A SILENT HAZARD

A Regional Survey on Mental Health & Suicide in Construction

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ACCORDING TO THE CDC, approximately 11.4 million workers were employed in the U.S. construction industry in 2019, a 25% increase since 2011 (Peterson et al., 2020). The construction industry experiences the highest numbers of fatal work injuries among private industry sectors in the U.S. (U.S. BLS, 2022). The top four leading causes of death in construction have consistently been fall (33%), struck-by (15%), electrocution (7%), and caught-in or between (5%). However, mental health and suicide have become increasingly relevant to workplace safety and wellness. Construction workers have the second-highest suicide rate of all industries (Peterson et al., 2020). The rate of suicide in construction is 45.3 deaths per 100,000 people, which is three times the U.S. national average of 14.2. In fact, in all developed countries, blue-collar construction workers are at a higher risk of suicide among all employed men (Dong et al., 2022). In addition to the loss of life, construction-related deaths cost the U.S. nearly $5 billion in lost productivity, reduced family income, pain and suffering, and lower quality of life (CPWR, 2007; Midwest Economic Policy Institute, 2017).

Several risk factors have been identified for high rates of suicide in the construction industry. First, construction workers are more likely to be male (90.8%), a much larger proportion compared to the general U.S. workforce, and most deaths due to suicide are among males (CDC, 2024a). Other risk factors related to construction industry personnel and their work environment have been suggested, including work-related chronic pain, high rates of substance use, access to lethal means, poor working conditions, and lack of accessible mental health care (Stergiou-Kita et al., 2015). Also, research has highlighted that construction work culture values risk-taking, stoicism and self-reliance, which may interfere with help-seeking behaviors (Stergiou-Kita et al., 2015). Moreover, research has indicated that most construction workers are hesitant to discuss mental health issues with their employers and coworkers, which may further limit help-seeking (Center for Workplace Mental Health, 2021). Lastly, males have greater levels of stigma toward mental illness compared to females, and greater levels of stigma are associated with greater psychological distress and sleep difficulties (Eyllon et al., 2020).

Although safety professionals traditionally focus on occupational risks to physical health, the high rate of suicide in construction suggests an urgency for safety professionals to address mental health and suicide prevention. However, there is a lack of research examining prevention programming, and existing prevention programming has been largely ineffective (Duckworth et al., 2022). Thus, the present study sought to examine views of employers and construction workers toward mental health and suicide as a problem in the workplace, their comfort level with discussing these issues, and the frequency of mental health and suicide resources available within organizations as an initial step for developing safety professional interventions to address knowledge and attitudes in the local industry.

KEY TAKEAWAYS

- **In addition to the four leading causes of death in the construction industry (fall, struck-by, electrocution, and caught-in or between), suicide has recently become an increasing concern, as construction workers have the second-highest rate of suicide among all industries.**
- **A pilot study was conducted in the U.S. Midwest. Results indicate a gap between the degree of importance employers and workers place on mental health and suicide issues. Workers did not view mental health or suicide as an important workplace issue and indicated low comfort levels in discussing mental health or suicide with coworkers and supervisors.**
- **Most organizations or employers did not have suicide prevention programs, and limited resources for mental health or suicide issues were available from the organization or employer.**
- **The increase of suicide in the construction industry demands increased implementation of suicide prevention programs, greater awareness, and available resources relating to mental health and suicide issues. Safety professionals are well positioned to increase awareness and implement mental health and suicide prevention programs as part of their safety role.**

Method

Participants

Participants included 34 union workers and 51 union employers within the construction industry in the U.S. Midwest, OSHA Region 5. Workers were from 11 different trade types, most commonly technical engineers, roofers, laborers, sheet metal workers and pipefitters. Employers included 18 trade types, most commonly laborers, carpenters, millwrights, operators, equipment operators, iron workers, pipefitters, roofers and sheet metal workers. Most employers (73%) had more than 100 employees within their organization, 12% had 51 to 100 employees, 12% had 11 to 50 employees, and 4% had 10 or fewer employees. Participants were recruited through the Building and Construction Resources Center (BCRC) and the Construction Advancement Foundation, and surveys were distributed through the BCRC and newsletter, which included only union-affiliated organizations and workers. All participants who completed the survey were male. To be included in the study, participants were required to be age 18 or older, able to read and comprehend English, and have access to an electronic device to complete the survey. Data was collected through an online survey using Qualtrics Survey Suite. Participants received no compensation or incentives for participation.

