

National Survey of College Student COVID-19 Vaccination Uptake, Attitudes, Experiences, and Intentions

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AMERICAN COLLEGE HEALTH ASSOCIATION
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Foreword

As co-chairs of ACHA's Campus COVID-19 Vaccination and Mitigation (CoVAC) Initiative Advisory Committee, we recognize the continued importance of vaccination in reducing the impact of COVID-19 on our campuses, their communities, our country, and the globe. To support these efforts, we are pleased to present the findings of this nationally representative survey examining college student attitudes, behaviors, and intentions regarding vaccination and mitigation strategies on campus. The results highlight the challenges and opportunities related to building and maintaining vaccine confidence on campus. As might be anticipated, there were differences in vaccine uptake and intentions regionally and by type of institution. There are also, however, key learnings regarding the factors that predict vaccine uptake and intentions:

- Campus leadership should clearly and consistently convey the safety of the COVID-19 vaccines and the importance of vaccination to the health and wellbeing of the campus and community, to students and their families.
- Vaccine requirements are a key predictor of vaccine uptake, as is the perception that vaccination is a community responsibility. A large majority of students also reported feeling safer on campus because of these policies.
- Students who use college health center services rate them positively on giving clear health information, reinforcing the importance of including college health professionals in developing and delivering COVID-19 messaging.

We encourage you to review the details of this report to inform your future work around COVID-19 vaccination and mitigation strategies on your campuses.

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Key Findings

American college students' uptake of COVID-19 vaccinations exceeds vaccine acceptance rates among all adults nationally – with campus requirements a decisive factor.

Eighty-five percent of college students are vaccinated, including 82 percent fully vaccinated or boosted and 3 percent partially vaccinated, a nationally representative survey by the American College Health Association finds, with college vaccination requirements a significant, independent predictor of uptake. Forty-three percent of students say their school has a requirement in place, and among them, 18 percent got their COVID-19 vaccine because it was required.

Indeed, in a testament to the effectiveness of requirements put into place the past year, COVID-19 vaccine uptake is nearly universal on campuses that require it. And vaccine requirements are highly effective on another metric: about eight in 10 students at schools with these requirements in place say they feel safer on campus as a result.

Challenges remain. Among the one in seven college students who are unvaccinated, few are likely to get a vaccine, with majorities unconvinced of the vaccines' safety or effectiveness. Even if encouraged by a health care provider, most still say they'd be unlikely to act.

Hesitancy also is a factor among vaccinated but unboosted college students: About six in 10 of those who are fully vaccinated but have not received a booster dose say they're unlikely to get one, with perceived lack of necessity topping the list of reasons.

Communication is one obstacle. Fewer than half of college students, 47 percent, report getting at least a good amount of information about COVID-19 or COVID-19 vaccines from their college, and a quarter of those who get such information lack trust in it. Notably, those with a student health center on campus are more apt than others to report receiving COVID-19 or COVID-19 vaccine information from their school.¹

Relatedly, large shares of incoming college students are unsure of the latest vaccine and mask requirements at their schools, underscoring the need for colleges to communicate more clearly to incoming students as they prepare for their arrival on campus.

Nearly six in 10 college students say they've caught COVID-19. Fewer, but still 44 percent, are worried about the possibility of catching it in the future.

Students at two-year or community colleges lag behind others on COVID-19 initial vaccine and booster uptake alike. Among factors, they're less likely to have received a vaccine specifically on campus, to have been encouraged by their college to get vaccinated, to report a vaccine requirement in place at their school, or to be aware of having a student health center on campus.

By race and ethnicity, COVID-19 vaccine and booster uptake alike are similar among white, Black, and Hispanic college students.² Differences emerge elsewhere: white college students are less apt than their

1 Having a student health center is defined as being aware of such a facility on campus.

2 Sample sizes of other racial and ethnic groups are insufficient for separate analysis, reflecting their population distributions.

Black or Hispanic counterparts to be worried about catching the virus, as well as more likely to say they already have had a COVID-19 infection.

Among other results, one in four college students lacks a regular place where they go for health care services. Among the three-quarters who have such a place, one in 10 says it's a college student health center. Regardless, of those with a health center on campus, nearly a quarter have used it for non-vaccination care in the past year. (About as many spring students, 21 percent, got at least one of their COVID-19 vaccine doses on campus.)

Substantial majorities of those who received health services other than vaccinations rate their student health center positively on three measures tested – giving clear health information, availability to provide needed services, and being sensitive toward cultural backgrounds.

In terms of other vaccinations, encouragingly, hesitancy is lower when it comes to vaccines for HPV, MMR, and meningitis B. And two-thirds of college students say they are likely to get a seasonal flu vaccine this fall.

These results are from a survey of a random national sample of 948 full- or part-time graduate and undergraduate students enrolled in in-person instruction at a two- or four-year college or university in spring or fall 2022.³ The survey was produced for the American College Health Association by [Langer Research Associates](#), with data collection from June 3-July 5, 2022, in English and Spanish, via the Ipsos KnowledgePanel®, a probability-based online survey panel. Results have a margin of error of 4.1 percentage points for the full sample; error margins are larger for subgroups.⁴

The study was produced for the American College Health Association's [CoVAC \(Campus COVID-19 Vaccination and Mitigation\) Initiative](#), under the direction of Claudia Trevor-Wright, MA, JD, MCHES, Robyn Buchsbaum, MHS, Heather Zesiger, PhD, MPH, MCHES, and Mary T. Hoban, PhD, MCHES of ACHA, with input from Brian Jerrad Manns, Kathleen Holmes and Nma Eberechukwu Ohiaeri of the U.S. Centers for Disease Control. Langer Research Associates Research Analyst Steven Sparks, PhD, served as project manager and lead analyst, supported by senior research analysts Allison De Jong, MA; Christine Filer, PhD; and Sofi Sinozich, MS, with Gary Langer as project director.

Detailed results follow in six sections: COVID-19 vaccine uptake and intentions, predicting vaccine uptake, campus policies, health care access, trusted sources of information and attitudes toward non-COVID-19 vaccines.

- 3 The term “college students” as used in this report refers to individuals who fit this description. See Appendix A for the sample demographic profile.
- 4 All differences described in this report have been tested for statistical significance. Those that are significant at the 95 percent confidence level (or higher) are reported without qualification. Those that are significant at 90-94 percent confidence are described as “slight” differences. Those that are significant at less than 90 percent confidence are not reported as differences.

I. COVID-19 Vaccine Uptake and Intentions

Eighty-five percent of college students report having received at least one dose of a COVID-19 vaccine. This includes 3 percent who are partially vaccinated, 24 percent fully vaccinated with no booster, and 58 percent who've received at least one booster dose (including 7 percent, two or more booster doses). Overall uptake surpasses the rate among all adults, 79 percent, in mid-July survey data. Booster uptake marginally exceeds that of all adults, 53 percent.⁵

More than 18 months into the vaccination effort, demographic and regional differences persist. Among them:

- Graduate students are most apt to be vaccinated (93 percent), compared with 87 percent of undergraduates at four-year colleges and 75 percent at two-year colleges.
- Political divisions reflect those in the public at large: uptake reaches 95 percent among students who identify themselves as liberals and 94 percent among Democrats, vs. 84 percent among independents and moderates alike and 70 percent among Republicans and conservatives.
- Regionally, uptake is especially high among students in the Northeast, 96 percent, where campus vaccine requirements are especially prevalent. That compares with 85 percent uptake in the West, 84 percent in the Midwest, and 80 percent in the South.
- By race and ethnicity, it's a similar 86 percent among Hispanic students, 84 percent among white students, and 81 percent among Black students, not statistically significant differences.

Among vaccinated college students who were enrolled in the spring, two in 10 got all (10 percent) or some (11 percent) of their COVID-19 vaccine doses on their college campus. That peaks at 35 percent of students with an underlying health condition, also 35 percent of those who live on campus and 27 percent of those at larger institutions (with at least 20,000 students). On-campus vaccinations lag among undergraduates at two-year colleges, 13 percent, compared with graduate students and four-year undergraduates, 23 percent alike. That may reflect lack of access for students at two-year colleges, in line with their lower overall vaccine uptake.

| % received at least one dose of a COVID-19 vaccine | |
|--|-----|
| All college students | 85% |
| Graduate students | 93 |
| Undergraduates, four-year colleges | 87 |
| Undergraduates, two-year colleges | 75 |
| Liberals | 95 |
| Moderates | 84 |
| Conservatives | 70 |
| Democrats | 94 |
| Independents | 84 |
| Republicans | 70 |
| Northeast | 96 |
| West | 85 |
| Midwest | 84 |
| South | 80 |
| Hispanic students | 86 |
| White students | 84 |
| Black students | 81 |

When asked about side effects, 77 percent of vaccinated college students report no negative reaction to the vaccine (43 percent) or just a mild reaction (34 percent). Seventeen percent had a moderate reaction;

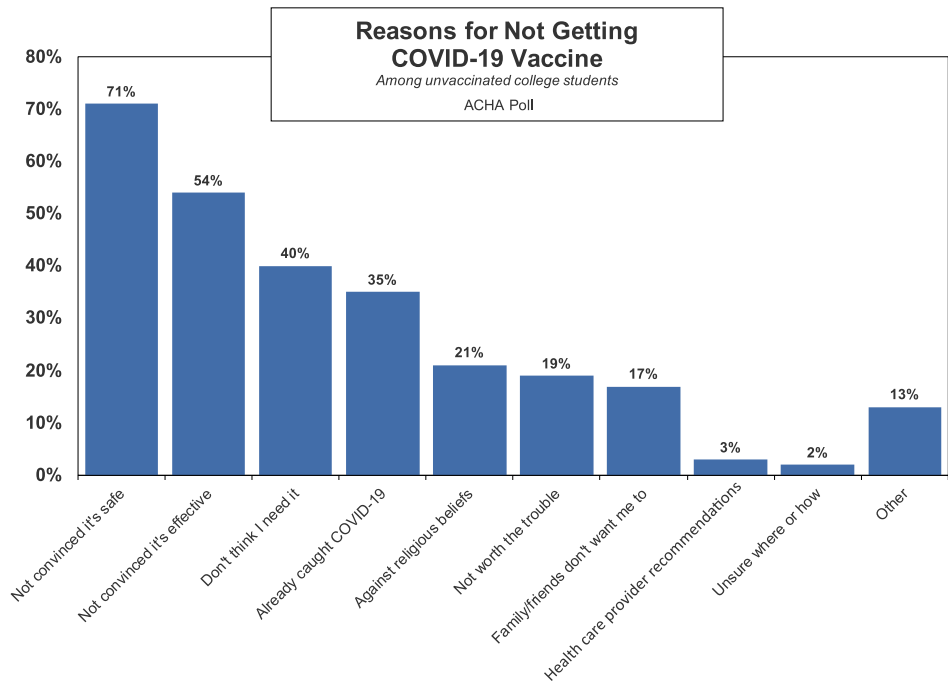
5 [Axios-Ipsos Coronavirus Index](#), July 15-18, 2022. The [CDC](#) estimate of initial uptake among adults is higher, 90 percent, and its estimate of booster uptake is lower, 39 percent, as of June 6, 2022; however, it [reports](#) that given limitations, "CDC's data may over-estimate first doses and under-estimate subsequent doses."

