National Safety Council

Diversity, Equity, Inclusion and Safety: Intersections, Integration and Implementation

Foundation

Foreword

The connection between Diversity, Equity and Inclusion (DEI) and business performance has been studied for many years, uncovering a wide range of benefits that emerge when employers take action to foster inclusion, address local and systemic inequities, and diversify the workforce from senior leadership to the shop floor. While DEI is composed of three (and sometimes four when including Accessibility) separate interconnected concepts, it can also be thought of as an ethos with a combined definition. This use of "DEI" implies combined strategies, initiatives, programs, policies and/or practices designed to include people of various backgrounds (particularly those who have been historically and systemically excluded or oppressed) in workplaces and ensure they have the support needed to equitably perform to the fullest of their abilities.

The existing body of research has explored the value of DEI, including its positive relationships with morale, talent acquisition and retention, productivity, innovation and other topics. Yet one area that could be hypothesized to be a fundamental outcome of a strong DEI strategy – workplace safety and health performance (both physical and psychological) – has seen little formal analysis in academic, white or grey literature.

Before going further, please note that while this foreword and the following Insight Report discuss DEI in a workplace safety context regarding individual characteristics, treating individual inequities is similar to treating symptoms of an underlying disease – it does not solve the overarching problem. Organizations must consider these challenges at the systemic and population levels. Although we reference individual safety and health outcomes throughout this piece, the solution does not lie solely in fixing a single instance of inequity. Instead, organizations must address the conditions and approaches allowing such inequities to lead to adverse outcomes.

With this in mind, the state of safety and health concerning DEI is particularly troubling given both workplace injury and fatality data as well as anecdotal evidence. In the United States, the Bureau of Labor Statistics (BLS) data clearly indicate that workers of color suffer disproportionate rates of injury, illness and death on the job. In addition, National Safety Council (NSC) survey data show strong connections between "feeling safe" (being able to bring one's whole self to work) and "being safe" (not suffering from adverse safety and health outcomes). Safety and health outcomes absolutely appear to be inequitable depending on who you are, and although this plays out at an individual level, it is not an isolated challenge.

Anecdotally, this inequity can most readily be demonstrated at the lowest level of the hierarchy of controls. When personal protective equipment (PPE) does not fit one's body because of its design, "who you are" has created significant, inequitable risk exposure – whether intentionally or unintentionally – for an entire population of workers.

Although ill-fitting PPE can in and of itself be life-threatening, a DEI-informed approach (one in which safety and health policies, programs and initiatives take into account and attempt to integrate DEI principles) is not only needed when considering hi-visibility vests and safety glasses. It must ripple through the layers of systemic Environment, Health and Safety (EHS) management. One need only think about the implications of training worker populations in a second or third language, installing new equipment that has complex written instructions, soliciting worker feedback from and/or including only the most visible and outspoken individuals in safety activities, and more. Beyond physical safety, a whole host of wellbeing and mental health risks await when already-underserved populations are further underserved in a work setting. These risks threaten entire groups (not just individual workers) in ways that may not be immediately obvious or observable.

The recent politicization of DEI has created a polarized perspective on these activities, and although many safety and health professionals prioritize keeping everyone safe, a lack of nuanced understanding of DEI (particularly the concept of equity) has created a set of false assumptions within many organizations. Across the course of many conversations that informed this report, the one-time mantras of "colorblindness" or "equal opportunity" that some EHS professionals – or entire organizations – fall back upon fail to take into account systemic factors, internal biases and historic inequities such as socioeconomic conditions leading to lower access to nutritious food, medical care, housing, safe communities, financial opportunities and more. It is simply not enough for organizations or safety and health professionals to treat everyone "equally."

Put another way, equality means each individual or group is given the same resources or opportunities (for instance, the same PPE is available for all workers despite different body shapes and types). Equity, on the other hand, recognizes that people or groups have different needs to achieve the same outcome. For example, not just access to PPE but access to PPE that fits. Workplaces addressing equity seek to allocate the right resources and opportunities needed to overcome the circumstances creating an unequal outcome. This same principle extends across all aspects of safety and health management, from communication and training to hazard identification and risk management.

The lack of knowledge on this critical issue is startling and paints a picture of organizations and safety and health professionals sometimes at odds with their core values and the systemic thinking they apply to many other areas of risk management and hazard control. While 94% of organizations surveyed for this Insight Report responded they believed DEI was important, a quarter of them reported no understanding of the linkages between DEI and safety. Even amongst the population of organizations that have made these connections, the report suggests the notion of implementing safety programs informed by DEI principles is in its infancy and is largely not strategic, validated or influenced by experts in this space.

NSC, in partnership with and funded by Lloyds Register Foundation, seeks to address this critical challenge by embarking on a first-of-its-kind examination of the state of DEI and safety. The resulting research provides an overview of the landscape and conversation from an organizational policy point of view and seeks to understand how (if at all) organizations are connecting the dots between DEI-informed risk assessment and appropriate systemic action to address it. The report that follows was based upon a wide-ranging review of the literature on this topic (finding troublingly little formal or informal discussion of these intersecting issues), interviews and surveys with operations, human resources (HR), and safety and health professionals and other stakeholders, as well a stakeholder workshop and year-long engagement with a group of safety and cross-disciplinary practitioners with experience across relevant domains.

In the following pages, you will find not only information on the DEI-informed safety landscape, but also learnings from the literature and practitioners in the field, a model for aligning strategic DEI and safety approaches, and recommendations for their implementation.

We hope you will engage with this work in the way it was intended – to utilize existing data and knowledge to draw deeper and more direct connections between DEI and safety and health. In that sense, this work is no different from the safety and health research that has preceded it. Consider the evolution over the past several decades from Behavior-Based Safety (BBS) programs to more nuanced and fruitful discussions of human behavior and error that gave rise to current thinking around Serious Injury, Illness and Fatality (SIIF) Prevention and Human and Organizational Performance (HOP). Changes to systems, programs and thought patterns have always been necessary for improvement. The same is true for safety and DEI.

To continue to advance in safety and health and truly fulfill the NSC mission to keep people safe – from the workplace to anyplace – we believe we must better, and more holistically, understand the systemic conditions and challenges affecting the people who perform the work every day. People in all of their incredible and infinite variation. People for whom one size does not fit all. People who will be put at risk if safety and health professionals and business leaders fail to understand what makes them "them," not just as individuals, but as populations shaped by – and too often failed by – the systems in which they work and live.

We invite you to join us as we work toward a greater understanding of and emerging applications of this work.

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Executive Summary

Background

The connection between Diversity, Equity and Inclusion (DEI) and business performance has been studied for many years, uncovering a wide range of benefits that emerge when employers take action to foster inclusion, address local and systemic inequities, and diversify the workforce from senior leadership to the shop floor.

While DEI is composed of three (and sometimes four when including Accessibility) separate interconnected concepts, it can also be thought of as an ethos with a combined definition. This use of "DEI" implies combined strategies, initiatives, programs, policies and/or practices designed to include people of various backgrounds (particularly those who have been historically and systemically excluded or oppressed) in workplaces and ensure they have the support needed to equitably perform to the fullest of their abilities.

The existing body of research has explored the value of DEI, including its positive relationships with morale, talent acquisition and retention, productivity, innovation and other topics. Yet one area that could be hypothesized to be a fundamental outcome of a strong DEI strategy – workplace safety and health performance (both physical and psychological) – has seen little formal analysis in academic, white or grey literature.

With this in mind, NSC developed a three-phase methodological approach designed to answer the following questions:

- What is the landscape of policies and practices in DEI?
- How do these topics align with safety? What are the inter-relationships, synergies and barriers among them?
- What aspects of DEI and safety are well-established? Where are there gaps?
- How could (or does) a focus on DEI improve safety outcomes?
- What strategies and tactics hold the most promise for operationalizing a DEI-informed safety approach?

Key Findings

A year-long research effort including a literature review, practitioner surveys and interviews as well as ongoing stakeholder engagement revealed numerous linkages, challenges, takeaways, themes and insights on the intersections, integration and implementation of DEI and safety:

Literature Review Linkages, Challenges and Key Takeaways

Linkage One: Systemic inequities affecting worker health and wellbeing outside the workplace also impact workplace safety and health equity

Linkage Two: DEI-informed requirements have begun to emerge for the design and usage of personal protective equipment

Linkage Three: The connection between DEI and psychological safety has been established, although less so between general DEI and physical safety

Challenge One: Lack of integration between the safety and health and human resource functions is a key barrier to identifying and addressing the impact and relevance of DEI to safety

Challenge Two: A lack of common reporting measures is a key barrier to identifying the relationship between DEI and safety

Key Takeaways: Approaches for developing, communicating and enhancing DEI and equitable safety policies across diverse workforces

Practitioner Themes and Insights

Theme One: The Interconnections between DEI and safety are clear, but there is space for further integration

- ***Insight One:*** Organizations recognize the value of the link between DEI and safety, but struggle with its effective implementation
- ***Insight Two:*** Approaches to DEI and safety differ across jurisdictions, industries and organizational design
- ***Insight Three:*** Organizations present diverse DEI and safety comprehension levels

Theme Two: Organizations' ability to operationalize the integration of DEI and safety is limited by a lack of data and resources

- ***Insight Four:*** Barriers at the organizational level impede progress on aligning DEI with workplace safety practices

Theme Three: Best practices are emerging to improve integration and implementation of DEI and safety

- ***Insight Five:*** Integration of DEI and safety starts at the executive level
- ***Insight Six:*** Successful DEI-aligned safety policies depend on engagement with and inclusion of key stakeholders

A Model for DEI-Informed Safety

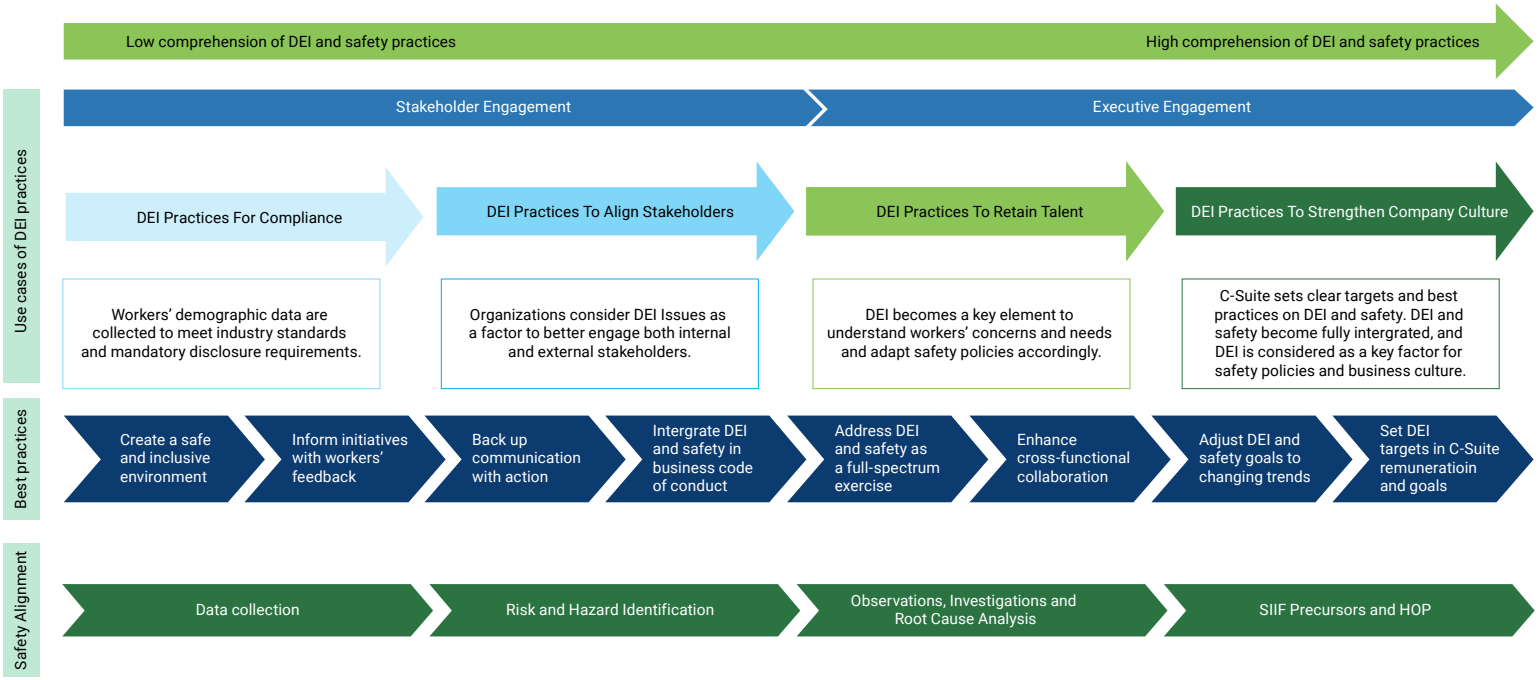
As a synthesis of the literature review, surveys, interviews and stakeholder engagement across the research contributing to this Insight Report, a model for DEI-Informed safety has been developed. The intent of this model is not to be all-encompassing but to suggest a framework and language with which we can describe the various levels of observed maturity, motivations, engagement, understanding of and best practices related to DEI and safety.

This model integrates and illustrates numerous components

- Organizational comprehension of DEI and safety (low to high)
- Organizational engagement (including general stakeholders and executives)
- Categorizations defining the extent of DEI integration in safety (compliance to culture)
- Associated best practices uncovered through literature and practitioner insights

These components and the model as a whole represent a starting point framework that can be used to gauge where an organization may currently be on its "journey" of DEI-informed safety maturity but is not intended to be quantitative or prescriptive in nature.

