



## Original article

## Proximity of Crisis Pregnancy Centers to Colleges and Universities in the United States, 2021

Nicole Luisi, M.P.H., M.S.<sup>\*</sup>, Danielle Lambert, Ph.D., M.P.H., Erin Johnson, Ph.D., M.P.H., and Andrea Swartzendruber, Ph.D., M.P.H.*Epidemiology and Biostatistics Department, University of Georgia College of Public Health, Athens, Georgia*

Article history: Received June 28, 2024; Accepted January 2, 2025

Keywords: Crisis Pregnancy Centers; College students; Spatial analysis; Abortion; Reproductive health

## A B S T R A C T

**Purpose:** Since Crisis Pregnancy Centers (CPCs) are known to target college and university (CU) students, the purpose of this analysis was to describe the spatial proximity between CUs and CPCs in the United States by driving distance.

**Methods:** Using 2021 data from CPC Map and the US Department of Education's Integrated Postsecondary Education Data System survey, we generated buffer zones around each public and private not-for-profit CU based on driving distance (miles) and examined CPC locations within each buffer. We calculated distances from each CU to the nearest CPC nationally and by state. We then calculated the total number and percentage of female undergraduate students enrolled in CUs with at least one CPC within 3 miles.

**Results:** A total of 2,546 CPCs and 3,391 CUs were included in the analyses. Nationally, the median driving distance to the nearest CPC was 3.5 miles. In 67% of states, the minimum driving distance to the nearest CPC was less than 0.5 miles. Most (51.5%) undergraduate women were enrolled in a CU with a CPC within 3 miles. Percentages of CUs with at least one CPC within 3 driving miles were highest among private-not-for-profit institutions, CUs with higher student enrollment, doctoral degree conferring CUs, and CUs located in the West South Central and Middle Atlantic subregions.

**Discussion:** CPCs were located in close proximity to CUs. Efforts to increase awareness about CPCs and their risks and assist students in finding quality sources of care and information may be warranted.

© 2025 Society for Adolescent Health and Medicine. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

IMPLICATIONS AND  
CONTRIBUTION

Potential harms caused by Crisis Pregnancy Centers (CPCs) may be disproportionately experienced by students given that CPCs target young people and are often located near college and universities. Programs and campaigns to increase students' awareness about CPCs and their risks may be warranted. College and universities should be cautious about CPCs' attempts to engage students on campus.

Crisis Pregnancy Centers (CPCs) are faith-based nonprofit organizations that aim to deter people from having abortions and promote marriage and sexual abstinence before marriage only. CPCs frequently use deceptive tactics and provide inaccurate health information in support of their goals [1–4]. The centers are increasingly offering limited medical services, such as

nondiagnostic ultrasounds, sexually transmitted infection (STI) testing, and sometimes STI treatment [5,6]. CPCs particularly target young people, people of color, and people with low incomes [1,7]. In 2021, there were more than 2,500 CPCs in the United States (US), with the greatest numbers in the South and Midwest regions [8].

For more than a decade, major national and international public health and medical organizations (i.e., American Academy of Pediatrics, American Medical Association, American Public Health Association, North American Society for Pediatric and Adolescent Gynecology, Society for Adolescent Health

**Conflicts of interest:** None to declare for any author.

<sup>\*</sup> Address correspondence to: Nicole Luisi, M.P.H., M.S., Epidemiology and Biostatistics Department, University of Georgia College of Public Health, 101 Buck Road, Athens, GA 30602.

E-mail address: [nluisi@uga.edu](mailto:nluisi@uga.edu) (N. Luisi).

and Medicine) have warned that CPCs pose risk and urged governments to only support programs that provide medically accurate comprehensive health information [1,9–14]. Despite these recommendations, government funding and legal support for CPCs drastically increased in the decade before the 2022 *Dobbs v. Jackson* decision that overturned the federal right to abortion. For example, in a narrow 2018 decision, the US Supreme Court determined in *National Institute of Family and Life Advocates versus Becerra* that the California Reproductive Freedom, Accountability, Comprehensive Care, and Transparency Act, which, in part, required CPCs to post signage about public programs that provide free and low-cost contraception and abortion services, violated CPCs' first amendment-free speech rights [15,16]. Government funding has continued to increase, particularly in states that banned or severely restricted access to abortion post-*Dobbs* [17,18]. Legal protections have also continued. In 2023, Illinois signed into law a policy designed to prevent CPCs from using misinformation, deceptive practices, and misrepresentation. However, a federal judge blocked the law, and the Attorney General announced that the law would not be enforced [19,20].

Fall 2021 National Center for Education Statistics enrollment reports indicate that the majority of undergraduate students at public institutions were under the age of 25 (91% full-time four-year, 79% full-time two-year, and >60% part-time two- or four-year) [21]. Women aged 18–24, commonly college- and university- (CU-) aged women, experience high rates of STIs and have the highest rate of unintended pregnancy [22,23]. CU students may be overrepresented among abortion patients and are particularly targeted by CPCs. In 2021, women aged 20–24 years accounted for 16.1% of all reproductive-age women (15–44 years) in the United States, but comprised 28.3% of all abortions and had the highest abortion rate (19.7 per 1,000 women) [24,25]. In 2014, the most recent year comprehensive national data are available, among which 24% of abortion patients were currently attending school, including 53% of (college-aged) 18–19-year-olds. Two-thirds of abortion patients had some education or a college degree, suggesting that most students seeking abortions were pursuing postsecondary education [26]. Further, women commonly cite interruption of educational plans as a reason for seeking abortion [27].

CPCs use various strategies to engage CU students, including placing billboards near campuses [28], targeted programs [29], locating near CUs [29], establishing CPCs or affiliated mobile units on campus [30], sponsoring on-campus student organizations [30], and conducting outreach, such as leaving gifts and information about nearby CPCs at sorority houses [30]. During young adulthood, many individuals may begin to manage their own healthcare and provider relationships [31], and CU students navigating these systems for the first time may be particularly vulnerable to CPC tactics.