5 percent, a severe (4 percent) or very severe (1 percent) one. Severe or very severe reactions are highest among those with an underlying health condition, 12 percent, vs. 3 percent among others.

Uptake Intentions

Fifteen percent of college students are unvaccinated, most of whom say they definitely (8 percent) or probably (4 percent) won't get a vaccine. Just 2 percent overall are unvaccinated but definitely or probably plan to get vaccinated. In untapped potential, inclination to get vaccinated peaks among those at two-year colleges (6 percent), those who haven't yet been encouraged to get vaccinated (6 percent), and Hispanic students (5 percent).

Most of the unvaccinated do not appear movable. Students who do not definitely plan to get a vaccine were asked about their likelihood of doing so if their doctor or other health care provider recommended it. It made little difference; hesitancy is similar regardless.



Doubts about safety and efficacy loom large among factors driving hesitancy. Topping a list of nine barriers tested, seven in 10 unvaccinated students lack confidence in the vaccines' safety and 54 percent doubt their effectiveness. Smaller but substantial shares of these students don't think they need it (40 percent) or say they already caught COVID-19 (35 percent). Roughly two in 10 apiece say it goes against their religious beliefs, it's not worth the trouble, or their family or friends don't want them to. Thirteen percent cite an assortment of other reasons.

Boosters

Concerningly, among the 24 percent of college students who are fully vaccinated but have not received a booster dose, about six in 10 say they definitely (18 percent) or probably (40 percent)

will not do so. Just 16 percent definitely will get a booster, 25 percent probably. Students in the booster-inclined group divide, 55-45 percent, on whether they'll wait or act as soon as they can.

| Reasons for not getting a first or second booster shot Among booster-hesitant college students | | |
|---|--------------------------------|--|
| | Fully vaccinated, unboosted | Have received one booster shot, not two |
| I don't think I need it | 50% | 57% |
| Not convinced it's effective | 34 | 18 |
| Not convinced it's safe or concerned about side effects | 31 | 17 |
| Already caught COVID-19 | 27 | 21 |
| Not worth the trouble | 25 | 19 |
| Unsure where or how to get it | 5 | 13 |
| Family/friends don't want me to | 5 | 1 |
| Health care provider recommended against it | 1 | 4 |
| Against religious beliefs | * | 0 |
| Other | 7 | 18 |

Among those who are fully vaccinated but booster-hesitant, lack of perceived necessity is the top reason: half don't think they need a booster and a third are unconvinced of its effectiveness. Safety concerns are the third most cited, by three in 10. About a quarter say they already caught COVID-19 or think a booster is not worth the trouble; other reasons are in the single digits.

As with first-booster hesitancy, lack of perceived necessity is the predominant factor driving hesitancy to second-booster uptake, cited by 57 percent in the second-booster-hesitant group.⁶ Far fewer cite already catching COVID-19 (21 percent), think it's not worth the trouble (19 percent), or are unconvinced of its effectiveness (18 percent) or safety (17 percent).

Among groups, overall booster uptake is lowest among students at two-year colleges (40 percent), conservatives (31 percent), and Republicans (30 percent). Regionally, it's substantially lower among those who attend college in the South (47 percent) and Midwest (52 percent), rising to six in 10 in the West and eight in 10 in the Northeast.

Booster uptake is a similar 58 percent among white students, 53 percent among Black students, and 52 percent among Hispanic students. As with initial doses, these are not statistically significant differences.

⁶ Respondents were asked about their likelihood of getting a second booster vaccine if they were eligible for one.

| % who received at least one booster shot | |
|--|-----|
| All college students | 58% |
| Graduate students | 72 |
| Undergraduates, four-year colleges | 61 |
| Undergraduates, two-year colleges | 40 |
| Liberals | 78 |
| Moderates | 53 |
| Conservatives | 31 |
| Democrats | 75 |
| Independents | 56 |
| Republicans | 30 |
| Northeast | 81 |
| West | 61 |
| Midwest | 52 |
| South | 47 |
| White students | 58 |
| Black students | 53 |
| Hispanic students | 52 |

II. Predicting COVID-19 Vaccine Uptake

A statistical analysis called regression identifies significant predictors of COVID-19 vaccine uptake among college students, holding other factors constant.⁷ Independent variables used in the model were informed by a review of the literature on vaccine uptake and modeling in previous national COVID-19 surveys.⁸ Among the key predictors to emerge:

- **Campus COVID-19 vaccine requirements:** Campus requirements are highly effective. Controlling for other demographic and attitudinal variables, the presence of a vaccine requirement is an independent, positive predictor of college students having been vaccinated. Illustratively, uptake rises to 97 percent of students at colleges with a vaccine requirement, compared with 75 percent of those whose school has no requirement.
- **Trust in the vaccines' safety:** As in studies of other populations, confidence in the vaccines' safety is another key predictor of uptake. In marginal data, eight in 10 college students are very or somewhat confident that the COVID-19 vaccines are safe, and nearly all those in this group, 96 percent, have been vaccinated. Uptake falls steeply, to 42 percent, among those who are less confident in the vaccines' safety.

Confidence is lowest among two-year college students (70 percent are confident in the vaccines' safety), Republicans (61 percent) and those who identify as politically conservative (59 percent). As noted, uptake is lower in these groups compared with their counterparts.

- **Seeing vaccination as a community responsibility:** Perceiving a moral norm of vaccination – that is, thinking that people have a responsibility to get vaccinated to help stop spread of the virus in their community – also is a significant predictor of uptake, again echoing previous studies of different populations.

Fifty-five percent of college students hold this view, and among them, 97 percent are vaccinated. Uptake falls to 69 percent of those who instead say that vaccination is an individual choice that should not be impacted by community considerations.

- **Encouragement to get vaccinated:** Another key predictor of uptake among college students is their having been encouraged to get vaccinated by a trusted advisor – specifically, by a parent or other close relative or a health care provider.

Again illustratively, 62 percent of college students were encouraged to get vaccinated by a parent or other close relative; 95 percent of them indeed are vaccinated. That compares with 76 percent uptake among those whose parents stayed out of it and 52 percent of those whose parents discouraged it.

Similarly, 69 percent were encouraged by a health care provider; 93 percent in this group got a vaccine, vs. 68 percent of those whose health care provider stayed out of it. (Too few students reported discouragement from a health care provider for reliable analysis.)

- **Undergraduate students at two-year or community colleges:** Accounting for other demographic and attitudinal variables, students at two-year colleges are significantly less likely to have received a COVID-19 vaccine. As noted, 75 percent of college students in this group are vaccinated, compared

⁷ See Appendix B for complete modeling results.

⁸ See COVID Collaborative reports on surveys of [all adults](#) and [Black and Hispanic Americans](#).

with 87 percent of undergraduate students at four-year colleges and 93 percent of graduate students.

Undergraduates at two-year colleges (32 percent) are markedly less apt than graduate students (53 percent) and undergraduates at four-year colleges (46 percent) to cite a vaccine requirement on their campus. And while six in 10 two-year college students have been encouraged by their college to get vaccinated, that compares with roughly eight in 10 graduate students and undergraduates at four-year colleges.

| % received at least one dose of a COVID-19 vaccine | |
|--|-----|
| COVID-19 vaccines are safe | |
| Very or somewhat confident (79%) | 96% |
| Not so or not at all confident (20%) | 42 |
| Getting vaccinated is a... | |
| Community responsibility (55%) | 97 |
| Individual choice (43%) | 69 |
| Parents or other close relatives... | |
| Encouraged vaccination (62%) | 95 |
| Stayed out of it (23%) | 76 |
| Discouraged vaccination (13%) | 52 |
| A health care provider... | |
| Encouraged vaccination (69%) | 93 |
| Stayed out of it (28%) | 68 |

Other Related Attitudes and Experiences

This study examines additional vaccine-related attitudes and experiences among college students. In one bright spot, eight in 10 are very or somewhat confident that the COVID-19 vaccines are effective at reducing the risk of serious illness, hospitalization, and death. While it's not an independent predictor of uptake when controlling for confidence in the vaccines' safety, a broad 94 percent in this group are vaccinated, falling sharply to 50 percent of those with less confidence.