Measures

The study included two questionnaires: one for employers and one for construction workers (Figures 1 and 2, pp. 24-25). Questionnaires were developed by the director of safety for one of the construction organizations that oversees 500 employers, the director of a local employee assistance program (EAP), the trainer contracted with the EAP facility, and two university professors: one specializing in psychology and the other in occupational safety.

Worker Questionnaire

Suicide perceptions and experiences with suicide concerns. Workers' beliefs about suicide as a problem within the construction industry were rated using a five-point Likert scale (5 = strongly agree). In addition,

workers answered three yes-or-no questions about whether they know of anyone in the construction industry who has died from, attempted or disclosed experiences with thoughts about suicide.

Mental health and suicide resources. Workers answered three yes-or-no questions about the availability and knowledge of mental health resources for employees. Workers were asked whether their organization has a suicide prevention program, if they have received information on suicide prevention, and whether they know where to seek help if they are experiencing thoughts of suicide or mental health issues. For those who received information about suicide prevention, respondents indicated where it was received. In addition, for those who indicated knowing where to seek assistance, respondents indicated where they would seek it.

Disclosure discomfort. Workers rated two statements about whether they would feel uncomfortable discussing suicidal ideation or mental health concerns with coworkers or supervisors using a five-point Likert scale (5 = strongly agree).

Sources and levels of stress. Workers rated the extent to which various individuals (e.g., coworkers, supervisors, managers, spouse or partner, other family members) cause them to feel stressed or upset using a five-point Likert scale (5 = strongly agree).

Employer Questionnaire

Perceived responsibility for suicide prevention and employee mental health. Employers rated their level of agreement with three statements using a five-point Likert scale (5 = strongly agree). Statements included whether it is the employer's responsibility to 1) address suicide and mental health issues of their employees, and 2) improve workers' mental health. The third statement related to whether their organization could be doing more to prevent suicide.

Suicide prevention and mental health assistance. Employers responded to two yes-or-no questions about whether their organization has a suicide prevention program, and whether the company allows time off for employees who have experience a mental health crisis. For those who indicated time off is allowed, employers were asked whether it is paid time off. In addition, employers used a five-point Likert scale to indicate the likelihood of certain actions a contractor might take in response to an employee experiencing mental health or suicide concerns. Lastly, employers indicated the type of assistance to which

FIGURE 1
STUDY QUESTIONNAIRE: WORKERS

Question 1: Which trade do you belong to? Select one.

- ☐ Boilermakers
- ☐ Bricklayers
- ☐ Carpenters/millwrights
- ☐ Electrician
- ☐ Ironworkers
- ☐ Insulators
- ☐ Laborer
- ☐ Operators/equipment operator
- ☐ Painters
- ☐ Pipefitters
- ☐ Plasters cement masons
- ☐ Plumbers
- ☐ Roofers
- ☐ Sheet metal workers
- ☐ Sprinkler fitters
- ☐ Surveyor technical engineers
- ☐ Teamster
- ☐ Other

Question 2: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"Suicide is a problem within the construction industry."	○	○	○	○	○

Question 3: Have you known anyone in the construction industry who died because of suicide?

- ☐ Yes
- ☐ No

Question 4: Do you know anyone in the construction industry who attempted suicide?

- ☐ Yes
- ☐ No

Question 5: Do you know anyone in the construction industry who told you that they had thought about suicide?

- ☐ Yes
- ☐ No

Question 6: How much do the following people cause you to be stressed or upset?

	A great deal	A lot	A moderate amount	A little	None at all
Coworkers	○	○	○	○	○
Supervisor	○	○	○	○	○
Manager	○	○	○	○	○
Spouse/partner	○	○	○	○	○
Other family members	○	○	○	○	○

Question 7: Does your organization have a suicide prevention program?

- ☐ Yes
- ☐ No
- ☐ Not sure

Question 8: Do you know where to go to get assistance if you or your coworker(s) was considering suicide?

- ☐ Yes
- ☐ No
- ☐ Not sure

If yes, where?

Question 9: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"I would be uncomfortable bringing up mental health concerns or suicidal thoughts with a **coworker**."	○	○	○	○	○

Question 10: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"I would be uncomfortable bringing up mental health or suicidal thoughts with a **supervisor**."	○	○	○	○	○

Question 11: Have you ever received information on suicide prevention from your workplace?

