Number of Schools		Number of Cases		Percentage of Cases	
	Students	Employees	Students	Employees	Students	Employees
Elementary	4	5	24	33	14.4%	76.7%
Middle	5	0	34	0	20.4%	0.0%
High	7	2	109	10	65.3%	23.3%
Total	16	7	167	43	100%	100%

Source: South Carolina Department of Health and Environmental Control



III. Graphical Analysis of COVID-19 Cases Among Students and Employees by School, continued As of 1/27/2021

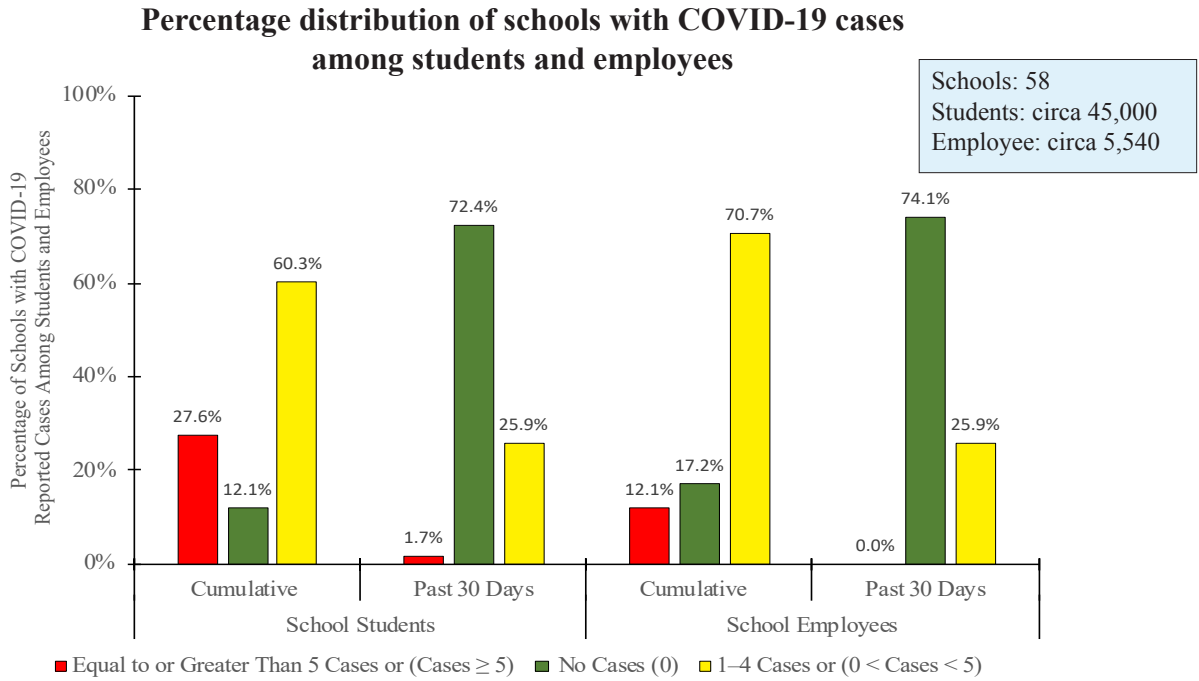


Figure 3.2 Percentage of Schools with COVID-19 Cases—students and employees

Source: South Carolina Department of Health and Environmental Control

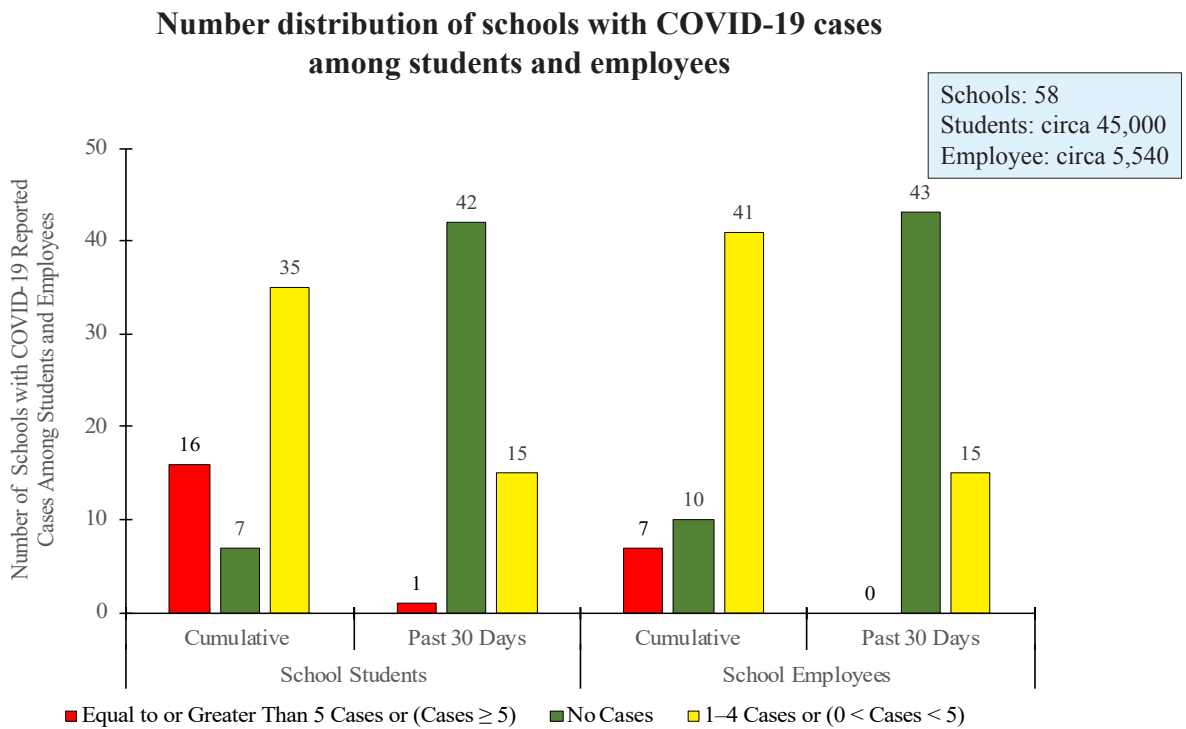


Figure 3.3 Number of Schools with COVID-19 Cases—students and employees

Source: South Carolina Department of Health and Environmental Control