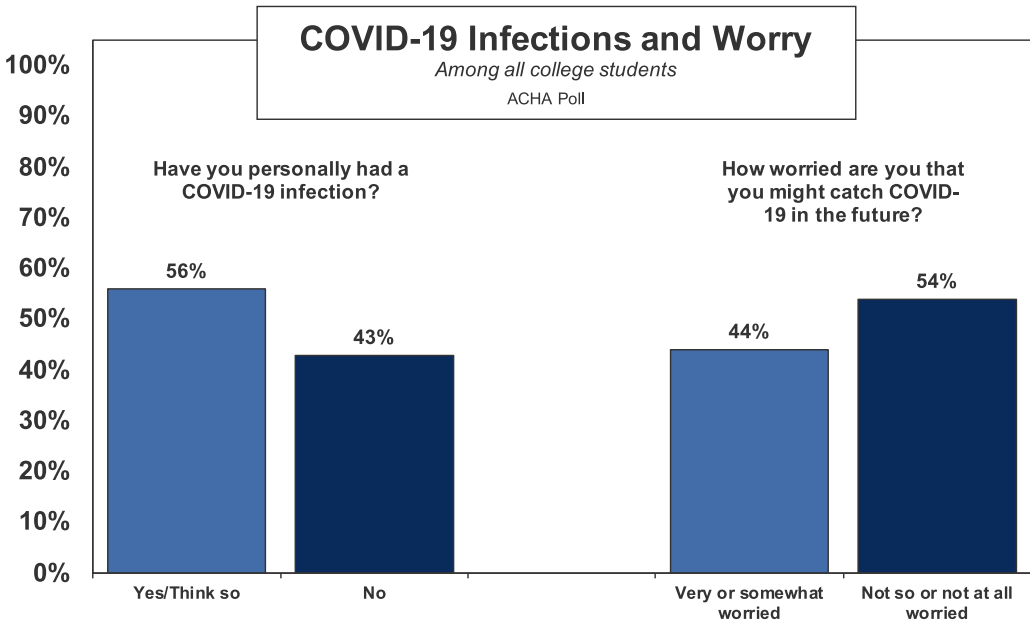
Encouragement to get vaccinated by advisors other than parents/family and health care providers also doesn't independently predict uptake but may play a supporting role. Seventy-three percent of students have been encouraged to get vaccinated by outreach from their college; 90 percent in this group are vaccinated, compared with 71 percent of those whose college stayed out of it.

As noted, 59 percent of students at two-year colleges report having been encouraged by their college to get vaccinated, compared with roughly eight in 10 undergraduates at four-year colleges and graduate students alike. A likely factor: those aware of a student health center on their campus are nearly twice as apt as others to report such encouragement from their college. This reflects a comparative absence of

student health centers on two-year college campuses. Among students at two-year colleges, 59 percent are aware of a student health center on campus, compared with 86 percent of graduate students and undergraduates at four-year colleges alike.

Students at colleges with at least 20,000 students are far more apt than those at colleges with fewer than 5,000 students to have been encouraged by their college to get vaccinated, 83 vs. 61 percent. It’s 73 percent among students at mid-size schools. (Nine in 10 students at large colleges have a student health center, vs. about three-quarters on campuses with fewer than 20,000 students.)

Half of college students have been encouraged to get vaccinated by one or more of their close friends; among them, 94 percent have been vaccinated. Thirty-nine percent say their friends stayed out of it and 9 percent say their friends discouraged them from getting vaccinated; uptake is lower, 79 and 67 percent, in these groups.⁹ Unvaccinated students (21 percent), Republicans (20 percent), and conservatives (16 percent) are most apt to have been discouraged by a friend.



Experientially, 56 percent of college students have or think they’ve had a COVID-19 infection. (An ongoing CDC study estimates that 58 percent of Americans overall have had a COVID-19 infection, albeit last updated in February 2022.) This includes 39 percent who tested positive, 6 percent who think they had it but tested negative and 10 percent who think they had it but were not tested. Confirmed or suspected infections are more prevalent among unvaccinated college students (64 percent) and those younger than 21 (62 percent). They’re also higher among white college students (59 percent) than Hispanic (49 percent) or Black (46 percent) students.

Twenty percent of college students who think they’ve had a COVID-19 infection also have been diagnosed with or think they’ve had long COVID; 4 percent say it was diagnosed, while 15 percent think so but did not receive a diagnosis. This is consistent with a recent CDC estimate that 21 percent

⁹ Small sample, n=94 college students who had one or more of their close friends discourage them from getting vaccinated.

of COVID-19 survivors age 18-64 (here, those with a confirmed diagnosis) experienced long-term conditions that might be attributable to a previous COVID-19 infection.

Looking ahead, 44 percent of college students overall are very (10 percent) or somewhat (34 percent) worried that they might catch COVID-19 in the future. This includes just 18 percent of unvaccinated students, compared with 55 percent of those who have received a booster dose. (Those vaccinated but not boosted are in between, with 34 percent worried.) Worry also is lower among Republicans (20 percent), conservatives (23 percent), men (32 percent), and 17- to 20-year-olds (37 percent). By race and ethnicity, worry is higher among Black and Hispanic college students (50 percent alike) than among white college students, 35 percent.

III. Campus Policies

As noted, 43 percent of students report that their college requires students to be vaccinated against COVID-19; 37 percent say there's no such requirement, while 19 percent are unsure. Forty-seven percent of students who were enrolled in the spring say their school requires vaccination, compared with 29 percent of incoming students this fall. Incoming students instead are more apt to be uncertain about their school's policies, 45 percent, compared with 13 percent of those who attended this spring.

Regional differences on requirements are vast: three-quarters of students who attend school in the Northeast say their college requires COVID-19 vaccinations, falling to 50 percent in the West, 36 percent in the Midwest, and 24 percent in the South. Requirements also are more prevalent among students who attend private rather than public colleges, 54 vs. 40 percent, and among students enrolled in graduate school (53 percent) and four-year undergraduates (46 percent), compared with those at two-year colleges, 32 percent.

Six in 10 students overall say their college has asked them about their COVID-19 vaccination status, including half who were required to provide documentation. Among students enrolled at colleges with a COVID-19 vaccine requirement, 88 percent say their college has asked them about their vaccination status, including 83 percent who were required to provide documentation. At colleges that do not require COVID-19 vaccination, far fewer, 47 percent, say their school asked about their status, and 31 percent were required to document it.

| % aware of a COVID-19 vaccine requirement at your college | |
|---|-----|
| All college students | 43% |
| Northeast | 77 |
| West | 50 |
| Midwest | 36 |
| South | 24 |
| Private colleges | 54 |
| Public colleges | 40 |
| Graduate students | 53 |
| Undergraduates, four-year colleges | 46 |
| Undergraduates, two-year colleges | 32 |

As of July, fewer incoming students had been asked about their vaccine status. Among newly enrolled students, 42 percent say they had been asked about their vaccination status at the time of the survey, compared with 65 percent of students who attended college in the spring. Similarly, 30 percent of newly enrolled students had been required to provide documentation about their vaccination status, compared with 55 percent of those enrolled in spring.

As noted, vaccination requirements boost uptake. While 82 percent of vaccinated students at colleges with vaccine requirements say they would have gotten vaccinated regardless of their school's policies, a consequential 18 percent were prompted to get a vaccine because it was required. That resembles the 22-point difference in initial vaccine uptake between students at colleges with vs. without vaccination requirements, 97 vs. 75 percent.

While exemptions to vaccine requirements generally are available, relatively few seek them

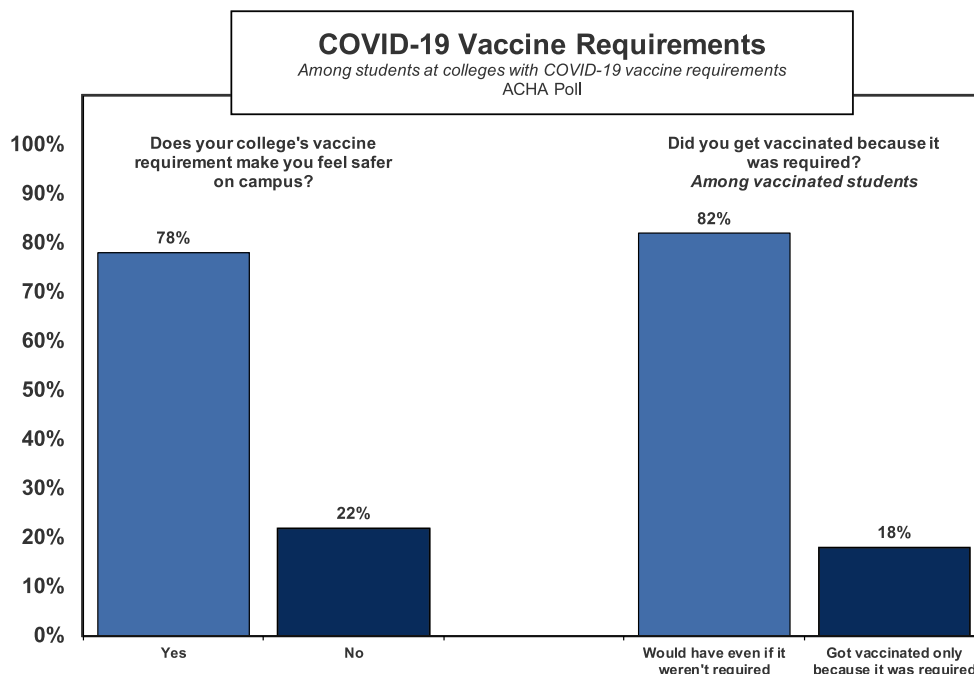
out. Among students at schools where COVID-19 vaccination is required, 58 percent say their school allows exemptions for religious or personal beliefs; 13 percent say these are disallowed and 30 percent are unsure. At schools where exemptions are allowed, 9 percent of students say they applied for one. Six percent were granted an exemption, 3 percent denied.

In addition to increasing uptake, vaccine requirements contribute to a sense of security on campus. Among those attending schools where vaccination is required, 78 percent say the requirement makes them feel safer on campus.

Mask Requirements

On another COVID-19 policy, 48 percent of students say their college has an indoor mask requirement for students, either always (14 percent) or sometimes (35 percent). Thirty-six percent never are required to wear masks indoors, while 16 percent are unsure of the policy.¹⁰ Uncertainty again peaks among students newly attending college this fall, 44 vs. 10 percent.