- ☐ Yes
- ☐ No

If yes, where:

- ☐ Apprenticeship
- ☐ Company training
- ☐ Employee assistance program (EAP)
- ☐ Trade school
- ☐ Union
- ☐ Other

they would refer an employee if they were experiencing issues related to mental health or suicide.

Perceived employee disclosure comfort. Employers used a five-point Likert scale to rate their level of agreement with two statements about whether their employees would be hesitant to seek help if they were experiencing 1) suicide or 2) mental health concerns. Lastly, employers were given an opportunity to provide open comments about suicide or mental health within the construction industry.

Data Analysis

Data analyses were performed using IBM's SPSS version 29. Descriptive statistics including frequencies and means were conducted for all survey questions. In addition, a series of *t*-tests were conducted to examine whether workers' perceptions about suicide being a problem within the construction industry differed based on familiarity with suicide (i.e., knowing someone who died from, attempted, or disclosed thoughts about suicide).

Results

Workers

Suicide Perceptions & Experiences With Suicide

Results indicate that workers were largely neutral ($M = 3.24$, $SD = 0.82$) about whether suicide is a problem in the construction industry, and only 30% of workers

FIGURE 2

STUDY QUESTIONNAIRE: EMPLOYERS

Question 1: What trade(s) do you employ? Check all that apply.

- ☐ Boilermakers
- ☐ Bricklayers
- ☐ Carpenters/millwrights
- ☐ Electrician
- ☐ Ironworkers
- ☐ Insulators
- ☐ Laborer
- ☐ Operators/equipment operator
- ☐ Painters
- ☐ Pipefitters
- ☐ Plasters cement masons
- ☐ Plumbers
- ☐ Roofers
- ☐ Sheet metal workers
- ☐ Sprinkler fitters
- ☐ Surveyor technical engineers
- ☐ Teamster
- ☐ Other

Question 2: Approximate number of employees at your organization:

- ☐ 1-10
- ☐ 11-50
- ☐ 51-100
- ☐ More than 100

Question 3: In general, how would contractors within the construction industry most likely handle someone with mental health concerns or suicidal thoughts?

	Extremely likely	Likely	Neutral	Unlikely	Extremely unlikely
Refer the person to human resources or other designated office(s)	○	○	○	○	○
Ignore the problem	○	○	○	○	○
Call their family	○	○	○	○	○
Lay-off that person	○	○	○	○	○

Question 4: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"It is employer's responsibility to address employees' mental health and suicide."	○	○	○	○	○

Question 5: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"My organization could be doing more to improve **mental health** of our workers."	○	○	○	○	○

Question 6: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"My organization could be doing more to **prevent suicide** of our workers."	○	○	○	○	○

Question 7: Does your organization have a suicide prevention program?

- ☐ Yes
- ☐ No
- ☐ Not sure

If yes, what kind (check all that apply)

- ☐ Gatekeeper training: Instruction in recognizing and responding to people in crisis
- ☐ Suicide postvention: Plan for reducing risk and promoting healing after a suicide death
- ☐ Antistigma training: Program to reduce stigma of mental illness or suicide and encourage help-seeking
- ☐ Other

If antistigma training, then what type:

- ☐ Education-based (e.g., facts or myths about mental health and encouragers to seek help)
- ☐ Contact-based (e.g., personal testimonial by person who has attempted suicide about fighting stigma and seeking help)
- ☐ Other – Specify

Question 8: How do your employees receive assistance in regard to mental health or suicide concerns? (Check all that apply)

- ☐ No assistance is available
- ☐ Designate facility
- ☐ Employee assistance program (EAP)
- ☐ Human resources
- ☐ Immediate supervisor
- ☐ Manager
- ☐ Safety professional
- ☐ Specific healthcare provider
- ☐ Union
- ☐ Other – Describe

Question 9: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"My employees would be hesitant to seek help when they have **mental health** concerns."	○	○	○	○	○

Question 10: How much do you agree with the following statement?

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
"My employees would be hesitant to seek help when they have **suicidal thoughts**."	○	○	○	○	○

Question 11: Does your company allow time off when workers experience mental health crisis (e.g., hospitalization, suicide attempt)?

- ☐ Yes
- ☐ No

If "Yes" above, is time off paid?