A Model for DEI-Informed Safety



Recommendations

Recommendations for action can be found throughout this Insight Report and are primarily summarized in the "Learnings From Practitioners" section, particularly within Theme Three, as well as Figures 10 and 11. For ease of reference, eight key recommendations are summarized and collected below:

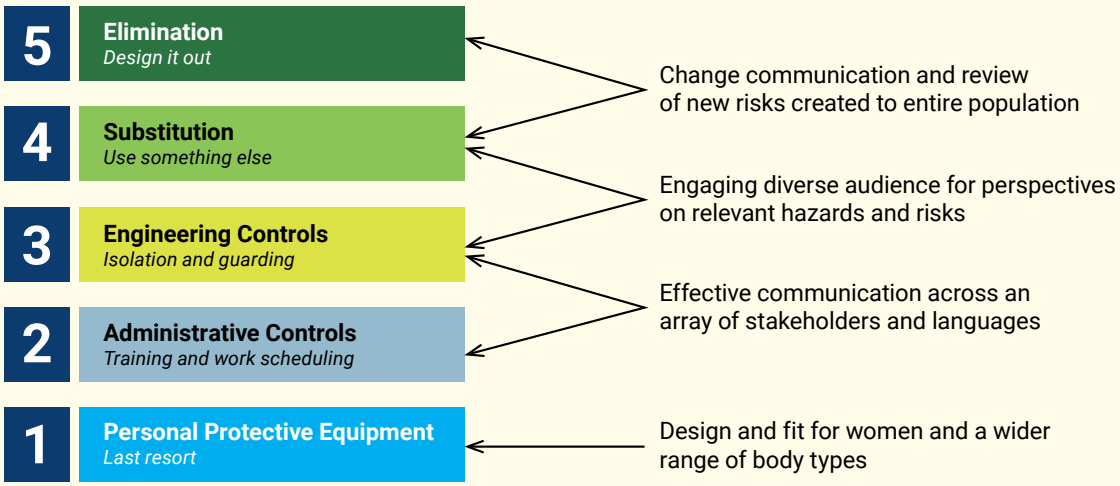
1. **Create a safe and inclusive environment:** A psychologically safe and trusting workforce is a starting point for honest and open engagement.
2. **Inform initiatives with workers' feedback:** Numerous mechanisms and channels must be leveraged to include diverse worker feedback in DEI and safety policies and initiatives.
3. **Back up communication with action:** Transparent and open communication is critical but fails without visible action and a positive feedback loop.
4. **Integrate DEI and safety in the business code of conduct:** DEI-informed safety must serve as a tenet of daily business decision-making to foster accountability.
5. **Address DEI and safety as a full-spectrum exercise:** Everyone, from leadership to middle management to workers, must have a meaningful role and must "walk the talk."
6. **Enhance cross-functional collaboration:** Collaboration between key stakeholders such as HR, ESG and safety is critical for integration and data purposes.
7. **Adapt DEI and safety goals to changing trends:** Regulatory, societal and workforce trends require regular policy, program and initiative review to stay relevant and impactful.
8. **Set DEI targets in C-Suite remuneration and goals:** ESG-related goals are becoming more common in CEO compensation and should be built upon with thoughtful DEI-related goals.

In addition, NSC recommends applying a DEI- or equity-informed "lens" to safety policies, programs and initiatives. This means that rather than starting new or tangential programs to integrate and implement DEI principles in safety, organizations should embed these principles into existing activities, particularly in key safety and health activities such as:

1. **Data collection:** Collect demographic data related to safety and health successes, near-misses, observations and incidents to assess trends related to worker characteristics that may be "hidden" day-to-day. Ensure this information is not used to individually identify or take punitive action against an individual or group.
2. **Risk assessment and hazard identification:** Ensure diverse, inclusive involvement in risk assessment and hazard identification activities, with direct workforce participation and a trusting environment in which there is no fear of raising concerns.
3. **Proactive observations, incident investigations and root cause analysis:** Take into account potential cultural, diversity and equity drivers of work activity and/or "behavior" that may emerge through supervisor or peer observation programs, in incident investigation processes and during root cause analysis activities. Ensure diverse, inclusive workforce participation in these activities to reduce biased outcomes.
4. **SIIF precursors and Human and Organizational Performance:** Make the connection between human error, decision-making and DEI and take into account cultural, diversity and equity drivers of work activity and/or "behavior" that may vary from individual to individual or group to group within the workforce.

In a more direct practice direction, we believe the research demonstrates the potential to and criticality of embedding DEI into "everyday safety" across the spectrum of safety and health management system activities, wherever they may fall on the hierarchy of controls. From PPE to engineering risk mitigation, opportunities exist to apply a DEI-informed approach.

DEI and the Hierarchy of Controls



Finally, this research suggests it is important to engage with the constituent components of DEI, not simply the entire concept as a monolithic idea. Each element is unique, requires specific action to enable and must continue to evolve over time. In both research and practitioner engagement, too often diversity, equity and inclusion are bundled together in ways that can restrict organizational ability to address any one particular challenge, instead resulting in proxy measurements or approaches.

Background and Rationale

Globally, organizations and governments have spent the past several decades expanding their comprehension, design and implementation of policies, programs and actions around DEI, driven by regulations, societal pressures, and worker and investor demands. Throughout its evolution as a formalized concept, DEI initiatives have taken on multiple focus areas, shaped by academic studies as well as industry practices and policies.

As it has evolved, numerous definitions and frameworks have been established to classify and understand the three constituent components of DEI. For this report, we have utilized definitions from the International Standards Organization (ISO) for their succinctness and simplicity, although it should be noted these concepts are complex, nuanced and often challenging to fully unpack in a dictionary sense. Nonetheless, as a useful shorthand, ISO defines them as follows:

- **Diversity:** The characteristics of differences and similarities between people
- **Equity:** The principle that people should be subject to policies, processes and practices that are fair, as far as possible, and free from bias
- **Inclusion:** The process of including all stakeholders in organizational contexts

Recently, the Environment, Health and Safety (EHS) discipline (variously referred to throughout this report as safety, safety and health, and EHS) has likewise entered a new era that looks beyond physical safety into issues such as mental health, wellbeing and psychosocial risk, dovetailing with emerging theory and practice in the DEI space. A recently published report from Lloyds Register Foundation (LRF) and the National Safety Council, The New Value of Safety in a Changing World (NSC, 2023), illustrates the important emerging dimensions of safety and health, including DEI. The report concludes that a more comprehensive and expansive understanding of the dimensions of safety and health, including DEI, is necessary not only to keep workers safe but also to demonstrate the value of the safety function within an organization.

However, to effectively move forward and positively impact safety and health outcomes, linkages between DEI and safety (and associated themes, including physical safety and health, psychological safety, mental health and wellbeing) must be better understood and activated, as opposed to merely being discussed and diagramed. This Insight Report, funded by and in partnership with LRF and developed by NSC, provides an in-depth overview of the intersections of DEI and safety, discusses current organizational approaches, challenges and integration of DEI-informed safety policies, programs and initiatives, and recommends models and best practices for implementation in the field.

To drive dialogue and inspire meaningful action towards safer and more equitable workplaces, LRF and NSC reviewed a wide range of academic, white and grey literature, surveyed and interviewed hundreds of safety, HR and business leaders, and convened a practitioner workshop and ongoing working group to gather data, stories, examples, insights and evidence. The report that follows synthesizes the most prominent emerging themes that emerged throughout this year-long effort.

Methodologies and Limitations

NSC began the research work behind this Insight Report well before it was commissioned to produce a specific output, with ongoing exploration and discussion of the connections between DEI and safety over the past decade. This work took on an increased focus in 2020 following the COVID-19 pandemic and prominent social justice conversations in the United States, such as the killing of George Floyd, with concurrent interest from the safety and health community in exploring the evolution of psychosocial issues in the workplace.

While the value of occupational DEI policies and programs is commonly linked to increased resilience and improved idea generation, NSC identified a lack of research on and limited understanding of the direct impact of DEI on the safety and health function and safety outcomes. Research on the business case for DEI often highlights the need to build trusting relationships where workers feel valued, respected and safe. With this in mind, NSC developed a three-phase methodological approach designed to answer the following questions:

- What is the landscape of policies and practices in DEI?
- How do these topics align with safety? What are the inter-relationships, synergies and barriers among them?
- What aspects of DEI and safety are well-established? Where are there gaps?
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- What strategies and tactics hold the most promise for operationalizing a DEI-informed safety approach?

In order to answer these questions, NSC utilized the following methodological approach:

Literature Review

Using a variety of search strategies across scientific, academic and business databases, including Academic Search Complete and Business Source Ultimate, NSC researchers identified approximately 2,600 potential articles published between January 2017 and January 2022 related to DEI and safety. After establishing inclusion and exclusion criteria, NSC narrowed this article pool to roughly 140 relevant pieces, with most exclusions being performed based on articles covering only one dimension or aspect of the two major disciplines rather than examining them in relationship to one another.

This set of 140 articles was further narrowed down to approximately 40 key publications that most directly and holistically analyzed the interrelationships between DEI and safety. The results of the literature review are covered in the “Learnings from the Literature” section.

A list of works referenced in the literature review and the Insight Report as a whole are listed in Appendix I.

Surveys and Interviews

Following the literature review, NSC and research partner Verdantix performed a tightly-scoped survey of safety and health, HR and business leaders around the globe, supplemented by in-depth interviews of ten key stakeholders. Intended to build on the literature review, the survey engaged 61 decision-makers representing the construction, education and health services, government, manufacturing, mining, NGO/frameworks and standards bodies, trade/transportation/utilities, and oil and gas/chemical sectors. Respondents were drawn from Brazil, Germany, India, Mexico, the Netherlands, Singapore, South Africa, Switzerland, the United Arab Emirates, the United Kingdom and the United States to ensure a global representation of insights. Participants came from enterprises with revenues in groups ranging from $250 million and under, $250 million to $1 billion and $1 billion and above. Respondents answered questions relating to governance, comprehension of DEI and safety, policies, challenges, best practices and implementation strategies around DEI and safety. This segment of the survey was randomized, to avoid bias that could present via the size and relative comprehension of DEI and the safety maturity and performance of a respondent's particular organization.

To augment these quantitative data, an additional 10 qualitative interviews were conducted to obtain deeper insights from EHS and DEI leaders globally, as well as to help contextualize the quantitative interview results. Study demographics were selected after careful consideration to create a less biased base of knowledge. Qualitative interviews were sought out with individuals across the demographic spectrum, to provide insights via each potential segmentation and awareness around the collective concept of DEI.

A full list of survey and interview questions is provided in Appendix II.

Workshop and Stakeholder Engagement

As an additional approach to soliciting contextual feedback, anecdotes, case studies and reactions to the literature review, survey and interview data, NSC held a stakeholder workshop in June 2023 consisting of approximately 35 senior decision-makers, representing numerous sectors, regions and demographic characteristics. This workshop allowed for direct engagement with the practitioners and leaders responsible for setting and implementing DEI and safety policies, programs and initiatives within organizations, and generated significant feedback around the potential size and reporting biases, noted in the limitations below.

This workshop supplemented a year-long effort to similarly engage this stakeholder set through an "Advisory Group" that NSC convened beginning in July 2022. Approximately 20 global safety, HR, ESG, operations and NGO leaders convened monthly to inform the research effort by offering their feedback, examples, stories, successes and challenges, and otherwise enriching the study through lived experience. Members of the Advisory Council are listed in Appendix III.

Limitations

Despite a relatively robust multi-modal research methodology, all studies have biases and limitations, and we would be remiss not to note three particular limitations of this report:

- **Literature review scope:** The scope of the literature review was limited to January 2017-January 2022 to narrow the volume of articles to a reasonable number given available research resources and the scope of the study. From a bias and limitation perspective, this has the potential to skew the results toward more recent attitudes and cultural mindsets, as well as to minimize influential prior literature. Additionally, with inclusion criteria that focused on concurrent examination of both DEI and safety, numerous articles were excluded that potentially offered valuable information on one or the other discipline as a whole. That said, NSC believes critical studies and information were captured via reference and summarization in the more modern publications utilized, and that given the deliberate focus on DEI in relation to safety, little direct benefit was lost in not examining two separate and vast bodies of literature.
- **Stakeholder representation and organizational size:** The scope of surveys, interviews and stakeholder engagement was limited to conform to realistic timelines, outputs and the ability to access needed perspectives. While the study was inclusive of individuals and organizations across demographics, industry sectors, sizes and regions, not every potential relevant point of view was included; sample sizes of 61 (survey) and 10 (interview) are relatively small and create inherent potential for bias.

  Additionally, respondents across the board skewed toward larger and more resource-rich organizations, resulting in a bias toward generally more mature and higher-performing companies when it comes to both DEI-related practices and safety and health outcomes. Additional perspectives from small and medium-sized businesses were gathered through targeted engagement in the NSC "Advisory Group" but should not be construed as a wide-ranging or scientific consideration of this stakeholder group's point of view.
- **Self-reporting:** All data collected, whether from surveys, interviews, the workshop or Advisory Group interactions, was subject to self-reporting bias. NSC, Verdantix and LRF did not perform independent verification or validation of statements made or data provided by organizations as part of this study. Generally speaking, individuals tend to answer questions and provide feedback in part based on societal or group expectations. Given the sensitivity of the topic area under study, the potential for bias here is somewhat significant even though respondent names and organizations have been kept anonymous and confidential.