Overall, as with vaccine requirements, indoor mask requirements for students are most prevalent in the Northeast, at 62 percent. This falls to 43 percent in the Midwest and a similar 40 percent in the South. (It's 53 percent in the West.) There are no significant differences in prevalence of mask requirements in private vs. public schools or by school level.



¹⁰ Respondents were asked about the most recent policy at their college.

IV. Health Care Access

More broadly, three-quarters of college students have a place where they usually go for health care services – meaning nearly one in four does not. Among those with a regular place for care, most by far, 66 percent, usually visit a private doctor’s office. The rest divide about equally among a retail health clinic/urgent care center (12 percent); a community, state, or other public clinic (11 percent); or a college student health center (9 percent). One percent use a hospital emergency room.

Graduate students are six times as apt as undergraduates at two-year colleges, 18 vs. 3 percent, to go to a student health center as their usual place for care; undergraduates at four-year colleges are in between, 10 percent. It’s 11 percent at colleges with at least 5,000 students vs. 5 percent on smaller campuses.

Six in 10 who have a usual place for health care services feel they’re known personally there. That said, neither having a usual place for care nor being known personally are significant predictors of COVID-19 vaccine uptake.

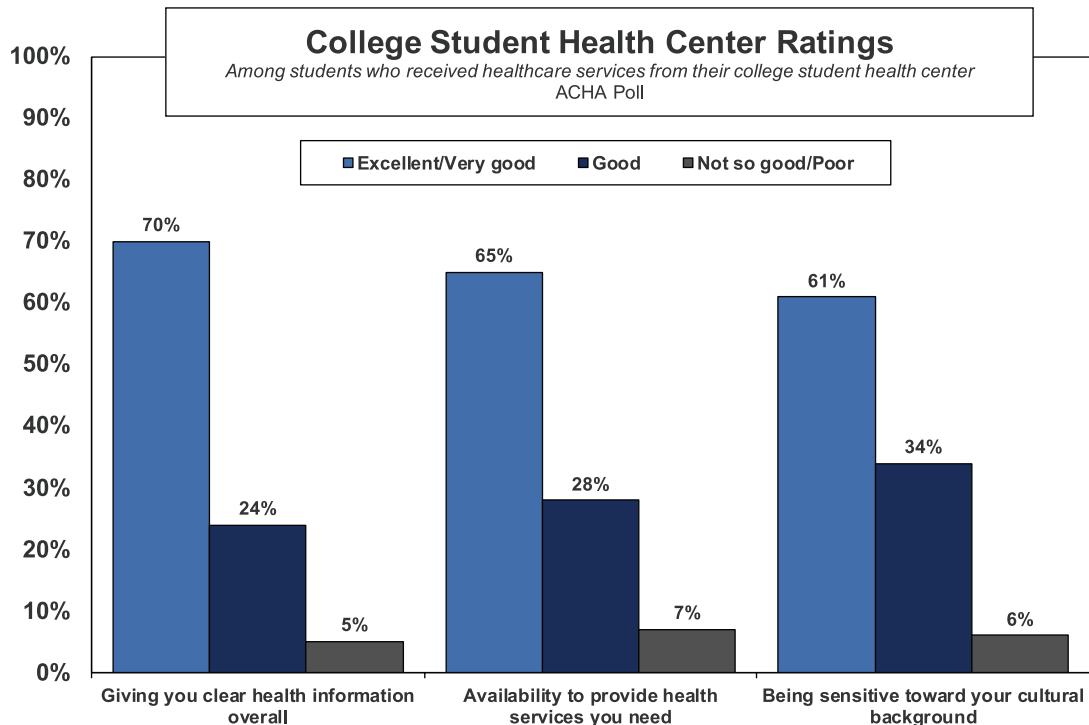
Student Health Centers

Eight in 10 students are aware of a student health center at their college, with 16 percent unsure; 5 percent say there is no such facility. As mentioned above, awareness of an on-campus student health center is higher among graduate and four-year undergraduate students, at 86 percent, vs. 59 percent among two-year college students. Undergraduates at two-year colleges are especially apt to be unsure, 32 percent, compared with 11 percent among undergraduates at four-year colleges and 8 percent of graduate students. Those at two-year colleges also are more apt than undergraduates at four-year colleges to say there’s no student health center, 10 vs. 2 percent; graduate students are in between, 6 percent.

Those at schools with 20,000+ students also are more apt to report a health center, 91 percent, vs. 74 percent of students at smaller schools. Just 1 percent at schools with 20,000+ students report no student health center on campus, rising to 7 percent at smaller schools. One in 10 students at schools with 20,000+ students is unsure, vs. two in 10 at campuses smaller than that.

Among students enrolled last spring and aware their college has a student health center, 23 percent received health care services there in the past 12 months, regardless of their usual place of care. That rises to four in 10 among those living on campus, compared with 15 percent of those living with family and 22 percent of those elsewhere off campus. Graduate students (29 percent) and four-year undergraduate students (26 percent) are more apt to use a campus health center than two-year college students, 9 percent.

Majorities of users give their college’s student health center positive ratings. Seven in 10 who’ve received such services in the past year rate it as excellent or very good at giving them clear health information overall, 65 percent for availability to provide health services they need, and 61 percent for being sensitive toward their cultural background. Most of the rest say they were “good” on these metrics, with those giving negative ratings in the single digits.



Of those enrolled last spring and aware of a student health center at their college, 43 percent say they received information about COVID-19 specifically from the center; 42 percent haven't and 15 percent are unsure. Those who've used the health center in the past year are most apt to report having gotten information about COVID-19 from the center, 61 percent. It drops to 37 percent among those who haven't used it. And those who have received COVID-19 information from their student health center are more apt to be vaccinated than those who have not, 94 vs. 82 percent.

V. Information and Trusted Sources

Among six sources tested, college students are most apt to report getting at least a good amount of information about COVID-19 and COVID-19 vaccines from reporting by professional news organizations (68 percent), a health care provider (66 percent), and their parents or other close relatives (62 percent). Forty-seven percent cite their college, with those aware of a student health center at their college more apt to do so, 51 vs. 34 percent. Fewer cite close friends (38 percent) or information posted by the people or organizations they follow on social media (33 percent).

COVID-19 information from a health care provider is most trusted; 89 percent say they trust that information a great deal or a good amount. Fewer, but still majorities, highly trust COVID-19 information from their college (74 percent), their parents/other close relatives (72 percent), reporting by professional news organizations (64 percent), and close friends (59 percent). Just 36 percent highly trust information about COVID-19 posted by the people or organizations they follow on social media.

| % getting a great deal or good amount of information about COVID-19/COVID-19 vaccines from... <i>Among all college students</i> | |
|--|-----|
| Reporting by professional news organizations | 68% |
| A health care provider | 66 |
| Parents or other close relatives | 62 |
| Your college | 47 |
| Close friends | 38 |
| Information posted by the people or organizations you follow on social media | 33 |

About two-thirds have a high level of trust in the information they see and hear about COVID-19 overall. Twenty-three percent don't have much trust in such information; 8 percent, none at all.

Reflecting political divisions among all adults, Republican and conservative college students are least apt by far to highly trust information they see and hear about COVID-19, 37 and 38 percent respectively, compared with 86 percent among Democrats and 90 percent among liberals. It's two-thirds among political independents and 64 percent among moderates.

Trust in information is associated with vaccination status: eighty-eight percent of those who've been boosted have a high level of trust in COVID-19 information they see or hear, dropping to 53 percent among those who are vaccinated but not boosted and 19 percent among those who haven't gotten a COVID-19 vaccine. However, level of trust in COVID-19 information is not a significant independent predictor of uptake when included in the full model.

Respondents also were asked whether they use any of six social media platforms for health information. Sixty-four percent do not. Among the rest, 18 percent use YouTube for health information, 14 percent alike use Twitter and Instagram, 12 percent Facebook, 10 percent TikTok, and 5 percent Snapchat. (Multiple responses were accepted).

VI. Attitudes and Intentions Toward Other Vaccines

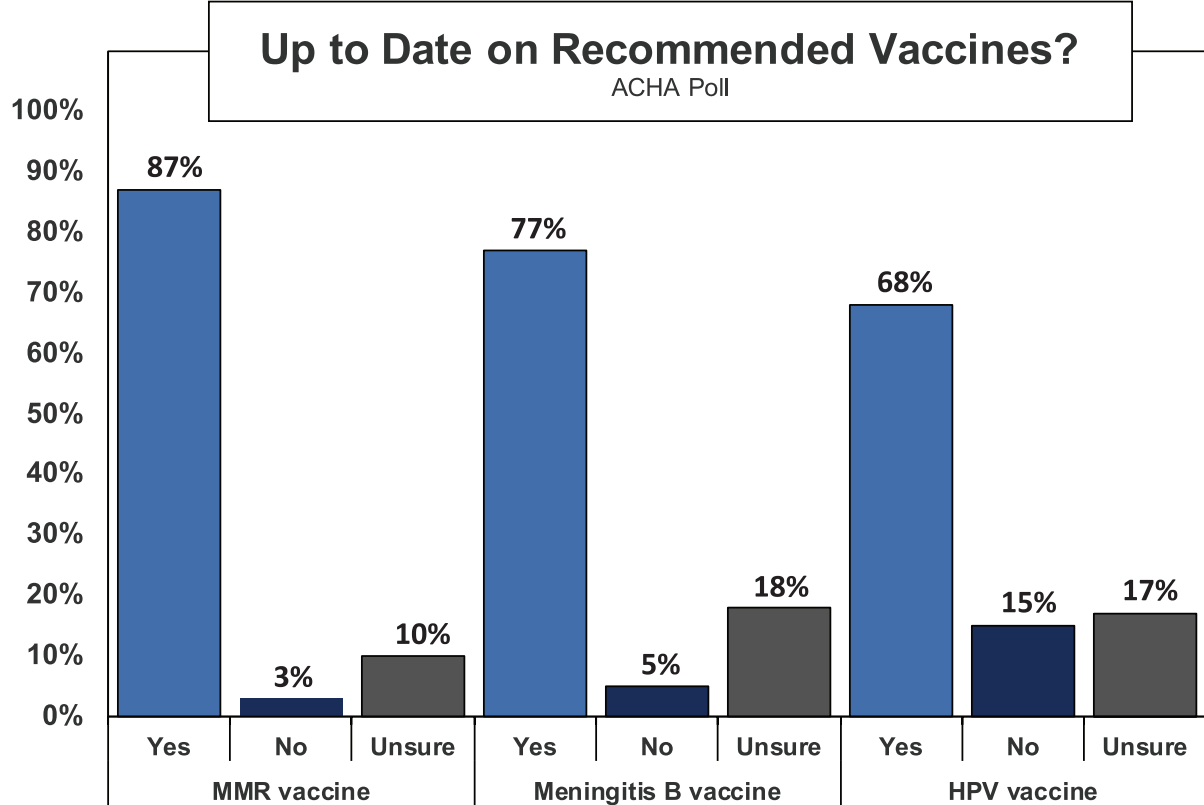
Vaccinations for the seasonal flu trail COVID-19 vaccines in uptake on college campuses, with 49 percent of students reporting having received a flu vaccine in the past 12 month. More, 64 percent, say they probably or definitely will receive one next fall.