- ☐ Yes
- ☐ No
- ☐ Other

Question 12: Additional comments or anything you would like to share about suicide or mental health within the construction industry.

TABLE 1
ASSISTANCE REPORTED BY WORKERS

Sources of mental health or suicide assistance reported by workers (*N* = 18).

Mental health assistance type	N	Percentage
Construction-specific resource center	4	22%
Employee assistance program	3	17%
Supervisor	1	12%
National suicide prevention lifeline	7	39%
Mental health professional or facility	2	11%

Note. Others included corporate site, private foundation, community mental health center, union, suicide prevention websites.

TABLE 2
STRESS REPORTED BY WORKERS

Sources and levels of stress reported by workers (*N* = 33).

Sources of stress	Mean	*SD*
Coworkers	3.45	0.83
Supervisor	3.30	1.07
Manager	3.45	1.18
Spouse or partner	3.58	1.17
Other family members	3.60	0.97

Note. Scale of 1 to 5 (1 = none at all; 5 = a great deal).

FIGURE 3
WORKER DISCOMFORT

Worker discomfort in discussing mental health and suicide with supervisors.

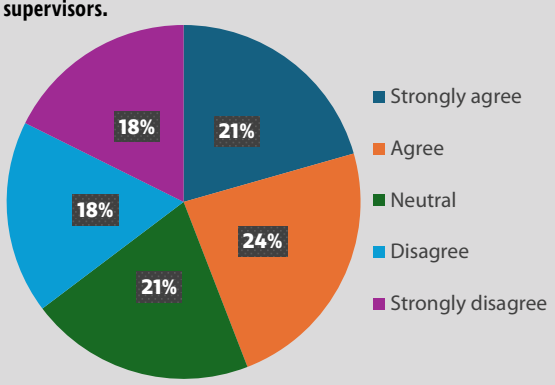
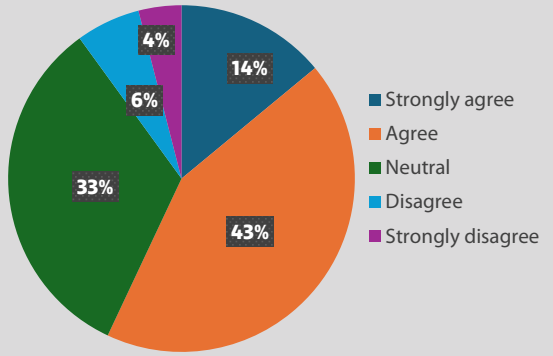


FIGURE 4
RESPONSIBILITY TO ADDRESS MENTAL HEALTH

Employer perspective: It is the employer's responsibility to address workers' mental health and suicide.



agreed it is a problem. In terms of workers' experiences with suicidal thoughts, attempts or death within the construction industry, 41% knew someone who died from suicide, 32% knew someone who attempted suicide, and 29% knew a coworker who told them they were experiencing suicidal thoughts. A series of *t*-tests were conducted to determine whether workers' beliefs about suicide as a problem within the construction industry differed based on knowing someone who has experienced suicide issues. Workers had statistically significantly greater agreement with suicide as a problem in the construction industry if they knew someone who died from suicide, t (32) = 3.93, $p < .001$, or attempted suicide, t (32) = 4.00, $p < .001$. However, workers' beliefs did not significantly differ if they knew someone who had suicidal thoughts, t (32) = -0.16, $p = .44$.

Mental Health & Suicide Resources

Only 44% of workers reported having a suicide prevention program within their organization, 27% did not have a program, and 29% were not sure whether a program existed. In addition, only 32% of workers had ever received suicide prevention information in the workplace: 36% from unions, 36% from EAPs and 27% from company trainings. Only 59% of workers knew where to seek assistance if they or a coworker were considering suicide, while 18% were not sure and 24% did not know. The most frequent types of assistance endorsed was the national suicide prevention lifeline (39%; see Table 1).

Disclosure Discomfort

Forty-one percent of workers agreed that they would feel uncomfortable discussing mental health concerns or suicidal thoughts with coworkers (M = 2.91, SD = 1.36). In terms of discussing suicide or mental health concerns with supervisors, 45% of workers agreed (M = 3.12, SD = 1.41) that they would be uncomfortable discussing it (Figure 3). A paired-samples *t*-test indicated no significant difference between workers' level of comfort discussing mental health concerns or suicidal thoughts with coworkers compared to discussing it with supervisors, t (33) = -1.485, $p = .15$.