Learnings from the Literature

The literature review performed for this Insight Report revealed a somewhat disjointed landscape of policies and practices around DEI and safety. This appears to stem largely from varying levels of comprehension of DEI factors and their translation into policies and actions within organizations. Further factors influencing this disconnected landscape include geographic region, employee demographics, industry variances and the prevalence of existing policies and education/training around DEI concepts.

Highlighted below are key themes that emerged throughout the literature review, including linkages, challenges and key takeaways, summarized in Figure 1 on page 18.

Linkage One: Systemic inequities that affect worker health and wellbeing outside the workplace also impact workplace safety and health equity

Organizations have a duty to create safety and health policies that reflect workers' safety priorities and concerns accurately. For example, current safety policies may misrepresent temporary workers, especially when safety policies are designed based on full-time employees. Albersten et.al., (2021) highlight the case of Nordic corporations, where employees must participate in the development and maintenance of safety and health standards in the workplace. Employees carry the legal responsibility to comply with safety standards and a safety and health representative is elected among them. However, in certain sectors such as retail, younger employees are usually excluded from this selection process as they work off-hours, covering work shifts that full-time workers avoid.

Precarious employment has a strong impact on workers' health and their families. Jaramillo et.al., (2022) found a negative correlation between job insecurity and mental health, finding a higher risk of depression, depressive symptoms, psychological distress, stress and suicidal thoughts. The research found that youth, women, people with low levels of education and immigrants are the groups most affected by this correlation.

Sterud et.al., (2018) found that safety and health outcomes in the workplace differ between immigrants and the native population. Safety is also impacted by other immigration-related factors such as the origin, reason, age and residence time in the new country. According to the authors, immigrants reported higher levels of exposure to physical risk factors and a higher risk of mental disorders.

Research also suggests that less-reached workers (such as workers belonging to less-represented ethnic or cultural backgrounds or immigrants or those who speak another language) are less likely to disclose workplace injuries or illnesses. Siordia et.al, (2020) highlight that job insecurity is prevalent among immigrants in the U.S., which may force them to undertake higher-risk jobs and hesitate to disclose occupational injuries and unsafe standards.

This subcategory of workers is also often subjected to serious societal stigmas, which makes it more difficult for organizations to implement diversity and inclusion policies that can ensure safety for all employees. Indeed, less-represented workers typically have inequitable access to quality jobs and are (incorrectly) thought of as being less promotable (Follmer et.al., 2018).

Further research found that systemic discrimination, especially in high-risk industries, can hinder individuals' perception of safety and vulnerability. For that, identifying which vulnerable groups have higher participation in high-risk occupations can inform the design of safety and health equity initiatives (Siordia et.al., 2020).

Connections: DEI and Return to Work

During the literature review phase of the research for this Insight Report, NSC analyzed a report published in July 2023 by the Institute for Work & Health (IWH) entitled, *Racial and ethnic inequalities in the return-to-work process*, stemming from a systemic literature review. While specific examination of organizational processes at a granular level was out of the scope of this Insight Report, the IWH piece offered some key insights concerning return-to-work outcomes that are highly relevant in the context of DEI. Per the report's key findings, these included:

- Strong evidence indicates that, following a non-work-related injury or illness, non-White workers are less likely to return to work than White workers
- Moderate evidence indicates that Black workers face particularly pronounced obstacles to returning to work
- Limited information is available on the experiences of those with work-related injuries
- The racial inequities found in the review indicate a need for strategies that address racism in the return-to-work process
- Limited evidence exists on other aspects of the return-to-work process such as access to workers' compensation and income support, accommodation planning and stay-at-work – this suggests the need for enhanced data collection on race and ethnicity in the disability management field

Linkage Two: DEI-informed requirements have begun to emerge for the design and usage of personal protective equipment

There is a growing body of literature discussing the importance of integrating DEI factors into the design of workplace equipment and tools. Flynn et.al., (2017) identify challenges with how information about alternative-sized personal protective equipment (PPE) is disseminated and communicated to purchasers by manufacturers. The authors highlight breakdowns in the typical supply and demand marketing structure which means employers may be unaware that such products are available, and manufacturers may, therefore, be unaware of the demand for alternative-sized products.

Additionally, the authors state that PPE is often designed based on measures taken from military male recruits in the U.S. during the 1950s-1970s. They argue this data doesn't fit the range of body shapes and sizes for the modern civilian workforce. Thus, PPE might not fit women, people of color and individuals with body sizes or shapes that do not conform to those of military recruits – often young, fit and mostly White.

Following this line of thought, Skillings (2022) highlights the lack of inclusive design of PPE in the construction sector, arguing that women in construction remain severely underserved in terms of accessibility to safety gear. The author argues that PPE is not designed for women's body types, which exposes women to higher safety risks in the workplace. For example, poorly fitting footwear can range from causing hot spots, blisters and abrasions, to unnecessary bulk which could cause serious workplace accidents (Skillings, 2022).

There is, however, evidence that organizations are taking matters into their own hands through initiatives seeking to redress some of these imbalances. The construction company Skanska partnered with a New York-based PPE provider to design alternative-sized PPE based on recent women's anthropometric data (Milligan, 2019). In addition to safety considerations, the author highlighted the importance of inclusive design in reaffirming the belief that women belong in the construction industry.

The importance of inclusive design was also highlighted when discussing ergonomics. Laal et.al., (2022) argues that work tools and workstations need to be designed in a way that is tailored to a diverse workforce. Though anthropometric databases have been established and large volumes of data have been collected and published for populations of different ages, genders and geographical regions of the world, the authors contend that these data are often not applied to the ergonomic design of tools and workstations which can pose significant physical health risks to workers.

Indeed, their research on the effect of demographic factors on musculoskeletal disorders in nurses' aides states that most workstations and tools are designed for males, while nurses' aides are primarily female. Hence, the lack of diversity factors in the design of work tools and workstations exposes them to a high risk of suffering disorders in hands, wrists, elbows, legs and shoulders.

Despite the challenges identified by the authors, there is evidence that the importance of inclusive design is being more widely recognized. Laberge et.al., (2022) detail the discussions held at the International Ergonomics Association (IEA) Conference in 2021. The article explores various themes related to gender and ergonomics from the presentations, such as:

- The challenges and opportunities of transferring knowledge on gender and ergonomics to different stakeholders, such as policymakers, practitioners, researchers and workers
- The need and methods of designing training for ergonomists to incorporate a sex/gender lens in their interventions, such as using case studies, role-playing and reflective exercises
- The specificities and risks of atypical work and vulnerable populations, such as migrant workers, informal workers, domestic workers and sex workers, and how a sex/gender lens can help understand their context and needs
- The exposure and perception of occupational risks among different groups of workers, such as nurses, cleaners, drivers and teachers, and how gender influences their strategies to manage risk

Linkage Three: The connection between DEI and psychological safety has been established, although less so between general DEI and physical safety

Edmondson (2018) defined psychological safety as "the belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes and that the team is safe for interpersonal risk-taking," implying that organizations need to be aware of the environments and power structures they create so employees feel safe in being authentic in the workplace. In doing so, organizations can elicit a greater understanding of physical safety needs across factors such as gender, age and access requirements.

Duffy (2022) sheds further light on how DEI interlinks with organizational structures and safety, arguing that psychological safety is essential for creating an inclusive work environment where low-wage health care workers feel respected, accepted, supported and valued, creating a space where employees feel they can express themselves and speak up without the fear of facing retaliation. Duffy further suggests that policies supporting psychological safety can improve the quality of care and advance health equity for patients and communities, as low-wage health care workers are more likely to share their ideas, concerns and feedback, and embrace team collaboration to address DEI and safety concerns in the workplace.

Cornelissen (2017) stated that safety outcomes and performance depend on variables related to management, colleagues, workplace characteristics, employee demographics, and climate and culture factors, which points toward a more general linkage between DEI and physical safety but is not definitive in nature.

Challenge One: Lack of integration between the safety and health and human resource functions is a key barrier to identifying and addressing the impact and relevance of DEI to safety

Flynn, et.al., (2018) highlight the broad relevance that culture plays in safety policies. The diverse cultural backgrounds of employees may reflect in the understanding, perception and prioritization of risk and safety measures.

Cultural factors, such as power dynamics between supervisors and workers, may prevent workers from feeling able to discuss safety concerns with superiors. For example, Gibson et.al., (2012) found that people from cultures that used sports metaphors when referring to work teams often expect discussions to focus on specific project details and few social interactions. In contrast, workers from cultures that used family metaphors when referring to work teams, are often expected to have more social interactions outside of work in which they could share other aspects of their lives outside of the working environment. Cultural differences shape how employees contribute to the design of safety policies and their relationships with coworkers and supervisors.

However, Flynn et.al., (2018) highlighted the fact that cultural differences are rarely referenced in safety policies. The absence of cultural differences in safety policies could be due to limitations of the available data and the lack of integration between safety and HR functions in the design of work-based safety programs (Sterud, et.al., 2018), representing a fundamental inclusion gap.

To create effective work-safety policies and a balanced and communicated workplace, HR and safety functions should coordinate to integrate cultural and gender-based factors into internal policies, procedures and systems. Cultural differences impact who is responsible for safety measures, how subordinates and superiors interact with each other and even workers' perception of work-related risks. Without taking into account cultural differences, safety professionals run the risk of misinterpreting the perception and understanding of workplace risk, which can lead to ineffective policies and superficial progress. (Flynn, et.al., 2018).

Challenge Two: A lack of common reporting measures is a key barrier to identifying the relationship between DEI and safety

The literature review exposed a gap around the theme of common reporting measures for DEI and safety. Several articles reviewed touched upon methodologies and metrics used for monitoring and reporting safety, such as reduced absenteeism and injury rates, but they often overlooked how these can intersect with demographic and situational factors (Bliss et.al., 2018).

Other sources present some potential sources of data that could be used to measure and monitor work-related health disparities and inequities, such as the National Health Interview Survey (NHIS), the Behavioral Risk Factor Surveillance System (BRFSS) and the Occupational Health Supplement (OHS) (Wipfli et.al., 2021). The authors suggest that OSH professionals should collaborate with public health agencies and researchers to develop common metrics and indicators.

In addition to a lack of common reporting measures, a lack of standardized definitions was also cited as a barrier to exploring the relationship between DEI and safety. Jaramillo et.al., (2021) recognize the connection between precarious employment status and worker mental health. However, they draw attention to the lack of a standardized definition of precarious employment or a commonly accepted methodology for measuring it.

Key Takeaways: Approaches for developing, communicating and enhancing DEI and equitable safety policies across diverse workforces

While an increasing number of organizations address DEI as part of their business purpose, addressing DEI's relationship to safety and health is an evolving process, requiring a deeper understanding of diversity and inclusion factors and their connection to risks within organizations. To help organizations drive DEI initiatives, Kim et.al., (2020) define diversity as the inclusion of demographic and non-observable cognitive diversity. To provide a deeper understanding of DEI, the authors defined inclusion as being driven by perceptions of fairness and belonging.

According to Van Eck et.al., (2021), organizations might address diversity through two main strategies: diversity-blind and diversity-conscious practices (Van Eck et.al., 2021). The diversity-blind policy supports fairness and equal treatment, whereas diversity-conscious practices create the most value out of employees' differences. No matter the strategy adopted, inclusion is understood as a step forward for a new set of diversity practices (Van Eck et.al., 2021). The authors state that diversity management is often reduced to incremental change, while inclusion creates policies developed for the greatest possible variety of human beings. Hence, inclusion should be part of everyday practices and processes.

Research has identified that organizational management and policies, workplace parameters, employee demographics and culture are all factors that influence workplace health and wellbeing safety (Cornelissen, et.al., 2017). As these factors influence the effectiveness and outcomes of safety policies, safety professionals should understand socioeconomic conditions and culture and strengthen the link between physical safety and diversity (Flynn, et.al., 2018).