COVID-19 vaccine uptake and flu vaccine uptake are related. Fifty-five percent of COVID-vaccinated students also received last season's flu vaccine, compared with 12 percent of those who are not vaccinated for COVID-19. Only one in five of those not vaccinated for COVID-19 says they'll get a flu vaccine this fall, compared with 72 percent of others.

Flu vaccination is most common among older, higher-income, and more senior students – about six in 10 or more of those older than 30, with household incomes of \$100,000 or more and graduate students. It's less common among Black and Hispanic students, those with household incomes less than \$50,000, those attending a two-year college, and those living with family while they attend school, all about four in 10.

Despite comparatively minimal political rancor regarding flu vaccines, there still are partisan differences in uptake. Sixty-four percent of Democratic students were vaccinated against the seasonal flu, vs. 41 percent of independents and 36 percent of Republicans. That is driven by younger students, with a 39-point gap in flu vaccine uptake between Democrats and Republicans under age 24, 67 vs. 28 percent. (Independents come in closer to Republicans, 35 percent.) Flu vaccination rates range from 52 to 58 percent among older students across partisan lines.

Adherence is higher for other vaccines recommended for college-age students, with less association with COVID-19 vaccine uptake. Majorities of COVID-vaccinated and COVID-unvaccinated students report being up to date on human papillomavirus (HPV), MMR, and meningitis B vaccinations. The MMR vaccine has the highest rate of overall uptake, 87 percent, including 76 percent of those not vaccinated for COVID-19. Most are aware of their status, potentially because this vaccine often is required for school attendance, but one in 10 is unsure.



Slightly fewer, 77 percent, report being current on the relatively recent meningitis B vaccine, though there’s more uncertainty about one’s status, 18 percent. Younger students are more likely to be sure they’re up to date on this vaccine, approved in 2014, ranging from 85 percent among those under 21 to 62 percent among those 30 and older.

Sixty-eight percent report being vaccinated against HPV, including 73 percent of women and 62 percent of men. Of these three vaccines, HPV is the one on which students are most likely to affirmatively say they're not up to date, 15 percent. Seventeen percent are unsure.

As with meningitis B, there's a gap by age for HPV vaccine. Among those younger than 30, 73 percent are up to date, 12 percent are not, and 15 percent are unsure. Among those 30 and older, many of whom were past the recommended age group by the time this vaccine was approved in 2006, 44 percent are up to date, 30 percent are not, and 26 percent are unsure.

For all three vaccines, gaps by political party in uptake of these vaccines are significantly narrower than for COVID-19 vaccines or flu vaccines.

Seventy-seven percent of Democrats report being up to date on the HPV vaccine, for example, compared with 62 percent of independents and 61 percent of Republicans. (Non-Democrats are more likely to be unsure of their status, 20 vs. 11 percent.) For MMR and meningitis B, Democrats and Republicans have similar uptake, with independents trailing by single digits.

Likewise, in contrast to resistance among the COVID-19 vaccine-hesitant, there's little reticence toward these vaccines among those who aren't up to date or are unsure. Sixty-nine to 81 percent of those who aren't vaccinated or are unsure of their status for each of the three vaccines tested say they definitely or probably would get them if advised to by a health care provider. Just 13 percent of COVID-19 vaccine-hesitant students would be inclined to get a COVID-19 vaccine under similar conditions.

VII. Conclusions and Recommendations

The results of this survey can inform continued efforts to encourage COVID-19 vaccine uptake among college students in the year ahead. Foremost, confidence in the vaccines' safety is a decisive factor in college students' calculations about whether to get a vaccine – and among unvaccinated students, concerns about their safety are the most-cited reason for their hesitancy. Campus communication should continue efforts to build confidence in the vaccines' safety.

Seeing vaccination as a community responsibility rather than an individual choice is another key consideration in students' vaccination decisions. Communication efforts should strongly emphasize this moral norm, urging students to consider the positive impacts of vaccination on their campus community.

Encouragement to get vaccinated – specifically, from parents/other close relatives and health care providers – also is a key factor in college students' decisions about uptake. Efforts should engage parents/close relatives and health care providers alike as trusted voices to encourage uptake, whether of initial doses or boosters.

Vaccine requirements are highly effective at boosting uptake on college campuses and at making students feel safer. But substantial shares of incoming on-campus students are unsure of their college's vaccine or mask policies. Clearer communication from colleges to incoming students is highly advisable.

Results among undergraduate students at two-year colleges underscore several ways in which this population has been left behind in campus vaccination efforts. Specifically, they're less likely than others to be vaccinated or boosted, to have received COVID-19 vaccines on their college campus, to have been encouraged to get vaccinated by their college, or to affirmatively report a campus vaccine requirement. Encouraging and facilitating uptake in this underserved group is another important pathway to improving vaccination rates among college students overall.

Finally, results reveal broadly positive ratings for college students' experiences with their campus student health centers. Moreover, as noted, college students who are aware of a student health center on their campus are nearly twice as apt as others to report having been encouraged by their college to get vaccinated. Continued efforts to support best public health practices on campuses should leverage this goodwill and proven communication channel.

Appendix A. Survey Methodology

The College Student COVID-19 Survey was conducted for the American College Health Association by [Langer Research Associates](#), with interviews conducted via the nationally representative Ipsos KnowledgePanel®, in which participants are randomly recruited via address-based sampling to participate in survey research online.

The survey was designed to include approximately 1,000 full- or part-time undergraduate or graduate students enrolled in in-person instruction at a two- or four-year college or university in spring or fall 2022. Field work was conducted June 3-July 5, with email reminders sent to non-responders June 5 and subsequently every three days until the end of the field period.

Screening questions identified 1,790 college students overall, including 956 who were enrolled in at least one in-person course last spring or next fall and completed the substantive survey. The median completion time was 10 minutes. Respondents who completed the survey in less than one-third of the median time were removed (eight cases), for a final sample size of 948.

Demographic data for all college students were weighted using iterative proportional fitting to the following benchmark distributions for undergraduate and graduate college students age 17 and older from the U.S. Census Bureau's 2019 American Community Survey. Some weighting categories for age, race/ethnicity, and education were collapsed for graduate students.

- Sex (male, female) by age (17-20, 21-22, 23-29, 30-44, 45+) by undergraduate or graduate student status
- Race/ethnicity (white, Black, other, Hispanic, 2+ races) by undergraduate or graduate student status
- Census region (Northeast, Midwest, South, West) by undergraduate or graduate student status
- Education (high school or less, some college, associate degree, bachelor's degree or above) by undergraduate or graduate student status
- Household income (less than \$25,000, \$25,000-\$49,999, \$50,000-\$74,999, \$75,000-\$99,999, \$100,000-\$149,999, \$150,000+) by undergraduate or graduate student status
- Language proficiency (English-proficient Hispanic, bilingual or Spanish-proficient Hispanic, non-Hispanic) by undergraduate or graduate student status
- Hispanic nativity (U.S.-born Hispanic, not U.S.-born Hispanic, non-Hispanic) by undergraduate or graduate student status
- School type (public, private) by undergraduate or graduate student status

Weights were trimmed at 0.9 percent and 99.0 percent for undergraduate students and 0.8 percent and 99.2 percent for graduate students, then rescaled to match the qualified respondent sample size. The average design effect for the final weight is 1.62, for a margin of error of 4.1 percentage points for the full sample. Error margins are larger for subgroups.