The aims of this analysis were to describe the spatial proximity between public and private not-for-profit CUs and CPCs in the United States and the number of female undergraduate students attending CUs with a CPC within 3 driving miles, nationally and by state. These findings may help examine the potential impact of CPCs on young people, aid efforts to increase awareness about CPCs' tactics and risks, help CU students identify quality sources of reproductive health information and care, and inform policies related to CPCs. This work may also serve as a baseline for examining changes to CPCs' strategies and potential reach over time.

## Methods

### Data sources

We used Crisis Pregnancy Center Map (CPC Map), an online geocoded directory of CPCs in the United States to identify CPCs [8]. Methods for the development of this resource have been previously reported; CPC Map includes centers that offer free pregnancy testing and excludes mobile centers, maternity homes, and adoption agencies [32]. All CPCs operating in 2021 were included in the analyses.

CU data were accessed through the US Department of Education, National Center for Education Statistics, and Integrated Postsecondary Education Data System (IPEDS) [33]. This web-based annual survey collects institutional data from postsecondary institutions in the United States and includes institutional characteristics, student enrollment and outcomes, and geolocation information. CUs in the 2021 release were included in analyses if they were active institutions that offered degree programs of at least 2 years and were classified as public (managed by publicly elected or appointed officials and supported primarily by public funds) or private not-for-profit (controlling party receives no compensation other than wages, rent, or other expenses for the assumption of risk), given that public and private not-for-profit institutions receive state and federal funding.

### Statistical analyses

To evaluate the spatial relationship between CPCs and CUs, proximity was estimated using driving distance (miles). First, we generated buffers for driving distances of one, 3, and 5 miles for each CU. For the additional analyses, we a priori selected buffers of 3 miles to restrict travel areas to those that could be reasonably covered by CU students without access to a personal vehicle. Next, we developed a binary indicator for the presence or absence of any CPC in the buffer (yes/no) and calculated the total number of CPCs in the buffer. Driving distance buffers were generated using the ArcGIS Online (Esri Inc.) network analysis Generate Travel Areas tool.

We used descriptive statistics to summarize select CU characteristics, including US Census Bureau subregion, degree of urbanization (city, suburb, and town), US Census Bureau statistical area type (metropolitan or micropolitan), type of institution (public or private not-for-profit), institution size category (<1,000; 1,000–4,999; 5,000–9,999; 10,000–19,000; or 20,000+), level of institution (4 or more years or at least 2 years but less than 4 years), highest degree offered (Doctoral, Master's, Bachelor's, Associate's, or nondegree granting), status as a historically Black college or university (HBCU), and institutional religious affiliation (public or no religious affiliation, private not-for-profit or no religious affiliation, protestant, catholic or orthodox, or other religious affiliation). We also used chi-square statistics to compare characteristics for CUs with and without any CPCs within three-mile driving distance.

To examine CPCs' potential "reach" near campuses, we calculated the total number and percentage of female undergraduate students enrolled in all CUs and at CUs with at least one CPC within a three-mile buffer during the fall of 2021. For each CU, we identified the closest CPC via driving distance (miles) using the Find Nearest tool with default settings for traffic and time of day. All analyses are presented nationally and by state,

including Washington, DC. Spatial analyses were conducted with ArcGIS Online (Esri Inc.). We used R Statistical Software (v4.3.1; R Core Team 2023) for all other analyses.

## Results

A total of 2,546 CPCs and 3,391 CUs were included in the analyses. The number and percentage of CPCs within each driving distance buffer around CUs nationally and by state are reported in [Table 1](#). Nationally, the total count of CPCs located within one mile of a CU ranged from 0 (86.7%) to 3 (<0.1%). The number of CPCs located within 3 miles of a CU ranged from 0 (53.8%) to 6 (0.1%) and the number within 5 miles ranged from 0 (34.7%) to 7 (0.3%). Nationally, 13.3% of CUs had a CPC located within a single mile, 46.2% within 3 miles, and 65.3% within 5 miles. [Figure 1](#) Maps CUs by the total number of CPCs within 3 miles.

By state, the percentage of CUs with a CPC within one mile ranged from 0% in Delaware and Nevada to 46.2% in Idaho. CUs with a CPC within 3 miles ranged from 16.7% in Delaware to 75% or more in DC, Idaho, and Wyoming. CUs with a CPC within 5 miles ranged from 21.1% in North Dakota to 87.5% in Wyoming and 100% in DC.

### *College and university characteristics and Crisis Pregnancy Center within three-mile driving distance*

[Table 2](#) presents comparisons between CUs within and outside of a three-mile drive of a CPC by CU characteristics. The percentage of CPCs within a three-mile drive ranged from 32.0% in the Pacific to 53.3% in the West South Central subregion ( $p < .001$ ). More than half (61.1%) of CUs located in cities had a CPC within 3 miles, as did 50.7% of CUs located in towns, 31.7% of those in suburbs, and 10.6% of those in rural areas ( $p < .001$ ). A greater percentage of private not-for-profit CUs had a CPC within 3 miles than public CUs (47.9% vs. 44.4%,  $p = .042$ ). CPCs were more prevalent near larger-sized CUs, with 43.7% of CUs with fewer than 1,000 students and 61.5% with 20,000 or more students within 3 miles of a CPC ( $p < .001$ ). Half (49.8%) of CUs with degree programs of 4 or more years had a CPC within 3 miles, compared to only 38.2% of CUs with two-year programs ( $p < .001$ ). More than half (54.4%) of CUs offering Doctoral degrees had a CPC within 3 miles, as did 47.0% and 43.5% of CUs offering Master's and Bachelor's degrees, respectively, and 36.6% of those offering Associate's degrees ( $p < .001$ ). There were no observed differences by status as an HBCU or institutional religious affiliation.

### *Crisis Pregnancy Center reach among undergraduate women*

[Table 1](#) shows the total number of undergraduate women enrolled in CUs nationally and by state within a three-mile driving distance to the nearest CPC. A total of 8,452,825 undergraduate women were enrolled at eligible CUs in the fall of 2021. Of these, 51.5% ( $n = 4,356,702$ ) were enrolled in a CU with a CPC located within a three-mile driving distance.