Bliss & Krzystowczyk (2018) discuss numerous policies that have aimed to protect disadvantaged groups, with some being revisited and updated to include at-risk groups:

- The enactment of the Pregnant Workers Fairness Act (PWFA), now a law across the U.S., which aims to provide reasonable accommodations for pregnant workers and prevent discrimination based on pregnancy, childbirth or related medical conditions
- The revision of the U.S. Toxic Substances Control Act (TSCA) in 2016 introduced a definition for "potentially exposed or susceptible subpopulation" that includes workers who may be at greater risk of adverse health effects from exposure, such as pregnant women
- The adoption of the Equality Act 2010 in the UK, which legally protects people from discrimination in the workplace and wider society based on various protected characteristics, including sex – the Act also prohibits sexual harassment and unequal pay for work of equal value

Strong Linkages Between Safety and:	Safety Enhanced Through:	Challenges Created By:	Gaps Identified As	Best Practices Generated Via
• Gender • Ethnicity/ Nationality • Occupation • Job temporality • Low-wage and high-wage worker relevancy • Ensuring physical health and safety can improve the quality of psychological health and safety	• Employee perception of DEI and engagement • PPE and workplace design • Reporting and implementation of systems	• Language barriers • Cultural differences • Disseminated information on DEI • Bias and preconceptions	• Limited integration between HR and safety functions • Limited common reporting measures • Poor DEI data informing PPE design • Communication and design	• Placing high levels of importance on employee engagement • Increasing awareness of safety • Highlighting disconnects between cultural perception

Figure 1: Summary of literature review findings

Connections: DEI, Harassment and Workplace Violence

During the literature review phase of the research for this Insight Report, NSC analyzed a report published by Lloyds Register Foundation in 2022 entitled, *Global Experiences of Violence and Harassment*, stemming from the results of the 2021 World Risk Poll administered by the Foundation. While harassment and violence were not as directly studied in the literature review, the report offered some key insights concerning physical and psychological safety outcomes that are highly relevant in the context of DEI. Per the report's Executive Summary, these included:

- Among those who have worked at some point in their life, one in five people reported experiencing some form of violence and harassment at work in their lifetime (20.9%)
  - Of those who reported experience of violence and harassment, more than half experienced it more than once (58.5%)
    - Men were slightly more likely than women to report experiencing violence and harassment at work (21.9% vs 19.8% of women)
    - Psychological violence and harassment was the most frequently reported form (16.5%) compared to physical (7.4%) and sexual (5.5%)
    - Of those who reported experiencing violence and harassment at work, over a quarter of people reported experiencing multiple forms of it (27.7%)
  - For a third of women who reported experiencing any violence and harassment, there was a sexual element to this experience (32.9%), which dropped to one in six for men (15.4%)
    - Australia and New Zealand is the region that reported the highest levels of experience, at nearly one in two people (47.9%)
  - In this and other 'Western' regions, there was a significant gap between the sexes, with women much more likely to say they had experienced violence and harassment at work than men
    - Women with a tertiary (university) level of education were both more likely to say they have experienced violence and harassment (29.3%) and also to have told someone about their experience (71.9%) compared to women with primary or secondary level education
    - Foreign-born women have a greater experience of violence and harassment in the workplace than their native-born counterparts (30.2% vs 21.5%), an effect that was not seen for men
  - This gap was largest in the poorest 20% of the global population at 12.6 percentage points, compared to 6.8 percentage points in the wealthiest 20%

Learnings from Practitioners

The literature review performed for this Insight Report was supplemented by a variety of direct stakeholder engagements, surveys, interviews and conversations. This additional input closely matched the key themes that emerged in the literature review and generally falls into three key themes: connections and integration, limitations with respect to data and resources, and emerging best practices to improve the integration and implementation of DEI and safety.

Highlighted below are key findings that emerged through practitioner engagement, sorted into themes and insights.

Theme One: The Interconnections between DEI and safety are clear, but there is space for further integration

At the broadest level, the literature review revealed a general understanding of the connections between DEI and workplace safety. Primarily, it outlined that positive, company-wide comprehension of DEI factors, when overlayed with safety concerns and backed by action and communication, has the potential to deliver enhanced physical and psychological safety benefits.

More than 50% of surveyed respondents highlighted DEI as a critical factor in an organization's general safety and health procedures (see Figure 2). However, the research also found an implementation gap, where organizations might struggle to further integrate the relevance of DEI into factors relating to physical safety (Bliss et.al., 2018). As a result, safety policies and communication strategies may be designed for only one segment of the workforce instead of accounting for the diverse needs of the whole workforce.

In this context, survey results show different approaches to DEI and safety that vary alongside external factors – such as jurisdictional and industry differences – and according to organizations' prioritization of DEI issues, such as gender equality and disability support in the workplace.

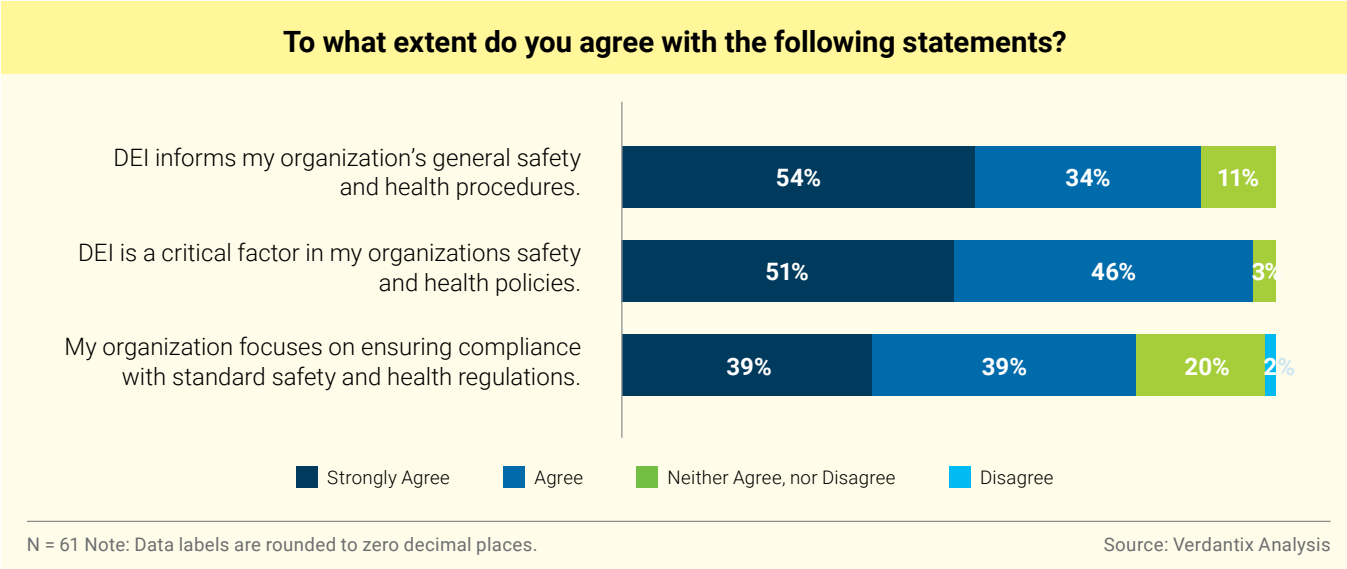


Figure 2: Organizations' integration of DEI and safety

Insight One: Organizations recognize the value of the link between DEI and safety, but struggle with its effective implementation

Across the spectrum of organizations, the integration of DEI concepts within safety operations is, overall, immature. Despite this, links such as the relationship between enhanced communication and comprehension around DEI sensitivity and safety are clear – and are evidenced by the existence of two contradictory patterns.

Over 60% of respondents recognized the importance of considering DEI when aiming to ensure comprehensive workplace safety and shared a commitment to fostering DEI as part of their safety practices (see Figure 3). However, the study results also showed corporations to be hesitant about the implementation of DEI policies. Indeed, over 30% of participants doubted whether DEI was directly linked to workplace safety at all. The integration of DEI and safety is thus still immature. It is, moreover, dominated by two distinct practices, in which organizations develop strategies to align DEI and safety, but fail to effectively implement them.

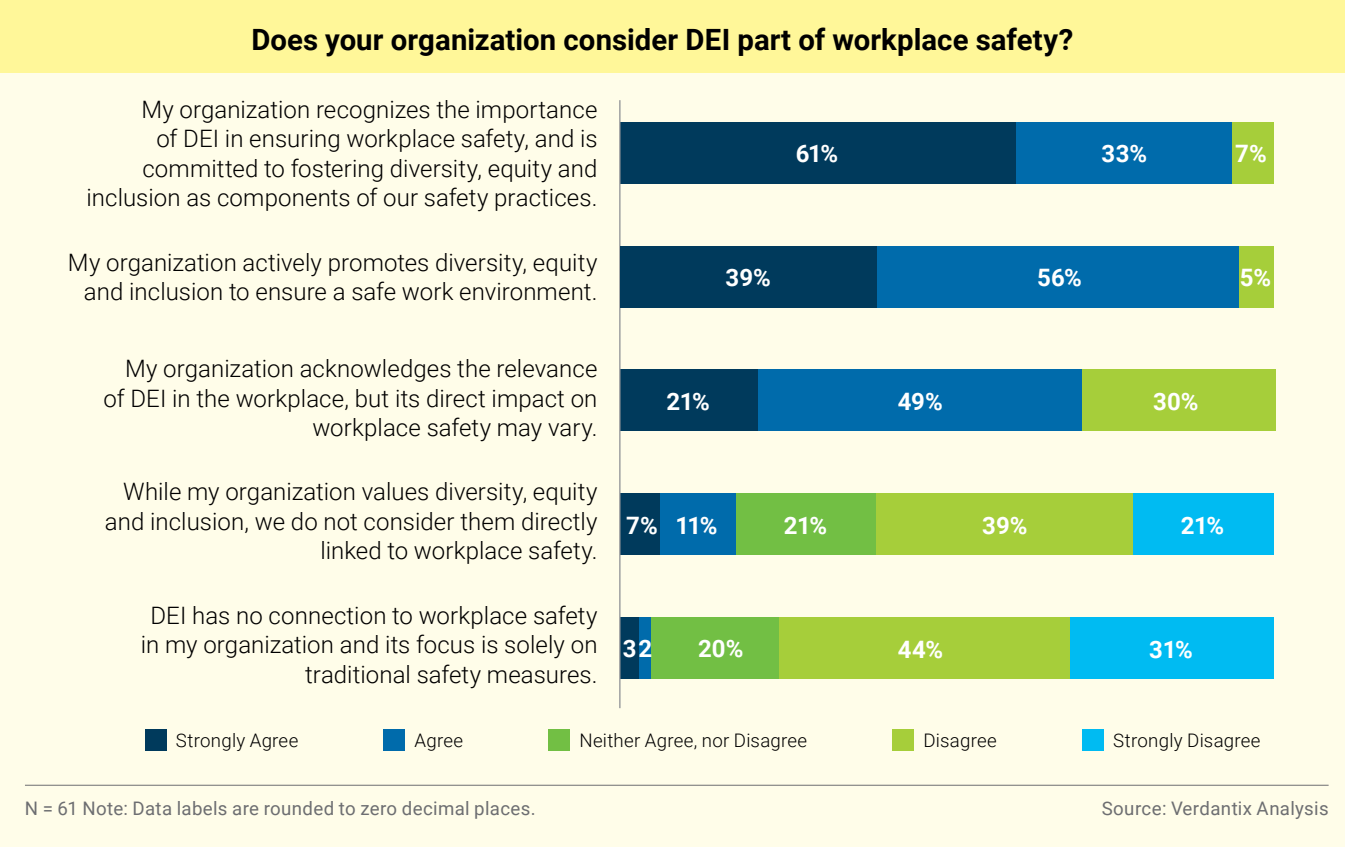


Figure 3: Organizations' attitudes towards DEI and safety

Organizations develop strategies to align DEI and safety

Organizations recognize the role of DEI in the design of effective safety policies. Over 50% of the larger study participants stated their current organizations had a strategy in place to ensure alignment of DEI with safety policies (see Figure 4). This was closely followed by the proportion of organizations currently developing a strategy to implement within the next two to three years. This demonstrates organizations' acknowledgment of the relevance of DEI for safety and illustrates the efforts they are making to foster the integration of these factors.

Gaps in the implementation of DEI-aligned safety practices persist.

Despite organizations' indication of engagement with DEI in the context of safety, the study results also illustrate gaps in the implementation of DEI-aligned safety practices. Almost 50% of participants noted efforts to raise awareness about the connection between DEI and workplace safety and health (see Figure 5). However, study results show that organizations struggle to integrate DEI into workplace risk assessments, which hinders the implementation and success of DEI-aligned risk mitigation strategies.