Tables of unweighted, weighted, and benchmark distributions for screened and qualified respondents follow.

| | Qualified (n=948) | | Screened (n=1,790) | | |
|----------------------------|-------------------|----------|--------------------|----------|-----------|
| | Unweighted | Weighted | Unweighted | Weighted | Benchmark |
| Male | 33.8 | 44.9 | 32.3 | 43.7 | 44.0 |
| Female | 66.2 | 55.1 | 67.7 | 56.3 | 56.0 |
| | | | | | |
| 17-20 | 24.4 | 34.8 | 15.2 | 25.3 | 24.7 |
| 21-22 | 15.2 | 23.5 | 9.6 | 18.1 | 18.4 |
| 23-29 | 25.2 | 25.4 | 23.0 | 27.3 | 27.7 |
| 30-44 | 26.3 | 11.2 | 37.9 | 19.4 | 19.3 |
| 45+ | 9.0 | 5.2 | 14.4 | 10.0 | 9.9 |
| | | | | | |
| 17-20 Male | 7.9 | 16.2 | 4.7 | 11.4 | 11.3 |
| 17-20 Female | 16.5 | 18.6 | 10.4 | 13.9 | 13.4 |
| 21-22 Male | 4.2 | 9.8 | 2.9 | 8.2 | 8.5 |
| 21-22 Female | 11.0 | 13.7 | 6.7 | 9.9 | 9.9 |
| 23-29 Male | 9.1 | 12.0 | 7.7 | 12.2 | 12.4 |
| 23-29 Female | 16.1 | 13.3 | 15.3 | 15.1 | 15.3 |
| 30-44 Male | 9.9 | 5.1 | 13.0 | 8.0 | 8.0 |
| 30-44 Female | 16.4 | 6.1 | 24.9 | 11.4 | 11.3 |
| 45+ Male | 2.6 | 1.8 | 4.0 | 3.9 | 3.8 |
| 45+ Female | 6.3 | 3.4 | 10.3 | 6.1 | 6.1 |
| | | | | | |
| White, Non-Hispanic | 52.8 | 52.6 | 54.4 | 52.8 | 52.7 |
| Black, Non-Hispanic | 12.8 | 12.6 | 14.7 | 14.1 | 14.2 |
| Other, Non-Hispanic | 5.4 | 9.0 | 4.6 | 9.2 | 9.8 |
| Hispanic | 24.8 | 22.2 | 22.3 | 20.2 | 20.1 |
| 2+ Race, Non-Hispanic | 4.2 | 3.5 | 4.0 | 3.7 | 3.2 |
| | | | | | |
| Northeast | 16.0 | 18.3 | 13.7 | 16.5 | 16.5 |
| Midwest | 22.6 | 18.3 | 23.7 | 19.3 | 19.3 |
| South | 34.2 | 36.0 | 36.1 | 37.1 | 37.2 |
| West | 27.2 | 27.4 | 26.4 | 27.0 | 27.0 |
| | | | | | |
| High school or less | 15.8 | 15.5 | 12.1 | 12.6 | 11.5 |
| Some college, no degree | 33.6 | 49.5 | 32.1 | 46.2 | 46.0 |
| Associate degree | 15.0 | 11.7 | 16.0 | 12.3 | 12.7 |
| Bachelor's degree or above | 35.5 | 23.2 | 39.8 | 29.0 | 29.9 |
| | | | | | |

| | | | | | |
|--|------|------|------|------|------|
| Under \$25,000 | 17.8 | 13.1 | 18.7 | 15.2 | 15.1 |
| \$25,000-\$49,999 | 20.6 | 15.5 | 21.1 | 16.4 | 16.3 |
| \$50,000-\$74,999 | 17.7 | 15.8 | 18.8 | 16.2 | 16.1 |
| \$75,000-\$99,999 | 16.1 | 13.2 | 16.0 | 13.3 | 13.3 |
| \$100,000-\$149,999 | 16.1 | 20.5 | 15.5 | 19.0 | 18.9 |
| \$150,000 and over | 11.6 | 21.8 | 9.9 | 19.9 | 20.3 |
| | | | | | |
| English Proficient Hispanic | 9.4 | 8.4 | 7.2 | 6.6 | 6.6 |
| Bilingual or Spanish Proficient Hispanic | 15.4 | 13.8 | 15.1 | 13.6 | 13.5 |
| Non-Hispanic | 75.2 | 77.8 | 77.7 | 79.8 | 79.9 |
| | | | | | |
| US born Hispanic | 18.7 | 17.1 | 16.5 | 15.2 | 15.1 |
| Not US born Hispanic | 6.1 | 5.1 | 5.9 | 5.1 | 5.0 |
| Non-Hispanic | 75.2 | 77.8 | 77.7 | 79.8 | 79.9 |
| | | | | | |
| Public School | 79.9 | 78.9 | 77.5 | 77.2 | 77.3 |
| Private School | 20.1 | 21.1 | 22.5 | 22.8 | 22.7 |
| | | | | | |
| College undergraduate (freshman to senior) | 78.3 | 83.7 | 72.9 | 77.6 | 77.6 |
| Graduate or professional school beyond a bachelor's degree | 21.7 | 16.3 | 27.1 | 22.4 | 22.4 |

Appendix B. Modeling Results

COVID-19 vaccine uptake was modeled using logistic regression, with binary responses from Q1 coded as 1) received at least one dose and 0) have not received a COVID-19 vaccine as the dependent variable. Independent variables retained in the model are listed in Table 1.

Table 1: Predicting having received at least one COVID-19 vaccine dose

| | M1 | M2 |
|---|--------------|--------------|
| Female | -0.20 | 0.06 |
| Age | 0.02 | 0.03 |
| Household income | 0.21 | 0.16 |
| Race/ethnicity: Black | -0.16 | -0.13 |
| Race/ethnicity: Hispanic | 0.22 | -0.04 |
| Race/ethnicity: Mixed, Other racial/ethnic minority | 1.00 | 0.40 |
| Liberalism | 0.62 | 0.02 |
| Graduate student | 0.45 | 0.19 |
| Undergraduate student at two-year college | -0.90 | -0.88 |
| College has COVID-19 vaccine requirement | | 1.36 |
| Confidence in COVID-19 vaccines' safety | | 1.35 |
| Moral norm: Vaccination is community responsibility | | 1.11 |
| Encouraged by parents or other close relatives | | 0.83 |
| Encouraged by a health care provider | | 1.27 |
| <i>Cox-Snell Pseudo-R-squared</i> | 0.14 | 0.36 |

p < 0.05 bolded. Log-odds ratio coefficients are from survey-weighted logistic regression

Model 1, including only demographic variables and political ideology, finds that household income, ideological liberalism and race/ethnicity – specifically, identifying with multiple racial or ethnic groups or with a single group that is not white, Black or Hispanic – are significant positive predictors of having received a COVID-19 vaccine. Being an undergraduate student at a two-year or community college is a significant negative predictor.

When attitudinal variables are added in Model 2, all significant Model 1 independent variables except being an undergraduate student at a two-year college drop out of significance. Positive and significant predictors in the expanded model include the presence of a campus COVID-19 vaccine requirement, confidence in the vaccines' safety, seeing vaccination as a community responsibility, and having been encouraged to get vaccinated by parents or other close relatives or by a health care provider.

Appendix C. Topline Data Report

Full questions and topline results follow. The following terms are used:

COVID-19 vaccine hesitant: Neither vaccinated nor definitely intending to get vaccinated

Full-vaccination hesitant: Not definitely intending to get fully vaccinated

Booster-hesitant: Not definitely intending to get a booster shot

Booster-inclined: Definitely or probably will get a booster shot

Second-booster hesitant: Not definitely intending to get a second booster shot

Second-booster inclined: Definitely or probably will get a second booster shot

Unless otherwise noted, * = <0.5 percent.

S1-S7. Screening questions used to determine eligibility.

| 1. Have you personally received at least one dose of a COVID-19 vaccine, or not? | | | |
|--|--|--|---------|
| | Yes, I have received at least one dose | No, I have not received a COVID-19 vaccine | Skipped |
| 7/5/22 | 85 | 15 | * |

| 2. [IF RECEIVED AT LEAST ONE COVID-19 VACCINE DOSE] Which of these describes your vaccination status? | |
|--|--------|
| | 7/5/22 |
| I am partially vaccinated (received one dose out of a two-dose vaccine) | 3 |
| I am fully vaccinated, have not received a booster shot (received two doses, or a single-dose vaccine like Johnson & Johnson) | 29 |
| I am fully vaccinated and have received one booster shot | 59 |
| I am fully vaccinated and have received two or more booster shots | 9 |
| Skipped | 0 |

| 3 [IF NOT VACCINATED] How likely are you to get a COVID-19 vaccine? | | | | | | | |
|---|-------------|-----------------|---------------|-------------|-------------------|---------------------|---------|
| | More likely | | | Less likely | | | |
| | NET | Definitely will | Probably will | NET | Probably will not | Definitely will not | Skipped |
| 7/5/22 | 16 | 5 | 11 | 84 | 30 | 54 | 0 |

| Q1/2/3 NET Table: | 7/5/22 |
|-----------------------------------|--------|
| Received at least one dose NET | 85 |
| Partially vaccinated | 3 |
| Fully vaccinated, no boosters | 24 |
| Received at least one booster NET | 58 |
| Received one booster | 50 |
| Received two or more boosters | 7 |
| Not vaccinated NET | 15 |
| Definitely/probably will NET | 2 |
| Definitely will | 1 |
| Probably will | 2 |
| Definitely/probably will not NET | 12 |
| Probably will not | 4 |
| Definitely will not | 8 |
| Skipped | * |

| 4. [IF COVID-19 VACCINE HESITANT] How likely would you be to get a COVID-19 vaccine if your doctor or other health care provider recommended it to you? | | | | | | | |
|---|-------------|------------------|----------------|-------------|--------------------|----------------------|---------|
| | More likely | | | Less likely | | | |
| | NET | Definitely would | Probably would | NET | Probably would not | Definitely would not | Skipped |
| 7/5/22 | 13 | * | 13 | 84 | 31 | 53 | 3 |

| 5. [IF COVID-19 VACCINE HESITANT] What's the reason you [may not/will not] get a COVID-19 vaccine? Check all that apply. | |
|--|--------|
| | 7/5/22 |
| I'm not convinced it's safe or I'm concerned about side effects | 71 |
| I'm not convinced it's effective | 54 |
| I don't think I need it | 40 |
| It's not worth the trouble | 19 |
| I already caught COVID-19 | 35 |
| My health care provider recommended against it | 3 |
| I'm unsure where or how to get it | 2 |
| My family/friends don't want me to | 17 |
| It's against my religious beliefs | 21 |
| Other (please write in) | 13 |
| Skipped | 0 |

6. [IF PARTIALLY VACCINATED] How likely are you to get fully vaccinated?

Insufficient sample size, n=28.