By state, the number of undergraduate women attending CUs with at least one CPC within 3 miles ranged from 74 in Delaware to more than 400,000 in California and Texas. The percentage attending CUs within 3 miles of a CPC ranged from fewer than 10% in Delaware and New Hampshire to more than 75% in Arkansas, Kentucky, Montana, and Wyoming.

### *Proximity of nearest Crisis Pregnancy Center*

[Table 3](#) shows the proximity of CUs to the nearest CPC, overall, and by state. Nationally, the median driving distance to the nearest CPC was 3.48 miles. Minimum driving distances ranged from 0.03 miles in Hawaii and Kansas to 2.22 miles in Nevada. In 67% of states, the minimum driving distance to the nearest CPC was less than 0.5 miles. Only 3 states (Alaska, Delaware, and Nevada) had a minimum driving distance to a CPC greater than one mile. The median driving distance ranged from 1.40 miles in Idaho to 73.90 miles in North Dakota. Maximum driving distance to the nearest CPC ranged from 3.60 miles in DC to 164.42 miles in Nevada.

## Discussion

This analysis examined the proximity of CPCs to CUs in the United States in 2021 and provides additional evidence that CPCs particularly target students attending CUs. It is the first published study to assess locations of CPCs around CUs. Overall, we found that CPCs were located in close proximity to CUs. For nearly half of CUs nationally, the nearest CPC was located within a 3 mile driving distance. Among more than 8.4 million undergraduate female students in the United States enrolled in a public or private not-for-profit CU with a 2-year or four-year or more degree program in the fall of 2021, more than half (>4.3 million) attended a CU within 3 miles of a CPC. The minimum distance from a CU to a CPC was less than 1 mile in the vast majority of states. The findings confirm that CPCs' stated strategies of locating near CUs and targeting students in their advertising and service offerings [28–30].

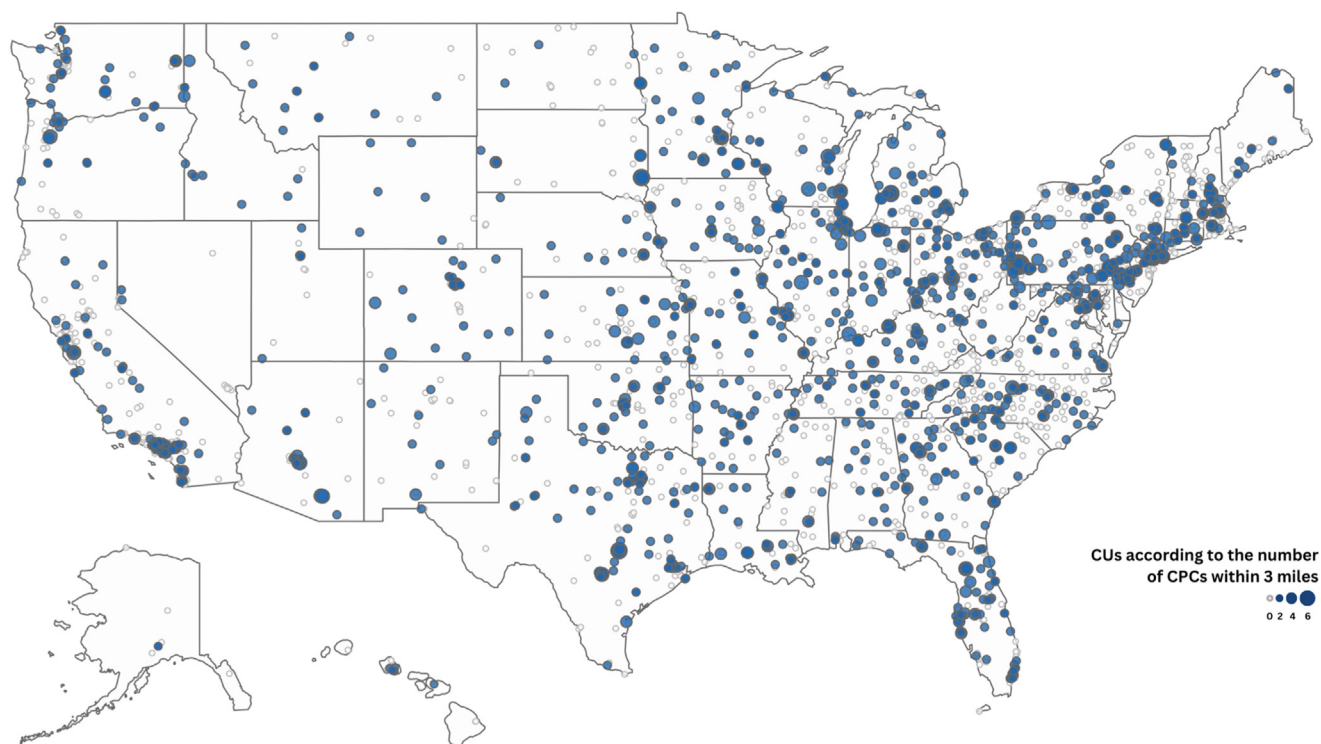
Although CPCs have documented their intentions and activities to engage with and appeal to CU students, we are not aware of evidence that CPCs target CUs with specific characteristics. The current study found that greater percentages of CUs in the West South Central subregion, including 4 states where abortion is currently banned, had CPCs nearby. The percentage of CUs with CPCs nearby was lowest in the Pacific, including 5 states that have not moved to ban or restrict abortion post-*Dobbs*. CPCs were also close to CUs in urban areas, larger institutions, CUs with four-year degree programs, CUs that offered graduate degrees, HBCUs, and CUs with no religious affiliation or protestant or catholic affiliations. These findings may be helpful for targeting CPC awareness programs among students and examining adverse outcomes among students due to CPCs.