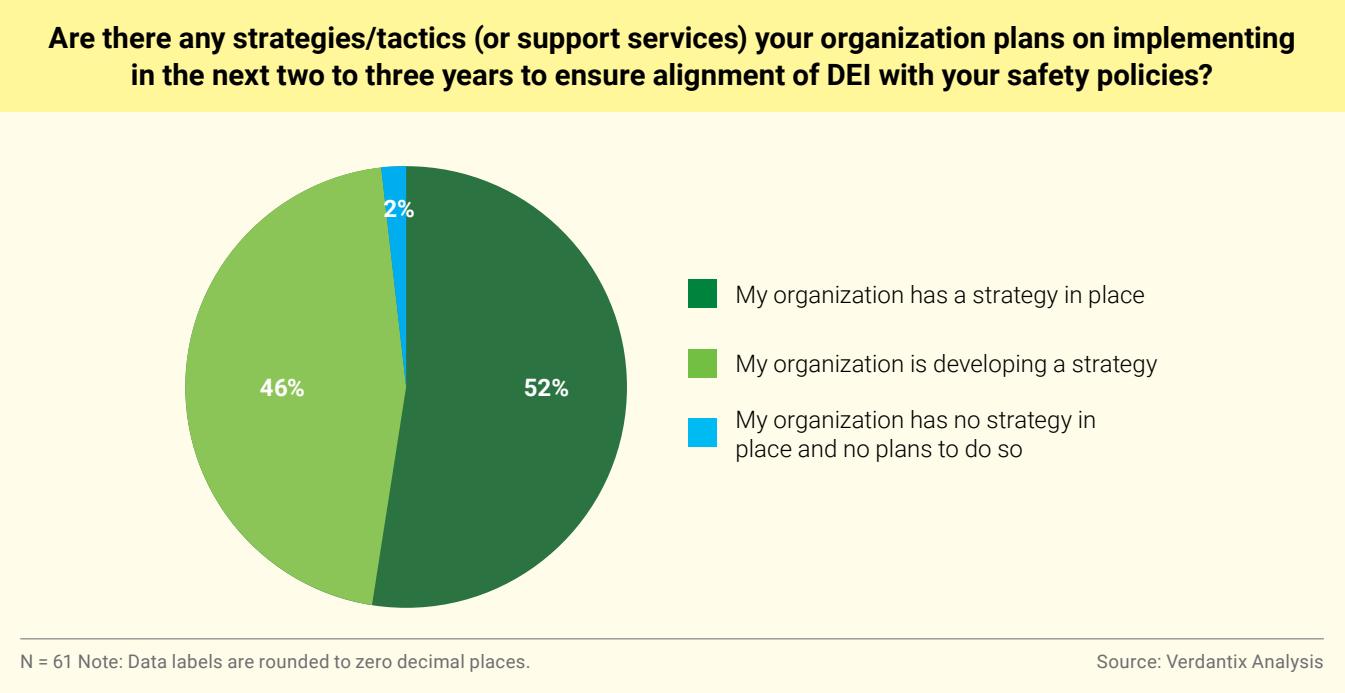


Figure 4: Organizations' plans to integrate DEI into safety policies

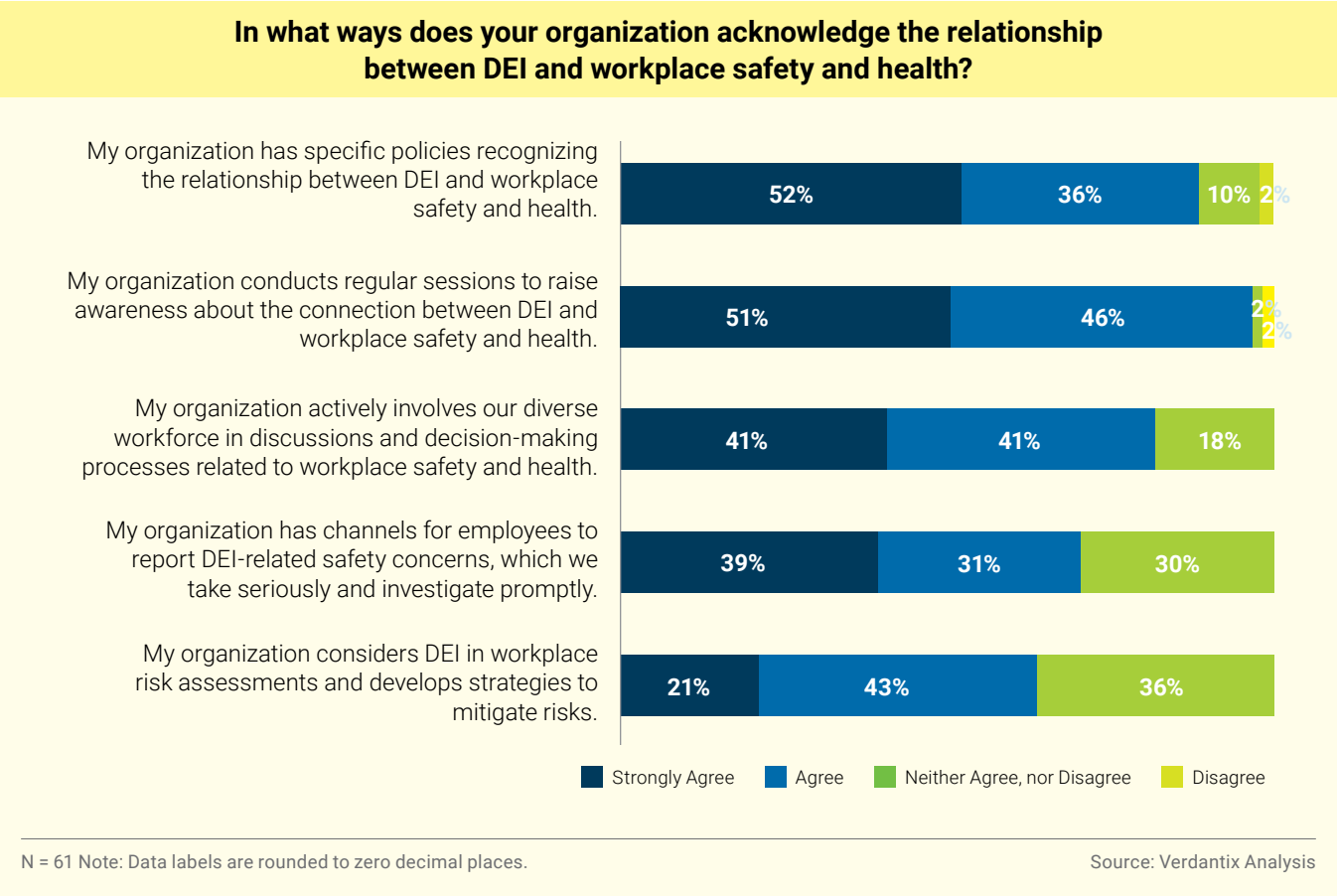


Figure 5: Organizations' strategies to align DEI with workplace safety and health

Insight Two: Approaches to DEI and safety differ across jurisdictions, industries and organizational design

The literature review identified that factors such as organizational management and policies, workplace parameters, employee demographics and culture influence workplace health and wellbeing (Cornelissen, 2017). These factors impact the effectiveness and outcomes of safety policies and explain the various organizational approaches and comprehension levels across safety equity – and the resulting integration of DEI and safety. DEI and safety strategies vary according to:

- **Cultural differences, power dynamics and employee demographics, shaping the prioritization of DEI issues**
  Participants in the qualitative interviews highlighted and reaffirmed the relevance of cultural differences in shaping the link between DEI and safety. Power dynamics between supervisors and workers, for example, may prevent the reporting of safety concerns and limit idea generation on improving wellbeing and health equity (Duffy, 2022). Cultural differences can shape how employees contribute to the design of safety policies, and consequently, how DEI factors are prioritized (Flynn, et al., 2018). For example, it may be easier to find a high commitment to DEI in multinational companies, which usually operate in multiple locations and have higher exposure to DEI-related reputational risks. These factors could push these organizations to address cultural differences as part of their DEI approach, prioritizing DEI-related issues that resonate with their customers' sentiments.

"The variance between nationalities can mean we face a lot of trouble in implementing safety culture." ***HSE Manager, Contruction***

- **Jurisdictional differences on mandatory DEI disclosures and targets**
  For some organizations, DEI is a key factor in complying with safety-related regulations. However, the regulatory landscape around DEI and safety varies across jurisdictions, presenting different perspectives on and necessitating varying approaches towards the link between DEI and safety (see Figure 6). Two such examples of this can be seen in the requirements of the Gender Pay Gap Reporting legislation in the UK and the Employment Equity Amendment Bill in South Africa. Jurisdictional differences in mandatory DEI and safety requirements shape how organizations address DEI and the importance they assign to related issues. It may be wise, however, for businesses to consider the limitations of regulations, and adopt an initiative-taking approach towards the integration of DEI as a safety factor, rather than simply limiting data collection efforts to achieving compliance.

"Occupational laws are outdated; they remain incomplete. They don't include women in the workplace. The U.S. has had a hard time bringing DEI and safety together. However, if it's not safe for everybody, it's not safe for anyone. You can't have a safety management system that only works for certain people and call it effective." ***CEO, EHS Consulting***

Regulation	Jurisdiction	DEI content
Chilean Labor Code	Chile	Obligation to adopt measures to include employees with a disability.
Finland Non-Discrimination Act	Finland	Mandatory establishment of an equality plan for any authority, education provider or organization with at least 30 employees. It also prohibits discrimination, harassment and denial of reasonable accommodation.
Act on Equal Status and Equal Rights Irrespective of Gender	Iceland	Act to prevent gender-based discrimination, to maintain gender equality and equal opportunities.
The Rights of Persons with Disabilities Act	India	Replacement of the 1995 law on disability. The Act follows the United Nations Convention on the Rights of Persons with Disabilities and encourages establishments to have an accessible and discrimination-free workplace.
Social Balance Law	Portugal	All organizations are required to maintain a five-year record of the registration of their working conditions, recruitment processes, training and promotion policies, with a breakdown by sex.
Broad-Based Black Economic Empowerment Act	South Africa	Mandate for incentive schemes to support Black-owned and managed enterprises, to avoid racial discrimination and bring marginalized communities into greater consideration.
Organic Law 3/2007 For the Effective Equality of Women and Men	Spain	Organizations must promote equality between men and women. Organizations with over 250 employees must formulate and implement an equality plan.
The UK Gender Pay Gap Reporting Act	UK	Requires mandatory gender pay gap reporting. Organizations with more than 250 employees must publicly disclose overall, mean and median gender pay gaps across the workforce.
California Corporations Code	U.S. (California)	Organizations must have at least one director from an underrepresented community by the end of 2021. Organizations with five to eight directors must have at least two from underrepresented communities, and corporations with more than eight directors must have at least three from these communities.

Sources: Verdantix analysis; Principles for Responsible Investment (PRI); government institutions

Figure 6: DEI and safety-related regulations

- **Industry, and its associated risk, exposing differences in DEI and safety awareness**
  The study revealed that a general understanding of DEI in relation to workplace safety is prevalent across industries. Research on DEI and safety, for example, often highlights the lack of inclusive design of PPE in the construction sector, leaving women severely underserved in terms of accessibility to safety gear (Skillings, 2022).

However, the study also uncovered variations in the understanding of the interconnectedness of DEI factors and workplace safety. Over 80% of respondents from NGOs, for instance, strongly agreed with the statement: "My organization actively promotes diversity, equity and inclusion to ensure a safe work environment," followed by over 50% of respondents working in government.

Results showed a bigger gap in the mining and manufacturing industries. When presented with the statement: "DEI has no connection to workplace safety in my organization, and its focus is solely on traditional safety measures," only about 20% of participants from the mining and manufacturing industries strongly agreed. This disconnect suggests that awareness of the links between DEI and safety varies across sectors.

"I would say, frankly, safety shouldn't be dependent on DEI. What I was saying upfront was: safety is safety; it shouldn't depend on who you are, what you are or what you look like."
Senior Manager, Manufacturing

Insight Three: Organizations present diverse DEI and safety comprehension levels

DEI initiatives may be heavily driven by stakeholders and regulatory pressure. Employees' demographic and organizational factors also impact how businesses prioritize DEI as a critical safety factor. For example, organizations that integrate DEI as a core business value may experience easier integration with safety issues, as DEI becomes a part of daily decision-making. Less diverse organizations with more homogenous employee demographics, meanwhile, may maintain a more traditional view of safety policies, with poor adaptation and flexibility for an evolving workforce.

Our qualitative interviews revealed a range of comprehension levels that organizations might attain, depending on their general understanding of DEI issues and safety-related risks, and the presence of effective internal performance-tracking and communication systems. For the purpose of segmentation, we developed a four-level classification system by which organizations' DEI-linked safety approaches can be described, as follows:

- **Compliance-driven**
  Organizations see the integration of DEI factors into safety policies as an enhancement of mandatory compliance efforts. At this comprehension level, the collection of employee-related data, such as on demographics and gender, is carried out to meet industry standards and mandatory disclosure requirements.
- **Enabling alignment with stakeholders' demands**
  At this comprehension level, organizations consider DEI issues as a factor to better engage both internal and external stakeholders. Organizations view DEI policies as something that can sustain their brand image and help them avoid DEI-related risks, such as discrimination lawsuits, negative safety and health outcomes, and reputational damage.
- **Enhancing talent retention**
  Organizations at this level recognize the relevance of making everyone safe in the workplace. DEI thus becomes a key element in understanding employees' concerns and needs and in adapting safety policies accordingly.

"It's vital to share the relevance of creating a safe space for everyone. Nobody will stay in a place where they don't feel safe." ***President, Consulting***

- **Integrated into company culture**
  When organizations address DEI as a core business value, factors such as cultural differences and gender are integrated into daily decision-making. This means that individual characteristics inform communications, safety policies and management strategies. Prioritization of DEI comes from the leadership level, with the C-Suite setting clear targets, emphasizing company culture, and establishing working committees and responsibility domains that incorporate prime examples of best practices. DEI and safety are thus fully integrated, with DEI considered to be a key factor for efficient safety policies and business culture.

"Psychological safety is not an EHS issue, but a leadership and management action." ***President, CEO, EHS Consulting***

Theme Two: Organizations' ability to operationalize the integration of DEI and safety is limited by a lack of data and resources

The major obstacles in operationalizing the integration of DEI and safety pertains to inadequate research, a lack of senior leadership buy-in, challenges in data collection and limited training. These hurdles are exacerbated by difficulties in mobilizing a workforce and in embedding the right standards and structures at scale.

Organizations appreciate the importance of focusing on the connections between DEI and safety. Almost 90% of respondents report they have policies in place that recognize the relationship between DEI and workplace safety and health (see Figure 5). Despite this, challenges remain that organizations must address to build their capacity to understand these connections and develop policies. Our research responses indicate that:

- **Organizations feel under-educated on the nuances and complexity of DEI**
  Respondents overwhelmingly feel there is more to be done to support research efforts seeking to understand the links between DEI, safety and health. This is the case even though 97% of respondents state their organization conducts sessions to raise awareness about the connection between DEI and workplace safety (see Figure 5). This indicates that even where work is being done to improve literacy on the subject, organizations believe that further research should be carried out by academic or industry bodies to explicitly test the relationship between the concepts, including specifics relating to the individual factors of diversity, equity and inclusion, allowing them

"The absence of diversity in occupational health, safety research and practice restricts our knowledge of how DEI affects workplace safety and health." ***Head of Sustainability, Construction***

  to use the findings as a basis from which to develop their own strategies and policies. At present, the presence of only limited resources appears to be hampering progress, given that some respondents feel that without sufficient research, there is a fundamental lack of knowledge from which to build policies.