7. [IF PARTIALLY VACCINATED AND FULL-VACCINATION HESITANT] What's the reason you [may not/will not] get fully vaccinated? Check all that apply.

Insufficient sample size, n=19.

8. [IF FULLY VACCINATED, NO BOOSTER] How likely are you to get a booster shot?

| | More likely | | | Less likely | | | |
|--------|-------------|-----------------|---------------|-------------|-------------------|---------------------|---------|
| | NET | Definitely will | Probably will | NET | Probably will not | Definitely will not | Skipped |
| 7/5/22 | 41 | 16 | 25 | 58 | 40 | 18 | 1 |

9. [IF FULLY VACCINATED AND BOOSTER-HESITANT] What's the reason you [may not/will not] get a booster shot? Check all that apply.

| | 7/5/22 |
|---|--------|
| I'm not convinced it's safe or I'm concerned about side effects | 31 |
| I'm not convinced it's effective | 34 |
| I don't think I need it | 50 |
| It's not worth the trouble | 25 |
| I already caught COVID-19 | 27 |
| My health care provider recommended against it | 1 |
| I'm unsure where or how to get it | 5 |
| My family/friends don't want me to | 5 |
| It's against my religious beliefs | * |
| Other (please write in) | 7 |
| Skipped | 4 |

10. [IF FULLY VACCINATED AND BOOSTER-INCLINED] Which of these are you likelier to do:

| | Get a booster shot as soon as you can | Wait before getting a booster shot | Skipped |
|--------|---------------------------------------|------------------------------------|---------|
| 7/5/22 | 45 | 55 | 0 |

11. [IF BOOSTER-INCLINED AND WILL WAIT] What's the main reason you'll wait before getting a booster shot?.

Insufficient sample size, n=59

| 12. [IF RECEIVED ONE BOOSTER] How likely are you to get a second booster shot if you are eligible for one? | | | | | | | |
|--|-------------|-----------------|---------------|-------------|-------------------|---------------------|---------|
| | More likely | | | Less likely | | | |
| | NET | Definitely will | Probably will | NET | Probably will not | Definitely will not | Skipped |
| 7/5/22 | 77 | 42 | 35 | 23 | 19 | 4 | * |

| 13. [IF RECEIVED ONE BOOSTER AND SECOND-BOOSTER HESITANT] What's the reason you [may not/will not] get a second booster shot? Check all that apply. | |
|---|--------|
| | 7/5/22 |
| I'm not convinced it's safe or I'm concerned about side effects | 17 |
| I'm not convinced it's effective | 18 |
| I don't think I need it | 57 |
| It's not worth the trouble | 19 |
| I already caught COVID-19 | 21 |
| My health care provider recommended against it | 4 |
| I'm unsure where or how to get it | 13 |
| My family/friends don't want me to | 1 |
| It's against my religious beliefs | 0 |
| Other (please write in) | 18 |
| Skipped | 2 |

| 14. [IF RECEIVED ONE BOOSTER AND SECOND-BOOSTER INCLINED] Which of these are you likelier to do: | | | |
|--|---------------------------------------|------------------------------------|---------|
| | Get a booster shot as soon as you can | Wait before getting a booster shot | Skipped |
| 7/5/22 | 59 | 41 | 0 |

| 15. [IF SECOND-BOOSTER INCLINED AND WILL WAIT] What's the main reason you'll wait before getting a booster shot? | | | | |
|--|-------------------------------------|--|-----------------------|---------|
| | To see how it works in other people | To get it close to the start of school | For some other reason | Skipped |
| 7/5/22 | 28 | 30 | 41 | 0 |

| Q14/15 NET Table: | | | | | | | |
|-------------------|---------------------------------------|---------------------|-------------------------------------|--|-----------------------|----------|---------|
| | | Wait before getting | | | | | |
| | Get a booster shot as soon as you can | NET | To see how it works in other people | To get it close to the start of school | For some other reason | Skp Q15. | Skp Q14 |
| 7/5/22 | 59 | 41 | 12 | 13 | 17 | 0 | 0 |

| 16. [IF RECEIVED AT LEAST ONE COVID-19 VACCINE DOSE] Did you have any negative reaction to the COVID-19 vaccination shot or shots that you received? | | | | | | | | | |
|--|-------------------|--------------------|-------------|--------|---------------|----------|------|-------------|--------|
| | Yes, had reaction | | | | | | | | |
| | | Very severe/severe | | | Moderate/mild | | | | |
| | NET | NET | Very severe | Severe | NET | Moderate | Mild | No reaction | Unsure |
| 7/5/22 | 56 | 5 | 1 | 4 | 51 | 17 | 34 | 43 | 1 |

| 17. How confident are you that the COVID-19 vaccines are safe? | | | | | | | |
|--|----------------|------|----------|----------------|--------|------------|---------|
| | More confident | | | Less confident | | | |
| | NET | Very | Somewhat | NET | Not so | Not at all | Skipped |
| 7/5/22 | 79 | 44 | 36 | 20 | 11 | 9 | 1 |

| 18. How confident are you that the COVID-19 vaccines are effective at reducing the risk of serious illness, hospitalization and death? | | | | | | | |
|--|----------------|------|----------|----------------|--------|------------|---------|
| | More confident | | | Less confident | | | |
| | NET | Very | Somewhat | NET | Not so | Not at all | Skipped |
| 7/5/22 | 79 | 50 | 29 | 20 | 12 | 9 | 1 |

| 19. As far as you are aware, is there a student health center at your college?* [the college you attended this spring/your college]? | | | |
|--|-----|----|--------|
| | Yes | No | Unsure |
| 7/5/22 | 79 | 5 | 16 |

*Here and at Q23, Q32, Q33, Q34, Q35, Q36, Q39, Q40, Q46 and Q47 asked as “the college you attended this spring” for students who attended one college in spring 2022 and will be attending a different college in fall 2022.

| 20. Is there a place where you usually go for health care services? | | | |
|---|-----|----|---------|
| | Yes | No | Skipped |
| 7/5/22 | 76 | 23 | 1 |

| 21. [IF HAVE PLACE FOR HEALTH CARE SERVICES] Which of these best describes the place you usually go for health care services? | | | | | | | |
|---|-------------------------|---|---|-------------------------------|-------------------------|----------------|------|
| | Private doctor's office | Retail health clinic/urgent care center | Community, state or other public clinic | College student health center | Hospital emergency room | Somewhere else | Skp. |
| 7/5/22 | 66 | 12 | 11 | 9 | 1 | * | * |

| 22. [IF HAVE PLACE FOR HEALTH CARE SERVICES] At the place where you go for health care services, do you feel they know you personally? | | | |
|--|-----|----|---------|
| | Yes | No | Skipped |
| 7/5/22 | 60 | 40 | 0 |

| 23. Have each of these (encouraged you to get vaccinated), (discouraged you from getting vaccinated), or have they stayed out of it? | | | | |
|--|------------|-------------|------------------|---------|
| 7/5/22 - Summary Table: | Encouraged | Discouraged | Stayed out of it | Skipped |
| a. Your parents or other close relatives | 62 | 13 | 23 | 1 |
| b. One or more of your close friends | 50 | 9 | 39 | 2 |
| c. Outreach from your college | 73 | 1 | 24 | 1 |
| d. A health care provider | 69 | 2 | 28 | 2 |

| 24. Which of these best fits your opinion, even if neither is exactly right? | | | |
|--|--|--|---------|
| | People have a responsibility to get vaccinated to help stop spread of the virus in their community | Getting vaccinated is an individual choice; community considerations should not impact this decision | Skipped |
| 7/5/22 | 55 | 43 | 2 |

| 25. Have you received a seasonal flu vaccine in the past 12 months? | | | |
|---|-----|----|---------|
| | Yes | No | Skipped |
| 7/5/22 | 49 | 50 | 1 |

| 26. How likely are you to receive a seasonal flu vaccine next fall? | | | | | | | |
|---|-------------|-----------------|---------------|-------------|-------------------|---------------------|---------|
| | More likely | | | Less likely | | | Skipped |
| | NET | Definitely will | Probably will | NET | Probably will not | Definitely will not | |
| 7/5/22 | 64 | 34 | 30 | 35 | 20 | 15 | 1 |

| 27. As far as you are aware, are you up to date on these vaccines? | | | |
|--|-----------------|--------------------|--------|
| 7/5/22 - Summary Table: | Yes, up to date | No, not up to date | Unsure |
| a. Human papillomavirus (HPV) | 68 | 15 | 17 |
| b. Measles, Mumps and Rubella (MMR) | 87 | 3 | 10 |
| c. Meningitis B | 77 | 5 | 18 |

| 28. If you were told by a doctor or other health care provider that you need any of these vaccines to be up to date, how likely would you be to get it? | | | | | | | |
|---|-------------|------------------|----------------|-------------|--------------------|----------------------|---------|
| a. Human papillomavirus (HPV) | | | | | | | |
| | More likely | | | Less likely | | | Skipped |
| | NET | Definitely would | Probably would | NET | Probably would not | Definitely would not | |
| 7/5/22 | 87 | 62 | 25 | 12 | 6 | 5 | 2 |

| b. Measles, Mumps and Rubella (MMR) | | | | | | | |
|-------------------------------------|-------------|------------------|----------------|-------------|--------------------|----------------------|---------|
| | More likely | | | Less likely | | | |
| | NET | Definitely would | Probably would | NET | Probably would not | Definitely would not | Skipped |
| 7/5/22 | 92 | 70 | 22 | 6 | 4 | 2 | 2 |

| c. Meningitis B | | | | | | | |
|-----------------|-------------|------------------|----------------|-------------|--------------------|----------------------|---------|
| | More likely | | | Less likely | | | |
| | NET | Definitely would | Probably would | NET | Probably would not | Definitely would not | Skipped |
| 7/5/22 | 92 | 67 | 24 | 7 | 5 | 2 | 1 |