Evidence shows that CU students experience multiple barriers in accessing sexual and reproductive health services. For example, in 2014–2015, 29% of CUs in the United States did not have a health center. Of those that did, 27% did not offer STI diagnosis or treatment and 35% did not offer contraceptive services [34]. A study conducted at a public university in the Southeast reported that the majority of students were unsure if the student health center offered 19 different sexual health services or tests, including contraception and STI testing [35]. In 2019, California became the first state to require public CU health centers to provide medication abortion, which took effect in 2023 [36]. Currently, California and New York require CUs to provide medication abortion, and Massachusetts requires CUs to develop a “medication abortion readiness” plan, which may include the direct provision of this medication or assistance in the form of information or referrals [37–39]. Although demand

**Table 1**

Proximity of Crisis Pregnancy Centers (CPCs) to public and private not-for-profit colleges and universities (CUs) in the United States, 2021, and female undergraduate enrollment at CUs with a CPC located within 3 miles

	All colleges & universities	Driving distance buffer zones (miles)			Enrollment of undergraduate women	
		Colleges & universities with a CPC within 1 mile	Colleges & universities with a CPC within 3 miles	Colleges & universities with a CPC within 5 miles	Undergrad women at all colleges & universities	Undergrad women at colleges & universities with a CPC within 3 miles
	N	N (%)	N (%)	N (%)	N	N (%)
Overall (All US States + DC)	3,391	451 (13.3)	1,567 (46.2)	2,215 (65.3)	8,452,825	4,356,702 (51.5)
Total # of CPCs within Zone						
0		2,940 (86.7)	1,824 (53.8)	1,176 (34.7)		
1		408 (12.0)	1,142 (33.7)	1,333 (39.3)		
2		42 (1.2)	348 (10.3)	549 (16.2)		
3		1 (0.0%)	59 (1.7)	204 (6.0)		
4		-	15 (0.4)	73 (2.2)		
5		-	1 (0.0)	37 (1.1)		
6		-	2 (0.1)	9 (0.3)		
7		-	-	10 (0.3)		
US States						
Alabama	57	3 (5.3)	20 (35.1)	33 (57.9)	132,566	64,447 (48.6)
Alaska	7	1 (14.3)	2 (28.6)	3 (42.9)	11,576	6,584 (56.9)
Arizona	37	4 (10.8)	17 (45.9)	23 (62.2)	187,649	125,840 (67.1)
Arkansas	51	9 (17.6)	30 (58.8)	37 (72.5)	75,000	57,250 (76.3)
California	320	25 (7.8)	92 (28.8)	181 (56.6)	1,161,286	407,945 (35.1)
Colorado	40	7 (17.5)	23 (57.5)	31 (77.5)	136,229	86,369 (63.4)
Connecticut	42	4 (9.5)	20 (47.6)	29 (69.0)	78,386	38,381 (49.0)
Delaware	6	0 (0.0)	1 (16.7)	3 (50.0)	28,381	74 (0.3)
District of Columbia	15	1 (6.7)	12 (80.0)	15 (100.0)	28,901	19,241 (66.6)
Florida	133	14 (10.5)	63 (47.4)	95 (71.4)	478,149	269,822 (56.4)
Georgia	88	13 (14.8)	47 (53.4)	59 (67.0)	260,275	163,638 (62.9)
Hawaii	14	1 (7.1)	7 (50.0)	8 (57.1)	33,217	20,295 (61.1)
Idaho	13	6 (46.2)	10 (76.9)	10 (76.9)	66,655	36,149 (54.2)
Illinois	141	23 (16.3)	59 (41.8)	92 (65.2)	271,374	131,167 (48.3)
Indiana	58	11 (19.0)	33 (56.9)	42 (72.4)	194,561	126,860 (65.2)
Iowa	54	8 (14.8)	26 (48.1)	34 (63.0)	94,018	54,691 (58.2)
Kansas	57	6 (10.5)	27 (47.4)	36 (63.2)	87,059	50,808 (58.4)
Kentucky	50	15 (30.0)	27 (54.0)	34 (68.0)	114,304	88,135 (77.1)
Louisiana	49	4 (8.2)	27 (55.1)	37 (75.5)	122,389	77,120 (63.0)
Maine	28	3 (10.7)	11 (39.3)	16 (57.1)	34,973	11,559 (33.1)
Maryland	49	6 (12.2)	24 (49.0)	31 (63.3)	145,737	61,017 (41.9)
Massachusetts	106	11 (10.4)	48 (45.3)	67 (63.2)	187,984	89,890 (47.8)
Michigan	88	17 (19.3)	46 (52.3)	66 (75.0)	231,853	137,192 (59.2)
Minnesota	78	16 (20.5)	48 (61.5)	59 (75.6)	141,964	102,656 (72.3)
Mississippi	32	5 (15.6)	11 (34.4)	16 (50.0)	81,197	29,616 (36.5)
Missouri	83	9 (10.8)	42 (50.6)	56 (67.5)	151,074	77,113 (51.0)
Montana	24	2 (8.3)	13 (54.2)	15 (62.5)	22,236	17,621 (79.2)
Nebraska	31	3 (9.7)	15 (48.4)	22 (71.0)	60,493	28,338 (46.8)
Nevada	11	0 (0.0)	2 (18.2)	4 (36.4)	56,098	10,928 (19.5)
New Hampshire	25	3 (12.0)	12 (48.0)	18 (72.0)	100,846	9,295 (9.2)
New Jersey	80	9 (11.3)	26 (32.5)	45 (56.3)	165,970	65,909 (39.7)
New Mexico	31	2 (6.5)	9 (29.0)	15 (48.4)	54,947	25,847 (47.0)
New York	285	34 (11.9)	152 (53.3)	204 (71.6)	484,152	253,504 (52.4)
North Carolina	125	11 (8.8)	51 (40.8)	74 (59.2)	279,122	150,440 (53.9)
North Dakota	19	1 (5.3)	4 (21.1)	4 (21.1)	21,555	11,733 (54.4)
Ohio	139	18 (12.9)	69 (49.6)	105 (75.5)	311,343	193,731 (62.2)
Oklahoma	54	6 (11.1)	22 (40.7)	31 (57.4)	97,036	66,714 (68.8)
Oregon	50	4 (8.0)	18 (36.0)	33 (66.0)	92,338	29,058 (31.5)
Pennsylvania	170	51 (30.0)	102 (60.0)	127 (74.7)	282,897	199,785 (70.6)
Rhode Island	15	1 (6.7)	7 (46.7)	7 (46.7)	36,125	15,153 (41.9)
South Carolina	58	5 (8.6)	29 (50.0)	40 (69.0)	119,575	72,872 (60.9)
South Dakota	23	3 (13.0)	10 (43.5)	11 (47.8)	23,626	10,756 (45.5)
Tennessee	92	14 (15.2)	43 (46.7)	65 (70.7)	147,665	90,260 (61.1)
Texas	176	26 (14.8)	97 (55.1)	126 (71.6)	769,861	434,299 (56.4)
Utah	13	1 (7.7)	5 (38.5)	6 (46.2)	179,495	35,144 (19.6)
Vermont	16	1 (6.3)	3 (18.8)	6 (37.5)	19,277	10,035 (52.1)
Virginia	82	6 (7.3)	29 (35.4)	45 (54.9)	228,804	103,214 (45.1)
Washington	68	8 (11.8)	28 (41.2)	37 (54.4)	156,807	60,543 (38.6)
West Virginia	35	4 (11.4)	10 (28.6)	14 (40.0)	37,602	19,590 (52.1)
Wisconsin	65	13 (20.0)	32 (49.2)	41 (63.1)	153,248	96,254 (62.8)
Wyoming	8	3 (37.5)	6 (75.0)	7 (87.5)	14,950	11,820 (79.1)