"We are still looking into it. It's quite complex: you need proper research before concluding any result." ***Head of Sustainability, Construction***

- **With low buy-in around DE&I in the safety context, core business performance takes priority**
  Respondents feel it is difficult to attain sufficient buy-in from key senior leaders to focus attention on this topic. Not only is it a challenge to obtain a sufficient budget for research, training and policy development in this area, but it is also hard to affect efforts to reorient business processes. Attempts to boost collaboration between different departments can be difficult – achieving buy-in from everyone within an organization is cited within the larger study as an ongoing problem.

There are also competing challenges for resources within a business, with productivity and profitability seen as

priorities over further developing a greater understanding of DEI, safety and health. Conversely, respondents note that where senior buy-in is achieved, budget, strategy and implementation are far easier to attain.

"You might have issues with buy-in from certain groups in the office – getting buy-in from everyone for the policies and procedures is bigger than getting them implemented. Buy-in from the very top makes it much easier." ***Senior Manager, Pharmaceuticals***

"Balancing the importance of DEI with competing demands such as productivity and profitability is a challenge." ***Head of Sustainability, Oil & Gas***

"The primary challenge is the leadership; the second is the required investment. The third challenge is more behavior-based." ***General Manager, EHS, Manufacturing***

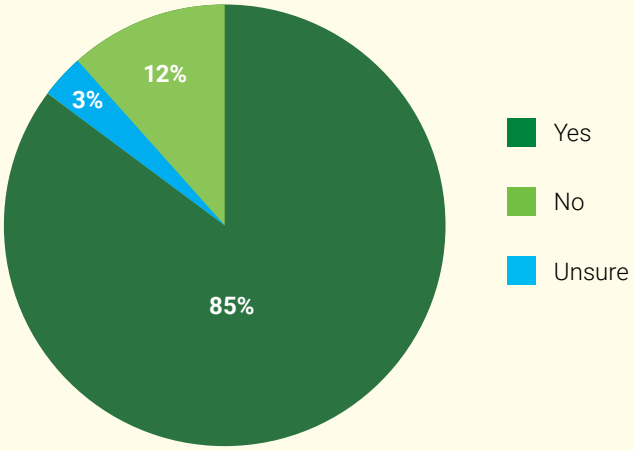
- **More work is needed to enhance data collection and use to integrate DEI with safety**
  Two main issues create bottlenecks in organizations' efforts to better understand DEI and safety and health. The first is the process of collecting the data itself. This may take the form of demographic data collection in the event of an incident – for example, to explore a connection to demographic diversity. The limited availability of real-time data, and employee hesitancy to share sensitive information, can hinder progress in this area. There is also a sense that although 85% of respondents report collecting demographic data alongside workplace injury information (see Figure 7), there is general uncertainty as to how best to use this. This may be compounded by the fact that while health and safety functions are the predominant collectors and users of demographic and safety data, several other functions will also be involved, making it hard to take a unified approach (see Figure 8).

  The second issue relates to the difficulty of knowing what to do with the data to develop insights. With limitations of research and training, many respondents perceive analysis of the data and the development of metrics for DEI and safety and health to be a challenge. Organizations must also consider whether the existing data factored into workplace safety and health policies accurately reflect all employees and are sufficient to reduce the incidence of safety issues.

"[There is] a lack of understanding about the metrics." ***Global Director, ESG, Oil & Gas***

"[The challenge is] firstly, the availability of real data, and secondly, reviewing how the data have been analyzed." ***General Manager HSE, Construction***

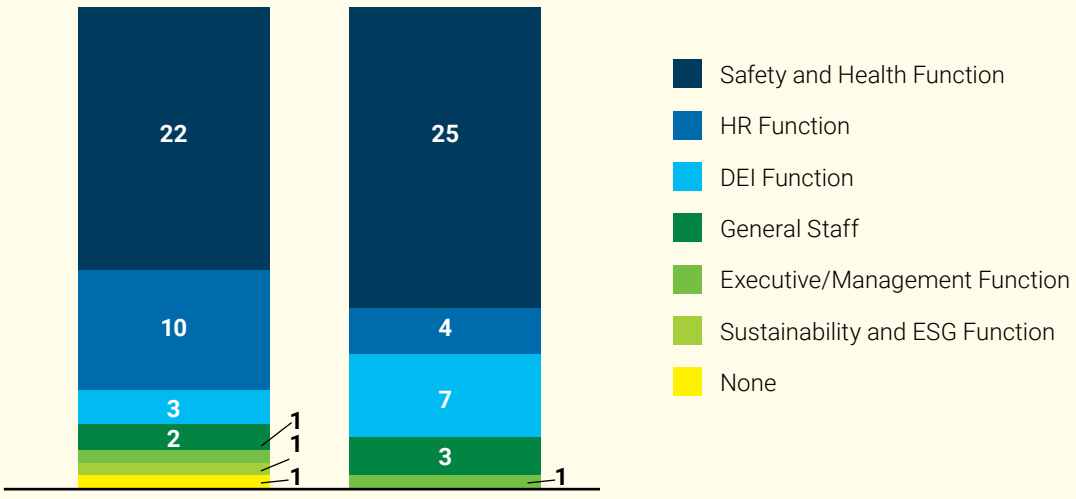
Does your organization gather demographic data alongside workplace injury data (i.e., on sex, gender, race, etc.)?



N = 61 Note: Data labels are rounded to zero decimal places. Source: Verdantix Analysis

Figure 7: Organizations' gathering of demographic and workplace injury data

Which function is the primary collector and user of demographic and workplace injury data?



N = 40 Note: Data labels are rounded to zero decimal places. Source: Verdantix Analysis

Figure 8: Main collectors and users of demographic and workplace injury data

- **Without educating the workforce on DEI practices, tangible results will remain limited**
  Responses to our research suggest that to understand the connections between DEI and safety and health, a holistic, organization-wide approach is needed. To make workplaces diverse, equitable and inclusive, DEI priorities must be part of the fabric of an organization and its culture. For this to be possible, businesses must plan and conduct training to educate employees at all levels of seniority. Organizations are aware of the difficulty of delivering training to varied audiences, acknowledging the resources this requires and the associated risks. Without executive buy-in, progress on this front will be delayed.

"It requires effort from all employees. It necessitates a dedication to educate employees on the significance of DEI principles and practices." ***Director of Sustainability and ESG, Oil & Gas***

"A communication gap can lead to workers not reporting even minor injuries."
EHS Manager, Manufacturing

"Addressing language issues as well as promoting multilingual communication in safety and health policies and practices is a challenge." ***Director of Human Resources, Government***

Insight Four: Barriers at the organizational level impede progress on aligning DEI with workplace safety practices

Beyond data collection and internal resources, there are also management hurdles to the integration of DEI and safety. These may manifest as stand-alone challenges or may have evolved based on previously mentioned issues around efforts to align DEI with workplace safety. It is apparent that at an operational level, study respondents face challenges across their people, processes and technology, and that these can impede the greater integration of DEI into safety and health policy. Respondents have experienced difficulties as a result of:

- **Dynamic regulations that present obstacles to policy alignment**
  Constantly evolving and complex regulations make it difficult for organizations to stay on top of their compliance issues – a significant problem, as over three-quarters take a compliance-based view of safety and health (see Figure 2). Respondents find it challenging when regulations change frequently as internal policies may have just been developed and implemented to fit a previous regulation. Some 52% of respondents already have strategies in place to align DEI with safety and health, and a further 46% are developing strategies at present, meaning this issue is likely to be ongoing (see Figure 4). Organizations must ensure resilience is built into their strategies, to deal with the dynamic nature of regulations and to limit the impact changes may have on research, training and policy.

"With different regulations to follow, it becomes complex to align DEI."
Director of Sustainability and ESG, Oil & Gas, Chemicals

"Frequent changes in the regulations makes it difficult to frame policies and strategies."
Head Occupational H&S, Education & Health Services

- **Problems assigning accountability due to inter-departmental bottlenecks**

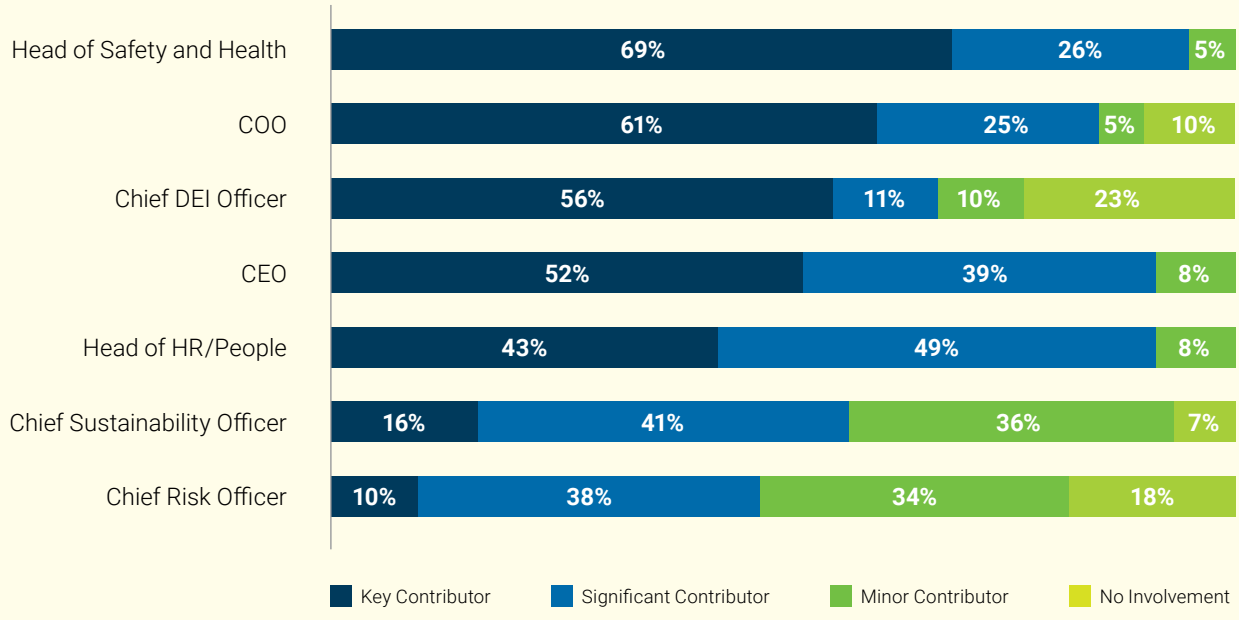
  Several key stakeholders, such as heads of human resources, training and engagement are required in the process of developing DEI-informed safety and health strategies. On the one hand, this brings benefits, ensuring representation, engagement and an organizational approach encompassing multiple functions (Yanar et.al., 2022). However, it also creates uncertainty as to who leads on the matter and has ownership over DEI-aligned safety and health policy.

  For example, over half of respondents said the CEO, COO, Head of Safety and Health, or Chief DEI Officer were key contributors to their DEI and safety and health policies, with significant contributions from the Chief Risk Officer, Head of HR/People and Chief Sustainability Officer as well (see Figure 9). Ultimately, this can make it hard to marry knowledge and strategy across different functions and can lead to communication challenges across business units. This may be even more evident where different stakeholders are responsible for individual factors within diversity, equity or inclusion metrics tied to health and safety.

"Both of them are governed by different departments, so the policies and approach would be different." ***Head of Sustainability, Construction***

"The alignment and efficacy of DEI workplace safety and health ideas are impacted by different interpretations or understandings." ***Executive Head of SHE, Mining***

What level of influence do the following personnel in your organization have in developing DEI-informed safety and health practices and procedures?



N = 61 Note: Data labels are rounded to zero decimal places. Source: Verdantix Analysis

Figure 9: Decision-makers influencing DEI and safety policies

- **Under-development of systems to measure progress and performance**
  After organizations have come to terms with the need to collect data to understand the links between DEI and safety and health, they must address the challenges associated with implementing systems that can operate across multiple departments. Respondents cite difficulties in maintaining systems that are aligned with global standards. They also feel underprepared and underequipped with the right tools and metrics to apply to the data they have. Fundamentally, this shows that organizations are grappling with understanding how to turn their data into actionable insights. The challenge can be eased by the establishment of standardized approaches across functions.

> **"We need to have appropriate metrics or tools to measure progress and evaluate the impact of these practices and policies."** ***Global Director, EHS, Manufacturing***

> **"The departments need to communicate properly in order to effectively manage DEI, health and safety."** ***Global Director ESG, Oil & Gas, Chemicals***

- **Efforts to balance inclusivity and engagement when developing DEI-focused safety policies**
  Organizations must undertake a difficult balancing act when designing policies. Multiple viewpoints, interpretations and understandings of health and safety and DEI matters can present challenges to efforts to ensure an inclusive approach to the subject. They can also make it difficult to ensure that throughout these efforts, factors such as diversity are embedded in safety and health policies. Organizations must take into account individual needs and modernize old policies but they must be efficient when doing so. Respondents say that addressing these problems requires careful thought and the balancing of opposing goals, which can create more bureaucracy and lead to potential delays in implementation. One respondent cites the consultation process for the renaming of a toilet that took ten meetings internally.

> **"Understanding the different cultures and languages across people, as well different skill levels of employees, is necessary to make sure everybody understands the policies in the same way."** ***Occupational Health and Wellness Manager, Manufacturing***

Theme Three: Best practices are emerging to improve integration and implementation of DEI and safety

The research results prove that organizations understand the importance and relevance of DEI for workplace safety and wellbeing, both physical and mental. However, they also indicate that capacity and organizational challenges are hindering the effective integration of DEI and safety, which can lead to inefficient safety policies. Organizations must adopt a full-spectrum approach to DEI and safety, as well as strengthen workers' engagement on DEI and safety issues. These avenues of operation can be distilled into key best practices, which will allow organizations to put DEI priorities into practice and ensure an inclusive and safe working environment (see Figure 10).