Sources & Levels of Stress

Workers indicated that the greatest sources of stress were from their spouse or partner (M = 3.58, SD = 1.17) and other family members (M = 3.60, SD = 0.97); however, stress levels were relatively even across sources (see Table 2).

Employers

Perceived Responsibility for Suicide Prevention & Mental Health of Employees

More than half (57%) of employers agreed that it is their responsibility to address their employees' suicide and

FIGURE 5
EFFORT TO IMPROVE MENTAL HEALTH

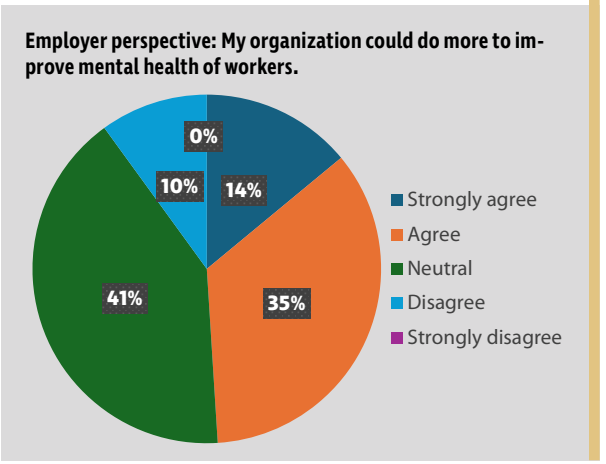
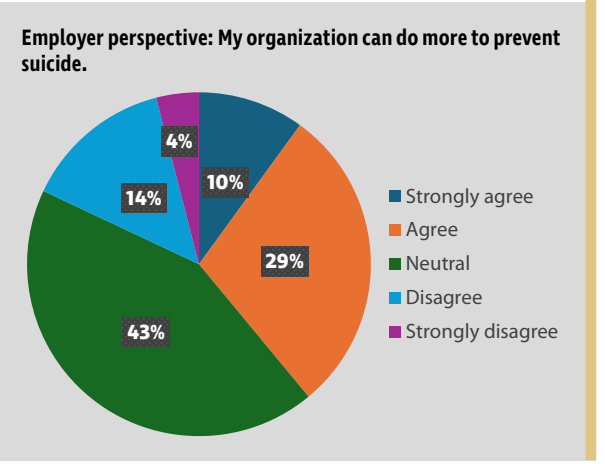


FIGURE 6
EFFORT TO PREVENT SUICIDE



mental health issues (M = 3.57, SD = 0.94; Figure 4). Nearly half (49%) of employers agreed that their organization could do more to improve their workers' mental health (M = 3.53, SD = 0.86; Figure 5). Only 39% of employers agreed that their organization could do more to prevent suicide (M = 3.27, SD = 0.96; Figure 6).

Suicide Prevention & Mental Health Assistance

Eighty-three percent of employers allowed time off for workers when they experienced a mental health crisis. However, only 12% of employers indicated employees receive paid time off. Qualitative responses indicated dependency on the type of employee (office, field or salaried) and for some, employees must use personal time off, sick time or vacation days. One respondent indicated that although it was not an explicit policy, they would expect general managers to provide paid time off.

Employers' perceptions of the typical supervisor response when an employee reports mental health or suicide concerns was most likely a referral to human resources or other designated office (77%; N = 37; see Table 3, p. 26). Slightly more than half of employers (54%) indicated that it would be unlikely for employers to just ignore the issue. A majority (64%) of employers indicated that they would be unlikely to lay off the employee.

All employers indicated that some type of assistance is available to employees experiencing suicide or mental health issues. The majority of employers (71%) indicated that they would refer employees to an EAP. Employers also reported referring employees to human resources (51%), the union (39%) or a safety professional (29%; see Table 4, p. 29). Only 17% of employers indicated that their organization had a suicide prevention program, while 33% were not sure and almost half (48%) indicated there was no suicide prevention program in place. Of the few organizations (N = 9) that had a suicide prevention program, the majority (78%) indicated having antistigma training, which were all education-based and not contact-based (see Table 5, p. 29). Sixty-five percent of employers agreed that their workers would be hesitant to seek help when they have mental health concerns. A similar percentage (67%) agreed that their workers would be hesitant to seek help when they have suicidal thoughts.