Data Sources: Crisis Pregnancy Center Map (CPC Map); U.S. Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS)

**Figure 1.** Public and private not-for-profit college and universities (CUs) according to the number Crisis Pregnancy Centers (CPCs) within 3 driving miles, United States, 2021.

for abortion is high on college campuses [36,40–42], a 2023 study of student health center websites of four-year bachelors granting CUs in the United States reported that only 4% of websites mentioned medication abortion and 57% only did so in the context of differentiating it from emergency contraception [43]. Further, a secret caller study conducted among CU student health centers in Pennsylvania reported that most health center staff lacked knowledge and comfort related to abortion referrals [44]. In another analysis, some of the same authors also reported that only 50% of CU student health centers provided direct, appropriate referrals for abortion [45]. Other barriers include concerns about confidentiality given that 42% of college students remain on their parent's insurance plan [46], lack of insurance altogether [47], and lack of comprehensive sexual health education [4].

Barriers to healthcare among students may underlie CPCs' strategies to locate around CUs. CPCs often mimic medical clinics, frequently advertise STI testing services, and hold themselves out as sources of abortion information [1,6]. Most CPCs advertise their services as "free" and "confidential" [2]. Notably, however, CPCs do not adhere to national medical or ethical practice standards and are not subject to Health Insurance Portability and Accountability Act regulations [1]. CPCs also frequently provide false and misleading health information [1–4].

CPCs' main goal is to divert people from seeking and accessing abortion care [1,2]. To our knowledge, no studies have examined spatial distances from CUs and abortion facilities. These analyses are currently underway. Given that CPCs outnumbered abortion

facilities by 3:1 in 2021 [48], we anticipate closer proximity of CPCs than abortion facilities around CUs and that more female CU students have closer access to CPCs than abortion facilities.

### Strength and limitations

This study is subject to several limitations. First, buffers based on different driving distances would yield different results. We also applied default settings for traffic and time of the day to all buffers, which may underestimate driving distance in more densely populated areas. Notably, this study was unable to account for mobile CPCs, which are known to also target students and park on CU campuses [30]. Thus, our analyses may underestimate CPCs potential "reach" of CU students. In addition, we selected buffers with students who might reach CPCs on foot or by public transportation in mind. Additionally, the geolocation for campuses provided by IPEDS is typically the registrar's office or another administrative building, which may not be the geographic center of campus. Therefore, our analyses may underestimate or overestimate the proximity of CPCs to CUs to the extent that the geolocation provided by IPEDS varies from the geographic center of campus given that campus boundary data were unavailable. In addition, our exclusion of schools offering programs of less than 2 years likely excluded many trade, technical, and vocational schools and certificate programs. However, these students may be older and, therefore, may spend less time on



**Table 2**

Comparison of public and private not-for-profit college and university (CU) characteristics with and without a Crisis Pregnancy Center (CPC) located within 3 miles, United States, 2021