| 29. As far as you are aware, have you personally had a COVID-19 infection, or not? | | | | | | | | |
|--|-----|--------------------------|-------------------------------|--------------------------|----------|-------------------------|------------------------|------|
| | | Yes/think so | | | Have not | | | |
| | NET | Yes, and tested positive | Think so, but tested negative | Think so, was not tested | NET | Think I have not had it | Sure I have not had it | Skip |
| 7/5/22 | 56 | 39 | 6 | 10 | 43 | 22 | 21 | 1 |

| 30. [IF HAD OR THINKS HAD COVID-19] "Long COVID" means having COVID-19 symptoms that last a month or more. Do you feel you've had long COVID, or not? | | | | | |
|---|-----|---------------------------------------|---|---|--------|
| | | Diagnosed or thinks they had/have | | | |
| | NET | I have been diagnosed with long COVID | I think I had or currently have long COVID, have not been diagnosed | I do not think I had or currently have long COVID | unsure |
| 7/5/22 | 20 | 4 | 15 | 72 | 8 |

| Q29/30 NET Table: | |
|--|--------|
| | 7/5/22 |
| Had/thinks had a COVID-19 infection NET | 56 |
| Diagnosed or thinks had/have long COVID NET | 11 |
| Diagnosed with long COVID | 2 |
| Think have/had long COVID, not diagnosed | 8 |
| Didn't have/doesn't think had long COVID | 40 |
| Unsure | 4 |
| Have not personally had a COVID-19 infection NET | 43 |
| Skipped Q29 | 1 |

| 31. How worried are you, if at all, about the possibility that you might catch COVID-19 in the future? | | | | | | | |
|--|--------------|------|----------|--------------|--------|------------|---------|
| | More worried | | | Less worried | | | |
| | NET | Very | Somewhat | NET | Not so | Not at all | Skipped |
| 7/5/22 | 44 | 10 | 34 | 54 | 34 | 21 | 2 |

| 32. As far as you are aware, what is the most recent COVID-19 policy at your college? | |
|---|--------|
| | 7/5/22 |
| Students are required to be vaccinated against COVID-19 | 43 |
| Students are not required to be vaccinated against COVID-19 | 37 |
| Unsure | 19 |

| 33. As far as you are aware, what is the most recent COVID-19 policy at your college? | |
|---|--------|
| | 7/5/22 |
| Mask requirements for students NET | 48 |
| Students are always required to wear masks indoors when around other people | 14 |
| Students are sometimes required to wear masks indoors when around other people | 35 |
| Students are never required to wear masks indoors when around other people | 36 |
| Unsure | 16 |

| 34. [IF COLLEGE REQUIRES COVID-19 VACCINE] Does your college's COVID-19 vaccine requirement make you feel safer on campus? | | | |
|--|---------------------------------|---------------------------------------|---------|
| | Yes, [made/makes] me feel safer | No, [did/does] not make me feel safer | Skipped |
| 7/5/22 | 78 | 22 | * |

| 35. [IF COLLEGE REQUIRES COVID-19 VACCINE] As far as you are aware, does your college allow exemptions to its COVID-19 vaccine requirement on the basis of religious or personal beliefs, meaning that some people don't need to get vaccinated because of their beliefs? | | | |
|---|--------------------------------|---------------------------------------|--------|
| | Yes, college allows exemptions | No, college does not allow exemptions | Unsure |
| 7/5/22 | 58 | 13 | 30 |

| 36. [IF COLLEGE ALLOWS EXEMPTIONS] Have you ever applied for an exemption to your college's COVID-19 vaccine requirement on the basis of your religious or personal beliefs? | | | | | |
|--|-----|-------------------------------|----------------------------------|------------------------------------|---------|
| Yes, applied for an exemption | | | | | |
| | NET | Yes, was granted an exemption | Yes, and was denied an exemption | No, did not apply for an exemption | Skipped |
| 7/5/22 | 9 | 6 | 3 | 90 | * |

| 37. [IF RECEIVED AT LEAST ONE COVID-19 VACCINE DOSE AND COLLEGE REQUIRES COVID-19 VACCINE] Did you get vaccinated because it was required at your campus, or would you have been vaccinated even if it wasn't required? | | | |
|---|--|--|---------|
| | Got vaccinated only Because it was required | Would have gotten vaccinated even if it wasn't required | Skipped |
| 7/5/22 | 18 | 82 | * |

| 38. [IF RECEIVED AT LEAST ONE COVID-19 VACCINE DOSE AND WAS ENROLLED THIS SPRING] Did you get [any of] your COVID-19 vaccine [dose/doses] on your college campus, or not? | | | | | |
|--|-----|--------------------------------|---------------------|--------------------------|---------|
| | | Yes, on campus | | | |
| | NET | Yes, [on campus/all on campus] | Yes, some on campus | No, [not/none] on campus | Skipped |
| 7/5/22 | 21 | 10 | 11 | 78 | 1 |

| 39. Has your college asked you about your COVID-19 vaccination status? | | | |
|--|-----|----|---------|
| | Yes | No | Skipped |
| 7/5/22 | 60 | 38 | 1 |

| 40. [IF COLLEGE ASKED ABOUT COVID-19 VACCINE STATUS] Did your college require you to provide documentation of your COVID-19 vaccination status? | | | |
|---|-----|----|---------|
| | Yes | No | Skipped |
| 7/5/22 | 84 | 16 | * |

| Q39/40 NET Table: | | | | | | |
|-------------------|-----|--|--------------|------|------------------|-------------|
| | | Yes, asked about COVID-19 vaccination status | | | No, not Asked | Skip Q39 |
| | NET | Documentation required | Not required | Skip | | |
| 7/5/22 | 60 | 51 | 9 | * | 38 | 1 |

| 41. [IF ENROLLED THIS SPRING AND AWARE OF STUDENT HEALTH CENTER] Beyond any vaccinations, have you received any health care services from your college's student health center in the past 12 months? | | | |
|---|-----|----|---------|
| | Yes | No | Skipped |
| 7/5/22 | 23 | 76 | 1 |

| 42. [IF ENROLLED THIS SPRING AND AWARE OF STUDENT HEALTH CENTER] Have you received any information about COVID-19 specifically from your college's student health center? | | | |
|---|-----|----|--------|
| | Yes | No | Unsure |
| 7/5/22 | 43 | 42 | 15 |

| 43. [IF RECEIVED HEALTH CARE SERVICES FROM COLLEGE STUDENT HEALTH CENTER] How would you rate your college's student health center in each of these areas? | | | | | | | | |
|---|--------|-----------|-----------|-------|-----|-------------|------|------|
| 7/5/22 - Summary Table: | Better | | | Worse | | | | |
| | NET | Excellent | Very Good | Good | NET | Not so good | Poor | Skp. |
| a. Giving you clear health information overall | 70 | 34 | 37 | 24 | 5 | 5 | 0 | 0 |
| b. Availability to provide health services you need | 65 | 30 | 34 | 28 | 7 | 6 | 1 | 0 |
| c. Being sensitive toward your cultural background | 61 | 37 | 24 | 34 | 6 | 4 | 1 | 0 |

| 44. Overall, how much do you trust the information you see and hear about COVID-19? | | | | | | | |
|---|------|--------------|---------------|------|----------|------------|---------|
| | More | | | Less | | | |
| | NET | A great deal | A good amount | NET | Not much | Not at all | Skipped |
| 7/5/22 | 68 | 18 | 50 | 31 | 23 | 8 | 1 |

| 45. Which of these social media platforms, if any, do you use for health information? Check all that apply. | |
|---|--------|
| | 7/5/22 |
| Any of these social media platforms NET | 35 |
| YouTube | 18 |
| Instagram | 14 |
| Twitter | 14 |
| Facebook | 12 |
| TikTok | 10 |
| Snapchat | 5 |
| None of these | 64 |
| Skipped | 1 |

| 46. How much information, if at all, do you get about COVID-19/COVID-19 vaccines from each of the following sources? | | | | | | | |
|--|------|--------------|---------------|------|----------|------------|---------|
| 7/5/22 - Summary Table: | More | | | Less | | | |
| | NET | A great deal | A good amount | NET | Not much | Not at all | Skipped |
| a. Your parents or other close relatives | 62 | 21 | 41 | 37 | 25 | 11 | 2 |
| b. Your close friends | 38 | 8 | 30 | 60 | 44 | 16 | 2 |
| c. Your college | 47 | 12 | 35 | 51 | 36 | 15 | 2 |
| d. A health care provider | 66 | 30 | 37 | 32 | 22 | 10 | 2 |
| e. Information posted by the people or organizations you follow on social media | 33 | 5 | 27 | 66 | 40 | 26 | 2 |
| f. Reporting by professional news organizations | 68 | 21 | 47 | 30 | 21 | 9 | 2 |

| 47. [IF GET INFORMATION FROM SOURCES] How much, if at all, do you trust information about COVID-19/COVID-19 vaccines from each of these sources? | | | | | | | |
|--|------|--------------|---------------|------|----------|------------|---------|
| 7/5/22 - Summary Table: | More | | | Less | | | |
| | NET | A great deal | A good amount | NET | Not much | Not at all | Skipped |
| a. Your parents or other close relatives | 72 | 26 | 47 | 27 | 24 | 3 | 1 |
| b. Your close friends | 59 | 10 | 49 | 41 | 37 | 4 | * |
| c. Your college | 74 | 19 | 55 | 26 | 22 | 3 | * |
| d. A health care provider | 89 | 51 | 38 | 10 | 9 | 1 | 1 |
| e. Information posted by the people or organizations you follow on social media | 36 | 5 | 31 | 63 | 50 | 13 | 1 |
| f. Reporting by professional news organizations | 64 | 17 | 47 | 35 | 28 | 7 | * |

Q48-64 collected demographic data including full-or part-time status, year of college, education level, public/private institution, housing type, school enrollment, presence of underlying health conditions, insurance status, state, ZIP code, gender and race/ethnicity. See survey methodology.