Additional Qualitative Comments

Lastly, employers were provided an opportunity to offer any additional thoughts or concerns related to suicide as a problem within the construction industry. Those who responded largely expressed a need and urgency to address suicide and mental health concerns within the construction industry. For example, one respondent expressed that it is "still a very taboo subject" and noted knowing of at least six deaths over the past 5 years that have occurred due to suicide from current or past employees, or their relatives. Another employer reported, "it is uncommon for frontline union leadership (superintendents, etc.) to address or discuss mental health issues with employees," and they are typically laid off when it is disclosed. Another employer shared that there is a "universal saying in the construction industry: leave your feelings at the door," which "pretty much sums up the construction industry's take on mental health."

Discussion

This study explored the views of employers and construction workers toward mental health and suicide and the perceived availability of resources to address these issues. The authors found that less than one-third of workers believed that suicide is a problem in the construction industry. Workers were significantly more likely to believe that suicide is a problem if they knew someone who had attempted or died from suicide. Knowing someone with suicidal ideation did not increase agreement that suicide is a problem in the construction industry. This finding suggests that construction workers minimize or fail to recognize suicide ideation as a serious problem, or do not recognize its impact in the workplace. The number of individuals that workers knew who had died by suicide was higher than either knowing someone who had attempted suicide or disclosed suicidal ideation. Given that suicidal ideation and attempts occur with higher frequency than suicide deaths, this suggests that individuals are

not discussing suicide until it is forced into the open. Some individuals mistakenly believe that talking about suicide or asking someone if they are contemplating suicide will initiate or strengthen a person's resolve to end their life. Education about myths and skill-building on how to talk about suicide are two components of prevention programs that address this issue (Knaak et al., 2014).

This study explored the views of employers and construction workers toward mental health and suicide and the perceived availability of resources to address these issues.

Regarding seeking help, most employers (65%) agreed that their workers would be hesitant to seek help when they have mental health concerns and 67% agreed that their workers would be hesitant to seek help when they have suicidal thoughts. In this study, only 59% of workers knew where to get assistance if they or a coworker were experiencing suicidal thoughts. About 41% of workers agreed that they would feel uncomfortable discussing mental health concerns or suicidal thoughts with coworkers, while 45% of workers agreed that they would feel uncomfortable discussing these experiences with a supervisor. These results are similar to a recent nationwide survey of more than 1,000 construction employers, which found that only 17% thought employees would discuss mental health struggles with a supervisor and 18% with a coworker (Center for Workplace Mental Health, 2021). While the present study did not include questions about reasons for discomfort with help-seeking, previous research has identified stigma, repercussions at work and lack of knowledge about mental health care as barriers to help-seeking (Center for Workplace Mental Health, 2021).

Given their close proximity to each other in the workplace, supervisors and coworkers have an important role to notice and refer fellow employees to mental health resources; however, these referrals and support rely on the distressed person being willing to talk and receive this help. Bystander interventions, in which laypeople are trained to recognize a person in a mental health crisis and connect them to appropriate resources, are becoming increasingly common (Hill et al., 2020) and could be tailored to the construction industry. It is important to note that the Americans With Disabilities Act (ADA, 42 U.S.C. § 12101, 1990), which protects the rights of people with psychiatric disabilities in the workplace, prohibits employers from directly asking about health and disability in some situations. However, supervisors can be trained to respond supportively in ways that do not violate a person's rights or privacy. The ADA also requires companies to provide reasonable accommodations to those with psychiatric disabilities who request them. These accommodations may include time off for medical treatments, flexible schedules or modifications to the work environment. These accommodations are typically arranged through the human resources department in such a way that frontline supervisors are not privy to the worker's health information but are responsible for implementing the accommodation that has been approved by the company. Thus, supervisors and companies may require additional training and support in addressing employee mental health concerns to avoid violating the ADA.

While most employers (83%) reported allowing time off for workers experiencing a mental health crisis, they reported that this time off would likely be unpaid. The most commonly endorsed action by employers in response to a worker mental health crisis was referral to human resources or a similar designated office. About 17% of employers believed it likely that employers would just ignore the problem, while one-third (34%) believed it likely that the employer would inform the worker's family and 18% thought it likely that the person would be laid off. These findings highlight systemic problems within the industry that disincentivizes preventive or proactive measures for addressing mental health. Most construction workers are paid hourly, do not have paid time off, and lack security in their positions due to the seasonal or cyclical nature of the business. In addition, there is minimal transparency about assignments and consistent work hours for construction workers. For example, an employer might tell a worker that there is no work for them, gradually cut hours, or avoid hiring them for a new project if they take days off for mental health struggles, which results in financial risk for disclosing and seeking mental health care (Ellyon et al., 2020). Employers can further support employee mental health by providing reasonable work hours, health insurance benefits and paid time off for mental health care.