Characteristic	All colleges & universities N = 3,391	Driving distance Buffer zone (miles) CPC within 3 miles N = 1,567	p value
	N (col %)	N (Row %)	
US Census Bureau Subregion			<.001
New England (CT, ME, MA, NH, RI, VT)	232 (6.8)	101 (43.5)	
Middle Atlantic (NJ, NY, PA)	535 (15.8)	280 (52.3)	
East North Central (IN, IL, MI, OH, WI)	491 (14.5)	239 (48.7)	
West North Central (IA, KS, MN, MO, NE, ND, SD)	345 (10.2)	172 (49.9)	
South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	591 (17.4)	266 (45.0)	
East South Central (AL, KY, MS, TN)	231 (6.8)	101 (43.7)	
West South Central (AR, LA, OK, TN)	330 (9.7)	176 (53.3)	
Mountain (AZ, CO, ID, NM, MT, UT, NV, WY)	177 (5.2)	85 (48.0)	
Pacific (AK, CA, HI, OR, WA)	459 (13.5)	147 (32.0)	
Degree of urbanization			<.001
City	1,535 (45.3)	938 (61.1)	
Suburb	805 (23.7)	255 (31.7)	
Town	655 (19.3)	332 (50.7)	
Rural	396 (11.7)	42 (10.6)	
US Census Bureau statistical area type			<.001
Metropolitan	2,670 (78.7)	1,261 (47.2)	
Micropolitan	497 (14.7)	247 (49.7)	
Not applicable	224 (6.6)	59 (26.3)	
Type of institution			.042
Public	1,663 (49.0)	739 (44.4)	
Private not-for-profit	1,728 (51.0)	828 (47.9)	
Institution size category <sup>a</sup>			<.001
Under 1,000	1,063 (31.4)	464 (43.7)	
1,000 – 4,999	1,388 (41.0)	603 (43.4)	
5,000 – 9,999	459 (13.6)	216 (47.1)	
10,000 – 19,999	287 (8.5)	165 (57.5)	
20,000 and above	187 (5.5)	115 (61.5)	
Level of Institution			<.001
4 or more years	2,347 (69.2)	1,168 (49.8)	
At least 2 years but Less than 4 years	1,044 (30.8)	399 (38.2)	
Highest degree Offered			<.001
Doctoral Degree	1,123 (33.1)	611 (54.4)	
Master's Degree	694 (20.5)	326 (47.0)	
Bachelor's Degree	524 (15.5)	228 (43.5)	
Associate's degree	920 (27.1)	337 (36.6)	
Non-degree granting	130 (3.8)	65 (50.0)	
Historically Black College or University	100 (2.9)	50 (50.0)	.400
Institutional Religious Affiliation <sup>a</sup>			.200
Public (No religious affiliation)	1,663 (49.1)	739 (44.4)	
Private not-for-profit (No religious affiliation)	841 (24.8)	415 (49.3)	
Protestant	529 (15.6)	249 (47.1)	
Catholic or Orthodox	235 (6.9)	111 (47.2)	
Other religious affiliation	120 (3.5)	52 (43.3)	

<sup>a</sup> Variables Institution Size Category and Institutional Religious Affiliation had missing values. Institution Size Category was missing values for 5 observations, and Institutional Religious Affiliation was missing values for 3 observations.

campus. Finally, there may be other reasons for CPC proximity to CUs such as the proximity of campuses to population centers.

Strengths of the study include the use of high-quality national data sources and presentation of both national and state-level findings. Furthermore, this study makes a unique contribution to the field related to CPC locations, tactics, and target populations.

### Implications

Potential harms caused by CPCs (e.g., delayed healthcare, blocked access to healthcare, adverse outcomes related to

inaccurate, and misleading health information) may be disproportionately experienced by CU students given that CPCs target young people and are often located in close proximity to CUs. Programs and campaigns to increase students' awareness about CPCs in general and locally may be warranted. CU student health centers should provide comprehensive services within legal limits and be equipped to provide referrals for safe sources of services not offered on campus, such as abortion and other healthcare services. CUs should ensure that students are aware of available health center services. CU administrators, students, and faculty should be cautious regarding CPCs' attempts to engage and attract students on campus and work to mitigate potential harms. Programs in fields such as nursing,

**Table 3**

Driving distances from public and private not-for-profit colleges and universities (CUs) to the nearest Crisis Pregnancy Center (CPC), United States, 2021

	Driving distance to nearest CPC (miles)			
	Minimum	Median	Mean	Maximum
Overall (All States + DC)	0.03	3.48	7.48	164.42
US States				
Alabama	0.25	4.19	7.06	32.64
Alaska	1.30	4.81	4.92	9.16
Arizona	0.56	3.39	11.60	117.69
Arkansas	0.31	2.30	6.92	36.46
California	0.07	4.63	5.99	65.53
Colorado	0.33	2.18	5.54	87.07
Connecticut	0.41	3.43	4.17	22.12
Delaware	1.82	5.35	4.87	6.98
District of Columbia	0.96	2.24	2.33	3.60
Florida	0.30	3.40	5.25	138.67
Georgia	0.42	2.71	5.71	44.52
Hawaii	0.03	3.04	15.94	77.36
Idaho	0.22	1.40	3.93	27.56
Illinois	0.16	3.89	5.13	30.84
Indiana	0.29	2.48	4.92	41.41
Iowa	0.53	3.14	10.78	55.38
Kansas	0.03	3.15	11.09	58.80
Kentucky	0.16	2.58	9.15	63.15
Louisiana	0.47	2.87	4.41	23.17
Maine	0.39	3.30	12.59	92.68
Maryland	0.48	3.71	5.14	28.85
Massachusetts	0.51	3.52	5.45	21.23
Michigan	0.34	3.04	4.65	30.12
Minnesota	0.40	2.53	5.55	48.74
Mississippi	0.46	5.83	14.23	45.89
Missouri	0.56	2.94	6.58	49.74
Montana	0.85	2.33	22.19	100.77
Nebraska	0.60	3.16	15.64	101.01
Nevada	2.22	8.79	23.10	164.42
New Hampshire	0.45	3.34	7.34	43.39
New Jersey	0.36	4.49	5.61	25.76
New Mexico	0.34	5.09	17.13	88.76
New York	0.26	2.95	6.33	71.56
North Carolina	0.36	3.96	7.98	40.02
North Dakota	0.98	73.90	67.90	155.51
Ohio	0.07	3.09	4.63	35.32
Oklahoma	0.23	3.88	10.02	64.03
Oregon	0.28	4.20	6.78	59.42
Pennsylvania	0.13	2.27	3.72	26.61
Rhode Island	0.88	7.73	8.16	23.00
South Carolina	0.31	3.50	6.93	45.52
South Dakota	0.19	38.81	34.55	100.04
Tennessee	0.32	3.33	6.59	34.56
Texas	0.23	2.79	6.68	149.34
Utah	0.75	5.29	19.90	90.32
Vermont	0.59	8.42	11.72	36.31
Virginia	0.59	4.53	9.45	52.76
Washington	0.48	4.33	6.14	18.87
West Virginia	0.60	6.06	13.56	49.79
Wisconsin	0.34	3.19	5.73	39.83
Wyoming	0.62	1.61	12.04	84.56

In Alaska and Hawaii, driving distance calculations may not be applicable to remote or noncontiguous areas; maximum distances may be underestimated.

social work, medicine, and public health have a particular responsibility to ensure that they do not implicitly endorse CPCs by allowing students to gain internship or practicum hours at the centers. Particularly given the proximity of CPCs around CUs by state, state abortion policies after *Dobbs*, increasing awareness about CPC risks, and evidence that the reproductive health policy landscape influences CU students' enrollment decisions, it may be in states' and CUs' self-interest to undertake and promote actions to protect students from potential CPC harms. Finally, state and city governments may consider

using zoning laws to regulate CPC locations and implementing legislation to regulate CPCs' misleading advertising.