Figure 10. Emerging best practices to improve the integration and implementation of DEI and safety

Insight Five: Integration of DEI and safety starts at the executive level

Organizations showcasing a better alignment of DEI and safety have embedded it within a leader's responsibility. Executives must lead the way toward this level of integration, translating the prioritization of DEI and safety issues to all business units. In this way, they will be better equipped to operationalize DEI priorities and to ensure health and safety equity. To achieve this, organizations must:

- **Ensure the inclusion of safety and DEI in their business code of conduct**
  DEI, as a part of safety policies, must become a tenet of daily decision-making, with employees looking to strengthen that relationship. In doing so, DEI-linked safety policies will lead to greater accountability, with organizations better equipped to report safety issues and share improvement opportunities that protect employees.

- **Address DEI and safety as a full-spectrum exercise**
  Participants in our research highlighted the relevance of leadership 'walking the talk.' Integration of DEI factors and safety must start at the top, with DEI and safety officers translating sponsorship into action. In this context, middle-level managers play a key role in making DEI policies actionable and in ensuring employees have the tools to report any concerns regarding their workplace wellbeing within a safe and inclusive environment.

> **"It's all about accountability, about calling out issues. Organizationss must have support mechanisms and get really good DEI officers who translate sponsorship into action. DEI and safety comes from a vertical development, which needs sponsorship and willingness for organizational transformation."** ***Head of Sustainability, Consulting***

- **Foster cross-functional agreement on the design of DEI and safety policies**
  The integration of DEI and safety is heavily reliant on cross-functional collaboration. Different functions, such as HR, DEI, ESG and safety, must agree on the prioritization of DEI for the business, and collaborate in the design of effective safety policies. Organizations can leverage the better usability of DEI data to create enhanced reporting processes, communication and engagement opportunities for all employees.

Insight Six: Successful DEI-aligned safety policies depend on engagement with and inclusion of key stakeholders

While proof of best practices is somewhat limited, based on the evidence provided, it is clear that good communication and an inclusive approach to employee interaction and feedback can make a significant difference. When conducting safety risk assessments in the workplace, organizations may opt for a diversity-focused risk approach that encompasses family issues, work demands, and age-related psychological and physiological changes (Varianou-Mikellidou et al., 2020). As DEI and safety and health are fundamentally organization-wide matters, successful strategies to advance policy must engage stakeholders top-down and bottom-up. Our research finds that:

- **Organizations must create a sense of safety for workers to engage**

  One of the most important things organizations can do to increase engagement with DEI and safety and health is to foster an environment of psychological safety. When workers feel more secure in their jobs and have a trusting relationship with their employers, they are happier to share workplace safety fears. The opposite is true when employees do not feel psychologically safe. "If you get your wrist slapped when you report a minor thing, you don't report it," a senior manager of EHS&S noted. To create psychological safety, the individual needs of employees from diverse backgrounds must be taken into account and accepted (a fundamental example of inclusion). In a culture of safety, workers are free to provide feedback knowing they will not face repercussions or judgment for sharing.

"You can't treat everyone the same – and must move towards inclusion. Do the bosses recognize the workers' needs? We should avoid a culture of 'get it done.' Psychological safety requires really good communication." ***Head of Operations, Consulting***

- **DEI and safety initiatives must be constantly informed by worker feedback**

  Organizations that make DEI a priority in their safety and health policies pay attention to worker feedback and embed it into their policy design, which is fundamentally an example of inclusion. Organizations leverage different channels to make this happen. For example, some have systems in place to capture employee views using software that enables trend analysis and the development of insights.

  At the next level, some organizations use feedback surveys and have formalized cross-functional committees, embracing both inclusion and diversity through this mechanism. Open-style engagements bring multiple functions into the fold, helping to share knowledge across departments and break down communication barriers. Town hall meetings also provide valuable forums for two-way discussions focusing on topical issues facing workers.

"We have a system which captures employees' views and feedback and is kept anonymous."
Global Director ESG, Oil & Gas, Chemicals

"Sessions are conducted with employees on a regular basis. There are safety committees as well, which employees can reach out to at any time, to discuss their concerns."
Head of Sustainability, Oil & Gas, Chemicals

"We have a communications channel program in place to connect with all workers – performing a safety audit, conducting a town hall, supporting reporting lines – all to give information and get their feedback." ***Head of EHS, Utilities***

- **Communication needs to be reinforced with action**

  Collecting data and building communication campaigns are important as part of a strategy, but these operations must be reinforced with concrete action. This can be operationalized via the right organizational structures, to act on any safety concerns. For example, in an anecdotal case where an employee raises an access issue, a respondent explained that "they go and approach it with the site lead and then an ops manager; the site lead then liaises with the facilities lead, who will rectify the issue and raise funds."

  Training acts as a solid foundation to support feedback in this way, with "employees getting safety training that enables them to identify and report workplace safety." A positive feedback loop is essential to enable the link between communication and action, with an eye toward developments in the wider field.

- **Effective implementation of DEI targets aligns with C-Suite remuneration and goals**

  Our findings highlight how important executive buy-in is, both to fund priorities and to engage holistically. To achieve buy-in, targets are essential, creating tangible goals. Recent research from an IBM Institute for Business Value study, in cooperation with Oxford Economics, found that out of 3,000 CEOs interviewed across 30 countries, approximately half have their compensation tied to ESG goals (IBM, 2023). While these are broader than DEI alone, this shows the trajectory that ESG-related – and thus DEI-related – metrics are taking, to create accountability mechanisms.

  Examples of best practices in the DEI and safety and health space incorporate targets that align with reporting incidence rates, the strategies an organization has in place to address DEI-related risks and the efforts an organization makes to create more equitable working conditions, such as ensuring all workers have access to PPE that fits, and adjust requirements for more equitable workplaces.

"It has always been a conversation from the leadership level, but until now, it wasn't a target for anyone." ***Director Health, Safety and Environment, Manufacturing***

"Lead by example, demonstrating value and action. Lead by living the concept."
Director Health, Safety and Environment

- **The integration of DEI and safety must evolve constantly**

  To address the challenges noted in the previous section, such as evolving regulatory landscapes and dynamic contractual workforces, the process of integrating DEI priorities into safety must be one of continuous improvement. Along with considering ongoing feedback and setting up committees to capture the sentiments and concerns of workers, policy reviews should be set at regular intervals, such as quarterly, to reinform existing practices.

  In this way, new regulatory considerations can be acted on, and operations to bolster awareness, such as research and training, tweaked constantly, to avoid costly system overhauls over longer periods. Regular risk reviews will help enable greater resilience and reduce safety and health risks to organizations.

"We should be intentional in our efforts to include DEI and workplace safety in risk reviews, and very intentional in including the social risks. Data will become part of the review process, to quantify the extent of an issue." ***Director Health, Safety and Environment, Manufacturing***

"Companies can lower the risk of workplace incidents by acknowledging and dealing with the effects of discrimination and bias on health and safety policies and practices."
HR Director, NGO, Frameworks & Standards Bodies

Connections: A Case Study from Architecture, Engineering and Construction

Using prompts and questions designed by NSC based on literature and practitioner insights, a major Architecture, Engineering and Construction firm held an internal review to assess their current stance on and integration of DEI and safety in February 2023. Attendees at this review included safety and DEI leadership internal to the organization, including two employees whose primary charge is specific to diversity, equity and inclusion.

Key learnings from this review included:

- **DEI starts at the vision and policy level** in their global social value policy, strategic beliefs and commitments, and with DEI metrics included in the organization's annual global report and sustainability report
- **DEI is activated through multiple channels** including employee resource groups, a DEI learning path (that is region-specific), messaging around microinequities and unconscious bias, training, marketing materials, cultural event toolkits, language in the employee handbook, inclusive client practices and in a regular people processes review
- **DEI is seen as aligned with safety through interrelationships and synergies** including working groups, procedures and processes, engagement in psychological safety, a shared focus on employees, hiring and training practices, risk management activities, reporting and investigations, among other activities
- **DEI and safety integration faces some barriers** such as privacy and data transparency, lack of ability to assess progress and perceptions in surveys, and potential for sensitivity and bias
- **Some aspects of DEI and safety are well-established, particularly in training and reporting processes, but gaps remain** including embedding into business strategy, and reporting on harassment and its potential inclusion as an "incident"
- **There is a belief that a focus on DEI could improve safety outcomes** through cultural alignment and engagement, inclusion of new and different points of view, and material improvement of procedures and processes through more diverse reviews
- **The most promising strategies are business process-related,** including training, measurement, reporting and process review, as well as more general efforts around psychological safety
- **The biggest challenges are enterprise-wide,** such as leadership involvement and capabilities, culture change, communication internally and to the market and society, organizational silos, program sustainability, and time and resources
- **Safety can directly help mature DEI strategy** through continued work on psychological safety, trust-building in disclosure and reporting, diversity and inclusion in strategic development, and go/no-go on-site decision-making that takes into account client attitudes and beliefs around both safety and DEI

A Model for DEI-Informed Safety

Multiple times throughout this report, the phrase "DEI-Informed Safety" has been used to describe safety and health policies, programs and initiatives that take into account and attempt to integrate diversity, equity and inclusion principles, as opposed to separate activity streams relating to both activities.

As a synthesis of the literature review, surveys, interviews and stakeholder engagement across the research contributing to this Insight Report, a model for DEI-Informed safety has been developed. The intent of this model is not to be all-encompassing but to suggest a framework and language with which we can describe the various levels of observed maturity, motivations, engagement, understanding of and best practices related to DEI and safety.

This model integrates and illustrates numerous components:

- Organizational comprehension of DEI and safety (low to high)
- Organizational engagement (including general stakeholders and executives)
- Categorizations defining the extent of DEI integration in safety (compliance to culture)
- Associated best practices and safety alignments uncovered through literature and practitioner insights

These components and the model as a whole represent a starting point framework that can be used to gauge where an organization may currently be on its "journey" of DEI-informed safety maturity but it is not intended to be quantitative or prescriptive in nature.

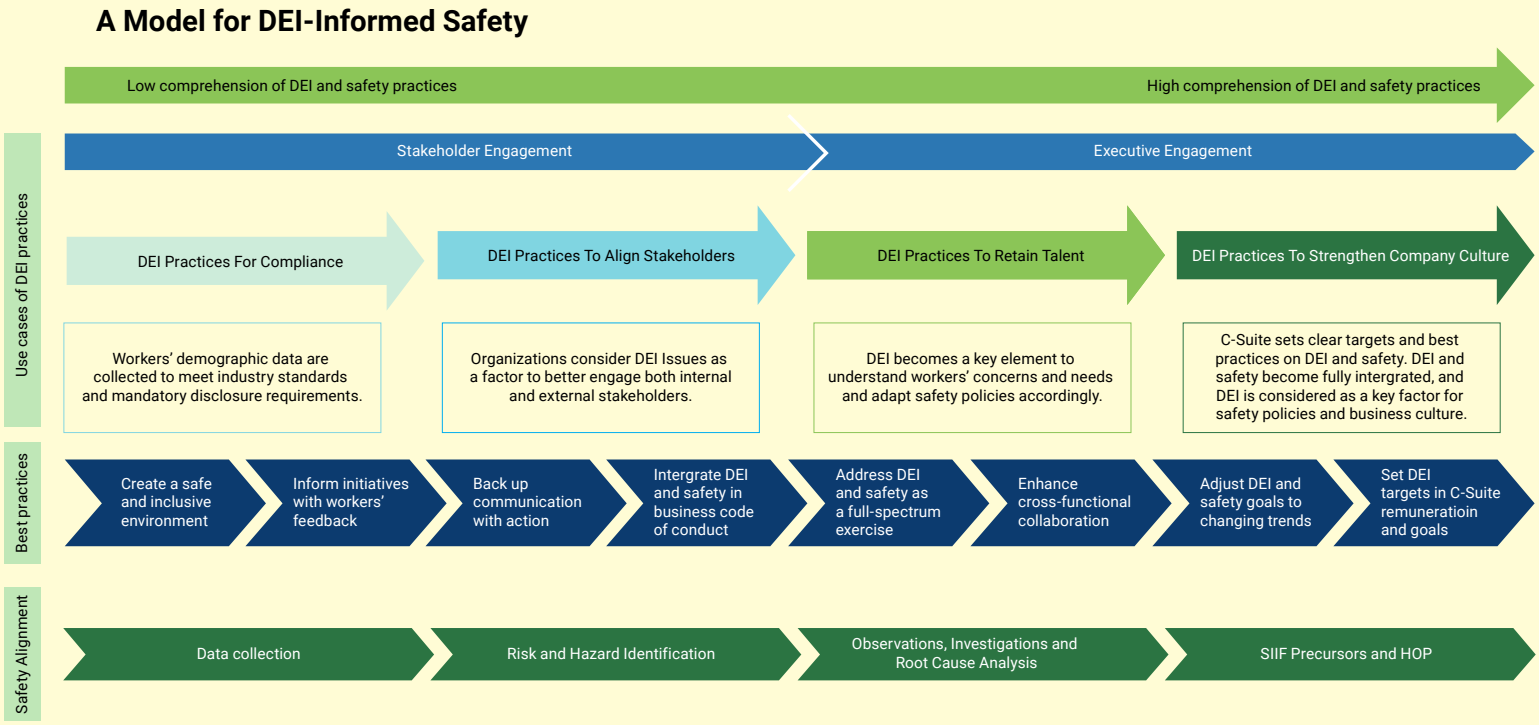


Figure 11. A model for DEI-Informed safety

Summary Recommendations

Recommendations for action can be found throughout this Insight Report and are primarily summarized in the "Learnings from Practitioners" section, particularly within Theme Three, as well as Figures 10 and 11. For ease of reference, eight key recommendations are summarized and collected below:

1. **Create a safe and inclusive environment:** A psychologically safe and trusting workforce is a starting point for honest and open engagement.