TABLE 3

SUPERVISOR RESPONSE REPORTED BY EMPLOYERS

Employer reports of typical supervisor response for workers with mental health or suicide concerns.

Employer action	Extremely unlikely (%)	Unlikely (%)	Neutral (%)	Likely (%)	Extremely likely (%)
Refer to human resources or other designated office	3 (6%)	4 (8%)	7 (14%)	21 (44%)	16 (33%)
Ignore the problem	16 (32%)	11 (22%)	14 (28%)	8 (16%)	1 (< 1%)
Call person's family	4 (8%)	15 (30%)	14 (28%)	13 (26%)	4 (8%)
Lay off that person	19 (38%)	13 (26%)	9 (18%)	6 (12%)	3 (6%)

Prevention Efforts & Programming

About 57% of employers in this study agreed that it is their responsibility to address suicide and mental health needs of their workers. While 49% agreed that their organization could do more to improve mental health

TABLE 4

ASSISTANCE REPORTED BY EMPLOYERS

Employer reports of mental health or suicide assistance for employees.

Mental health assistance type	N	Percentage
No assistance	0	--
Designated facility	6	12%
Employee assistant program	36	71%
Human resources	26	51%
Immediate supervisor	10	20%
Manager	5	10%
Safety professional	15	29%
Specific healthcare provider	6	12%
Union	20	39%
Other	4	8%

Note. Other included BCRC, chaplain, health insurance company.

TABLE 5

PREVENTION PROGRAMS OFFERED

Type of suicide prevention programs offered by employers (*N* = 9).

Suicide prevention program	*N*	Percentage
Gatekeeper training	3	33%
Suicide postvention	3	33%
Antistigma training	7	78%
Education-based	6	--
Contact-based	0	--
Other	1	11%

Note. Other included suicide hotlines and employee assistance program.

of their workers, a lower percentage (39%) agreed that their organization could do more to prevent suicide. This lower percentage regarding suicide may reflect discredited ideas that suicide is not preventable and that a person who wants to end their life will inevitably do so (Sheehan et al., 2017). Education efforts should be made to correct this misconception and give employers the tools needed to address suicide.

Only 17% of employers in this survey had a suicide prevention program, 48% had no program, and one-third (33%) were not sure. In contrast, almost half (44%) of workers reported a suicide prevention program in their workplace, and the majority either did not have one or were not sure. Of the nine employers who reported having an antistigma training program, the majority (78%) indicated that they used education-based antistigma training. While education-based programming, which provides information about mental health conditions and challenges stereotypes, has been shown efficacious in changing attitudes around mental health, programming that includes meaningful contact between people in recovery from mental health challenges is often more effective (Corrigan et al., 2012; Knaak et al., 2014). Contact-based stigma interventions include people who have "lived experiences" facilitating the training, discussing their experiences with stigma and recovery. Programs with enthusiastic facilitators, those that include various types of social contact with individuals who have lived experience, and those that emphasize recovery, address myths and build skills are among the most effective ways to reduce mental health stigma (Knaak et al. 2014). Recent efforts to address suicide in construction have been sparse and largely ineffective (Greiner et al., 2022; Martin et al., 2016). Companies have relied largely on EAPs, although they doubt the helpfulness of these (Center for Workplace Mental Health, 2021).

Implications for Safety Professionals

While it is not within safety professionals' responsibility or expertise to directly provide mental health services to workers, they are well-positioned to champion suicide prevention programming and help employers with implementation of mental health safety training. As indicated by ASSP, OSH professionals "advise, develop strategies, and lead workplace safety and health management. They provide advice, support and analysis to help employers establish risk controls and management processes that promote sustainable business practice" (ASSP, n.d.). In their role, safety professionals are in frequent contact with both management and workers in the field, and can potentially embed mental health safety within existing safety efforts. Existing efforts used to convey mental health information in the construction field include toolbox talks, emails, fact sheets, wallet cards, and hard hat stickers that show the wearer is willing to talk about mental health (Center for Workplace Mental Health, 2021). These strategies can be combined into a coordinated campaign, or additional grassroots efforts can be initiated to highlight mental health (e.g., social media campaigns, videos, prevention events). These efforts can increase mental health literacy, reduce stigma toward mental health and create awareness of resources that are available for employees.