## References

- [1] Society for Adolescent Health and Medicine and the North American Society for Pediatric and Adolescent Gynecology. Crisis pregnancy centers in the U.S.: Lack of adherence to medical and ethical practice standards. Position paper. *J Adolesc Health* 2019;65:821–4.
- [2] Bryant AG, Swartz JJ. Why crisis pregnancy centers are legal but unethical. *AMA J Ethics* 2018;20:269–77.

- [3] Swartzendruber A, Newton-Levinson A, Feuchs AE, et al. Sexual and reproductive health services and related health information on pregnancy resource center websites: A statewide content analysis. *Wom Health Issues* 2018;28:14–20.
- [4] Swartzendruber A, Steiner RJ, Newton-Levinson A. Contraceptive information on pregnancy resource center websites: A statewide content analysis. *Contraception* 2018;98:158–62.
- [5] Baggett L. New data reveals CPCs are spreading, casting wider net to attract non-pregnant clients. University of Georgia college of public health. 2022. Available at: <https://publichealth.uga.edu/new-data-reveals-cpcs-are-spreading/>. Accessed June 28, 2024.
- [6] Swartzendruber A, Solsman A, Lambert DN. The availability of HIV and sexually transmitted infection testing and treatment services at crisis pregnancy centers in the United States. *Sex Transm Dis* 2021;48:738–47.
- [7] Hartshorn MH. Foot soldiers armed with love: Heartbeat international's first forty years. Brookfield, MO: Donning Company Publishers; 2011.
- [8] Swartzendruber A, Lambert D. Crisis pregnancy center map. 2021. Available at: <http://www.crisispregnancycentermap.com>. Accessed June 28, 2024.
- [9] American Public Health Association (APHA). Regulating disclosure of services and sponsorship of crisis pregnancy centers. 2011. Available at: <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/22/08/33/regulating-disclosure-of-services-and-sponsorship-of-crisis-pregnancy-centers>. Accessed June 28, 2024.
- [10] American Public Health Association (APHA). Recommendations for pregnancy counseling and abortion referrals. Available at: <https://www.apha.org/Policies-and-Advocacy/Public-Health-Policy-Statements/Policy-Databa se/2021/01/12/Recommendations-for-Pregnancy-Counseling-and-Abortio n-Referrals>. Accessed June 28, 2024.
- [11] American Academy of Pediatrics (AAP). Options counseling for the pregnant adolescent patient. *Pediatrics* 2022;150:e2022058781.
- [12] American College of Obstetricians and Gynecologists (ACOG). Issue brief: Crisis pregnancy centers. 2022. Available at: <https://www.acog.org/ad vocacy/abortion-is-essential/trending-issues/issue-brief-crisis-pregnancy-centers>. Accessed June 28, 2024.
- [13] American Medical Association. Truth and transparency in pregnancy counseling centers H-420.954. 2022. Available at: <https://policysearch.ama-assn.org/policyfinder/detail/pregnancy?uri=%2FAMADoc%2FHOD.xml -0-3697.xml>. Accessed June 28, 2024.
- [14] American Academy of Pediatrics. Equitable access to sexual and reproductive health care for all youth. Available at: [https://downloads.aap.org/AAP/PDF/FINAL\\_Equitable%20Youth%20Access%20to%20SRH%20Care.pdf](https://downloads.aap.org/AAP/PDF/FINAL_Equitable%20Youth%20Access%20to%20SRH%20Care.pdf). Accessed September 27, 2024.
- [15] National Institute of Family and Life Advocates, dba NIFLA, et al v. Becerra, Attorney General of California, et al. (Supreme Court of the United States 2018). Available at: [https://www.supremecourt.gov/opinions/17pdf/16-1140\\_5368.pdf](https://www.supremecourt.gov/opinions/17pdf/16-1140_5368.pdf). Accessed June 28, 2024.
- [16] Supreme Court of the United States. National Institute of Family and Life Advocates, DBA NIFLA, et al. v. Becerra, Attorney General of California, et al. 2018. Available at: [https://www.supremecourt.gov/opinions/17pdf/16-1140\\_5368.pdf](https://www.supremecourt.gov/opinions/17pdf/16-1140_5368.pdf). Accessed February 10, 2025.
- [17] Sherman C. Anti-abortion centers raked in \$1.4bn in year roe fell, including federal money. The guardian. 2024. Available at: <https://amp.theguardian.com/world/2024/feb/14/anti-abortion-centers-funding>. Accessed June 28, 2024.
- [18] Kruesi K. Millions in tax dollars flow to anti-abortion centers in US. AP News. 2022. Available at: <https://apnews.com/article/abortion-business-health-nashville-personal-taxes-fffa6f6f86e6eaa448b8ea89087a1c46>.
- [19] Illinois General Assembly. Amendment to senate bill 1909, Deceptive practices of limited services pregnancy centers act. In: 103rd general assembly, editor. SB1909. Available at: <https://www.ilga.gov/legislation/billstatus.asp?DocNum=1909&GAID=17&GA=103&DocTypeID=SB&LegID=146759&SessionID=1122023>. Accessed June 28, 2024.
- [20] McDonald M. (Don't) be deceived. Chicago Reader. 2024. Available at: <https://chicagoreader.com/news-politics/crisis-pregnancy-centers-lawsuit/>. Accessed June 28, 2024.
- [21] National Center for Education Statistics. Characteristics of postsecondary students. Condition of education. U.S. Department of education, institute of education sciences. Available at: <https://nces.ed.gov/programs/coe/indicator/csb>. Accessed September 19, 2024.
- [22] Centers for Disease Control and Prevention. Sexually transmitted infections surveillance. 2022. Available at: <https://www.cdc.gov/std/statistics/2022/>. Accessed June 28, 2024.
- [23] Rossen L, Hamilton B, Abma J, et al. Updated methodology to estimate overall and unintended pregnancy rates in the United States. *Vital Health Stat* 2023;2:16–7.
- [24] Kortsmitt K, Nguyen A, Mandel M, et al. Abortion surveillance—United States, 2021. *MMWR Surveill Summ* 2023;72:1–29.
- [25] U.S. Census Bureau. American community survey demographic and housing estimates. 2021. Available at: <https://data.census.gov/table/ACSST1Y 2021.S0101?q=United%20States&g=010XX00US&y=2021>. Accessed June 28, 2024.
- [26] Jerman J, Jones R, Onda T. Characteristics of U.S. Abortion patients in 2014 and changes since 2008. Guttmacher institute. 2016. Available at: <https://www.guttmacher.org/report/characteristics-us-abortion-patients-2014>. Accessed June 28, 2024.
- [27] Biggs MA, Gould H, Foster DG. Understanding why women seek abortions in the US. *BMC Wom Health* 2013;13:29.
- [28] Holtzman B. Have crisis pregnancy centers finally met their match: California's reproductive FACT act. *Northwest J Law Soc Pol* 2017;12:78.
- [29] Family Research Council. A passion to serve, A vision for life: Pregnancy resource center service report. 2009. Available at: <https://downloads.frc.org/EF/EF09I51.pdf>. Accessed June 28, 2024.
- [30] Williams Y, Henderson M, Hale M. Care Net 2017 annual conference: Impacting Your Campus. Washington, DC. Available at: [https://cdn2.hubspot.net/hubfs/367552/Conference/Conference\\_17/ConfBrochure\\_Online Download.pdf](https://cdn2.hubspot.net/hubfs/367552/Conference/Conference_17/ConfBrochure_Online Download.pdf). Accessed August 30, 2017.
- [31] Irwin CE Jr. Young adults are worse off than adolescents. *J Adolesc Health* 2010;46:405–6.
- [32] Swartzendruber A, Lambert DN. A web-based geolocated directory of crisis pregnancy centers (CPCs) in the United States: Description of CPC map methods and design features and analysis of baseline data. *JMIR Public Health Surveill* 2020;6:e16726.
- [33] U.S. Department of Education. Integrated Postsecondary Education Data System (IPEDS). National Center for Education Statistics (NCES). Available at: <https://nces.ed.gov/ipeds/>. Accessed June 28, 2024.
- [34] Habel MA, Coor A, Beltran O, et al. The state of sexual health services at U.S. colleges and universities. *J Am Coll Health* 2018;66:259–68.
- [35] Mozingo SL, Museck IJ, Mitchell SE, et al. Students' awareness of the student health center's sexual health services at a southeast public university. *J Am Coll Health* 2023;71:76–9.
- [36] Behonick D. Assessing the need for on-campus medication abortion at California community colleges. *J Am Coll Health* 2023;71:813–20.
- [37] Public Health. Public university student health centers: Abortion by medication techniques, CA SB24, California Legislature, 2019–2020 sess. 2019. Available at: <https://legiscan.com/CA/bill/SB24/2019>. Accessed June 28, 2024.
- [38] Provides access to medication abortion prescription drugs at SUNY and CUNY campuses, NY Senate Bill S1213B. 2023. Available at: <https://www.nysenate.gov/legislation/bills/2023/S1213/amendment/B>. Accessed June 28, 2024.
- [39] An Act Expanding Protections for Reproductive and Gender-Affirming Care, H.5090, The general Court of the commonwealth of Massachusetts, 2021–2022 sess. 2022. Available at: <https://malegislature.gov/Bills/192/h5090>. Accessed June 28, 2024.
- [40] Peart MS, Cartwright AF, Tadikonda A, et al. Potential demand for and access to medication abortion among North Carolina college students. *J Am Coll Health* 2024;1–8. <https://doi.org/10.1080/07448481.2023.2299408>.
- [41] Riley T, Godfrey EM, Angelini E, et al. Demand for medication abortion among public university students in Washington. *J Am Coll Health* 2023;1–5. <https://doi.org/10.1080/07448481.2023.2245481>.
- [42] Upadhyay UD, Cartwright AF, Johns NE. Access to medication abortion among California's public university students. *J Adolesc Health* 2018;63:249–52.
- [43] Modrek S, Wong M, Kulkarni A, et al. Medication abortion: State of information on student health center websites. *J Am Coll Health* 2024;72:3131–5.
- [44] Anand P, Bravo L, Gutman S, et al. "I wasn't expecting that question": Responses to requests for abortion referral at college student health centers. *Wom Health Issues* 2024;34:148–55.
- [45] Anand P, McAllister A, Hunter T, et al. A simulated patient study to assess referrals to abortion care by student health centers in Pennsylvania. *Contraception* 2020;102:23–9.
- [46] Copen CE, Dittus PJ, Leichter JS. Confidentiality concerns and sexual and reproductive health care among adolescents and young adults aged 15–25. *NCHS Data Brief* 2016;266:1–8.
- [47] United Healthcare. The college student behavioral health report. 2022. Available at: <https://www.uhc.com/content/dam/uhcdotcom/en/Brokers AndConsultants/behavioral-health-college-student-white-paper.pdf>. Accessed June 28, 2024.
- [48] Swartzendruber A, Luisi N, Johnson E, Lambert DN. Spatial analyses of crisis pregnancy centers and abortion facilities in the United States, 2021: Pre-dobbs cross-sectional study. *JMIR Public Health Surveill* 2024;10:e60001.