Safety professionals also could have an important role in provision of workplace training, including antistigma programming, suicide prevention programming, and mental health promotion campaigns. In accordance with the evidence, antistigma programming should include construction workers sharing their mental health or suicide struggles and recovery. However, workplace implementation of antistigma programming can be challenging and can require sustained efforts (Szeto et al., 2019). One option, Mental Health First Aid (**www.mentalhealthfirstaid.org**) is a widely implemented and evidence-based program that teaches basics of mental health and substance use as well as how to respond to a person in crisis. The organization also offers workplace-based courses that can be tailored to specific industries. Working Minds, an organization devoted to addressing suicide prevention in construction, has trainings and resources such as a peer ally program that matches fellow construction workers to colleagues who are struggling with mental health or substance use. OSHA (n.d.) also provides resources specific to construction and promotes Suicide Prevention Week. A comprehensive review of suicide prevention trainings and materials (most not specific to the construction industry) can be found at the Suicide Prevention Resource Center (**https://sprc.org**) and National Council for Mental Wellbeing (**www.mentalhealthfirstaid.org**).

However, one-time training will not likely be impactful. An organized and sustained infusion of evidence-based antistigma and suicide prevention efforts across trades, time and organizational level allows individuals to receive continual messages about prevention across their career from multiple sources. Ideally, these efforts are integrated with other injury prevention initiatives, including substance-use treatment and prevention (Dong et al., 2022). Training can be held as part of the apprenticeship, included in required annual safety training or targeted to management (e.g., superintendents, foreman). Previous research shows that mental health programming should be tailored to specific workplaces and should address cultural factors (Greiner et al., 2022). This is a particular challenge for the construction industry, in which each trade has a distinct culture, and worker access to resources varies based on type of employment and union membership. Including the local unions in development and implementation of training, however, can create buy-in from workers. The Construction Industry Alliance for Suicide Prevention (2023) also provides resources to develop more comprehensive suicide prevention programming in construction.

Safety professionals might incorporate training for both management and frontline workers on mental health literacy and how to best support colleagues who are in a mental health crisis.

Safety educators and relevant professionals in the construction industry can be involved in training and informing future professionals and advocating for systemic change within the construction industry. University courses such as construction safety courses can incorporate mental health as a safety concern. Mental health and suicide prevention topics can be addressed during apprenticeship programs or at union halls. While the construction industry has policies, practices and culture that may be resistant to change, such as lack of paid time off, future efforts can advocate for changes, supported by research that highlights the implications of practices that are harmful to mental health.

Strengths & Limitations

This study included both worker and employer perspectives from union trades in northwest Indiana, which encompasses both urban and rural areas. To decrease survey burden and enhance participant confidentiality, the survey did not ask participants to report on race, ethnicity, age or other demographic characteristics. Thus, the authors cannot speculate on representativeness of the sample, which limits generalizability. Also, this was a relatively small convenience sample in a limited geographic region within the Midwest. Participants self-selected into the study; thus, those with stronger opinions about mental health and suicide may have been more likely to participate. For example, individuals who had lost someone to suicide might be overrepresented in this data. This survey was brief and did not examine other factors that are potentially important to understanding suicide (e.g., substance use, chronic pain, access to lethal means) or allow for a comparison between union and nonunion workers. Future research might address this through more systematic sampling methods.

Conclusions

Study results indicate that although employers largely agree that suicide is a problem within the construction industry, less than one-third of organizations had suicide prevention programs in place. In addition, less than one-third of workers believed suicide is a problem within the construction industry. Furthermore, 41% of workers are reluctant to bring up their mental health and suicide related concerns to their employers. Safety professionals might incorporate training for both management and frontline workers on mental health literacy and how to best support colleagues who are in a mental health crisis. Safety professionals can also promote antistigma initiatives and incorporate mental health information into regular safety training. **PSJ**

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Need Help or Know Someone Who Does?

Contact the Suicide and Crisis Lifeline. Call 9-8-8. Use the online Lifeline Chat at https://988lifeline.org. Both are free and confidential.

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