2. **Inform initiatives with workers' feedback:** Numerous mechanisms and channels must be leveraged to include diverse worker feedback in DEI and safety policies and initiatives.

3. **Back up communication with action:** Transparent and open communication is critical but fails without visible action and a positive feedback loop.

4. **Integrate DEI and safety in the business code of conduct:** DEI-informed safety must serve as a tenet of daily business decision-making to foster accountability.

5. **Address DEI and safety as a full-spectrum exercise:** Everyone, from leadership to middle management to workers, must have a meaningful role and must "walk the talk."

6. **Enhance cross-functional collaboration:** Collaboration between key stakeholders such as HR, ESG and safety is critical for integration and data purposes.

7. **Adapt DEI and safety goals to changing trends:** Regulatory, societal and workforce trends require regular policy, program and initiative reviews to stay relevant and impactful.

8. **Set DEI targets in C-Suite remuneration and goals:** ESG-related goals are becoming more common in CEO compensation and should be built upon with thoughtful DEI-related goals.

In addition, NSC recommends applying a DEI- or equity-informed "lens" to safety policies, programs and initiatives. This means that rather than starting new or tangential programs to integrate and implement DEI principles in safety, organizations should embed these principles into existing activities, particularly in key safety and health activities such as:

1. **Data collection:** Collect demographic data related to safety and health successes, near-misses, observations and incidents to assess trends related to worker characteristics that may be "hidden" day-to-day. Ensure this information is not used to individually identify or take punitive action against an individual or group. For U.S. operations, share these data with government agencies as appropriate.
2. **Risk assessment and hazard identification:** Ensure diverse, inclusive involvement in risk assessment and hazard identification activities, with direct workforce participation and a trusting environment in which there is no fear of raising concerns.
3. **Proactive observations, incident investigations and root cause analysis:** Take into account potential cultural, diversity and equity drivers of work activity and/or "behavior" that may emerge through supervisor or peer observation programs, in incident investigation processes and during root cause analysis activities. Ensure diverse, inclusive workforce participation in these activities in order to reduce biased outcomes.
4. **SIIF precursors and Human and Organizational Performance:** Make the connection between human error, decision-making and DEI and take into account cultural, diversity and equity drivers of work activity and/or "behavior" that may vary from individual to individual or group to group within the workforce.

Numerous tactical resources exist to assist in applying a DEI or equity lens. The below six-step approach, developed by the Center for Nonprofit Advancement (Center for Nonprofit Advancement, 2020), is one such tool:

1. **What decision is being made?**
    a. What beliefs, values and assumptions (some of which will be cultural) guide how the topic is being considered?

2. **Who is at the table?**
    a. Who or what informs their thinking on the issue?
    b. Who is most affected by these decisions, and thus should be at the table?
    c. How can they be included?

3. **How is the decision being made?**
    a. What participatory structures can be added to hear from more voices, equalize participation and elements of consensus be used?

4. **What assumptions are at the foundation of the issue? Be explicit in naming these and the values and cultural bases for them.**

5. **What is the likely impact?**
    a. Does the policy, program or decision improve, worsen or make no change to existing disparities? Does it result in a systemic change that addresses institutional inequity?
    b. Does the policy, program or decision produce any intentional benefits or unintended consequences for the affected groups?
    c. What is the real impact likely to be for different groups who are important to the organization?

6. **What is your decision?**
    a. Based on the above responses, what are the possible revisions to the policy, program or decision under review that could address inequity/promote equity?

Next Steps

As with any evolving conversation, the intersection of DEI and safety is not and will not remain static, and its integration and implementation are never a one-size-fits-all exercise. The multi-faceted nature of DEI-informed safety reflects the multitudes of workers, industries and operations that exist globally, and the nuances of demographics, cultures, work environments, regulations and other factors create a yet more complex and interconnected web of topics to address as organizations seek to take action on this important issue.

Thus, this Insight Report can be viewed as a snapshot in time, one which has produced a foundation for future research and practice through which a deeper exploration of the various factors, best practices, policies and gaps can be leveraged to build a robust body of knowledge. This report, while indicating a broad organizational push towards DEI and safety integration, and outlining the challenges and best practices therein, can and should be supplemented by additional studies. These could, for example, augment the research by taking a larger sample size of smaller organizations, which represent the biggest body of employers globally.

Additional insights could be gained via deep dives into selected industries, with studies tailored towards the issues faced within them, or more specific studies on key recommendation areas such as best practices for cross-functional collaboration. Such research could directly provide the targeted information organizations currently lack as they attempt to understand the connection between DEI and safety.

These key areas for future exploration can be broken out across several themes.

Assessing Current Levels of Maturity

- Exploring the current level of comprehension around DEI, its perceived importance concerning safety (mental and physical) and how this understanding is translated or lost as it informs workplace actions and policies
- Investigating organizational structures, such as the potential "silo-ization" of the HR and safety functions, relating to how connections are formed, information is shared and how it influences policy and workflow generation
- Identifying primary organizational challenges that arise in the process of ensuring equity in physical and mental safety and health within diverse workforces and in what ways challenges can be avoided or addressed

Exploring Current Engagement Structures

- Identifying common stakeholders involved in DEI strategies and exploring how to equip them with the appropriate remit and knowledge to overcome institutional challenges
- Understanding workplace organization design principles that are detrimental to DEI-informed safety and health, how they are created and in what ways these can be optimized to better create synergy
- Understanding how the foundational linkages between DEI and psychological safety are generated, which can then be applied to developing the connection between DEI and physical safety

Identifying Current Data Collection and Reporting Practices

- Identifying what common reporting measures are in place for DEI and safety issues and what forms of data are currently processed, as well as how these systems and metrics are utilized for optimizing safety policies and practices
- Exploring what perceived barriers exist in implementing reporting systems to provide visibility of DEI factors within workplace safety reporting

Understanding the Current Landscape of Best Practices

- Understanding what practices are present across sectors that deliver positive and negative outcomes and assessing how these may be leveraged by other organizations
- Exploring how organizations currently conduct detailed risk assessments, and to what extent they include DEI factors as well as exploring how they differ across sectors
- Exploring operations to identify similar workflows to those that have apprised DEI-informed PPE evolutions, and leverage this to expand the design and considerations of DEI about other aspects of physical safety

Exploring these topics, and more, through additional research and interviews, will enable the creation of a body of knowledge that can be better translated into policies and actions that can be operationalized to elucidate and elevate the interconnectedness of DEI and safety.

In a more direct practice direction, we believe the research demonstrates the potential and criticality of embedding DEI into "everyday safety" across the spectrum of safety and health management system activities, wherever they may fall on the hierarchy of controls. From PPE to engineering risk mitigation, opportunities exist to apply a DEI-informed approach. This is illustrated in Figure 12 below.

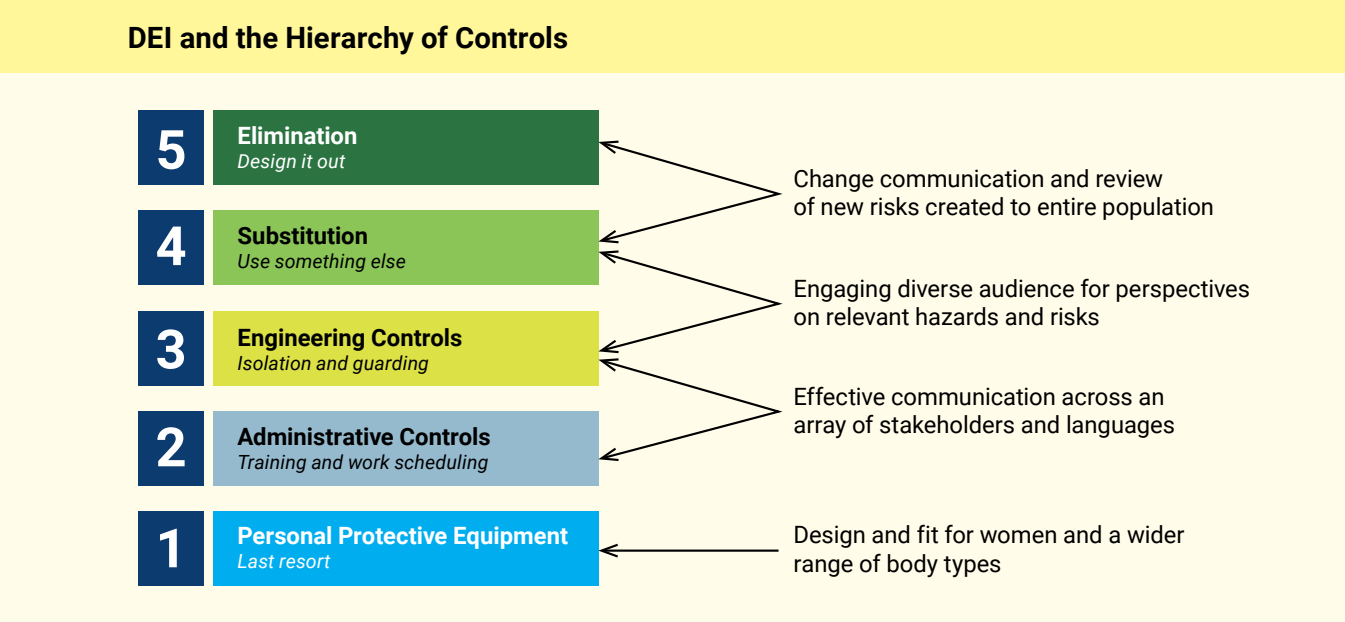


Figure 12: DEI-informed safety approaches across the Hierarchy of Controls

Finally, this research suggests it is important to engage with the constituent components of DEI, not simply the entire concept as a monolithic idea. Each element is unique, requires specific action to enable and must continue to evolve over time. In both research and practitioner engagement, we found that too often diversity, equity and inclusion are bundled together in ways that can restrict the organizational ability to address any one particular challenge, instead resulting in proxy measurements or approaches (such as tracking percentages of representative populations).

Much of this report focuses on diversity and inclusion, and future work is necessary to unpack both of these topics as well as their direct connection to equity outcomes. We have offered tools for an equity-informed lens (see page 38) that also speaks to diversity and inclusion as a starting point. Organizations will be well served to iterate on these types of tools, taking into account the most relevant cultural and risk factors present in their work environments and workforces.

Appendix I: Works Cited

Albertsen, K., Grøn, S., Meyland, K. K., & Limborg, H. J. (2021). Youth Health and Safety Groups: Process Evaluation from an Intervention in Danish Supermarkets. Nordic Journal of Working Life Studies, 11(2), 65-86.

Bliss, M. M., & Krzystowczyk, J. (2018). Inclusive & Gender Equal Protection: Protecting Workers' Reproductive Health. Professional Safety, 63(3), 38-43.

Boateng, G. O., Schuster, R. C., & Odei Boateng, M. (2019). Uncovering a health and wellbeing gap among professional nurses: situated experiences of direct care nurses in two Canadian cities. Social Science & Medicine, 242(0).

Center for Non-Profit Advancement. (2020). What is an equity lens? Available at https://www.nonprofitadvancement.org/files/2020/12/What-is-an-Equity-Lens.pdf (Accessed: 30 September 2023).

Cornelissen, P. A., Van Hoof, J. J., & De Jong, M. D. (2017). Determinants of safety outcomes and performance: A systematic literature review of research in four high-risk industries. Journal of Safety Research, 62(0), 127-141.

Duffy, M. (2022). Why Improving Low-Wage Health Care Jobs Is Critical for Health Equity. AMA Journal of Ethics, 24(9), 871-875.

Edmondson, A. C. (2018). The Fearless Organization: Creating Psychological Safety In The Workplace For Learning, Innovation, and Growth. Hoboken, NJ.: John Wiley & Sons.

Ely, R. J., & Thomas, D. A. (2020). Getting Serious About Diversity. Harvard Business Review.

Flynn, M. A., Castellanos, E., & Flores-Andrade, A. (2018). Safety across cultures: Understanding the challenges. Professional Safety, 63(1), 28-32.

Flynn, M. A., Eggerth, D. E., Keller, B. M., & Check, P. (2021). Reaching 'hard to reach' workers: Evaluating approaches to disseminate worker safety information via the Mexican consular network. Journal of Occupational and Environmental Hygiene, 18(4-5), 180-191.

Flynn, M. A., Keller, B., & DeLaney, S. C. (2017). Promotion of alternative-sized personal protective equipment. Journal of Safety Research, 63(0), 43-46.

Follmer, K. B., & Jones, K. S. (2018). Mental Illness in the workplace: An interdisciplinary review and organizational research agenda. Journal of Management, 44(1), 325-351.

The International Organization for Standardization (2021) ISO 30415:2021 Human resource management – Diversity and inclusion. Available at https://www.iso.org/standard/71164.html (Accessed: 31 March 2023).

Institute for Work & Health (2023). Racial and ethnic inequities in the return-to-work process. Available at https://www.iwh.on.ca/summaries/sharing-best-evidence/racial-and-ethnic-inequities-in-return-to-work-process (Accessed: 30 September 2023).

Jaramillo, N. R., Trillos, C. E., & Julià, M. (2022). The measure of precarious employment and its impact on the mental health of workers: A systematic review 2007-2020. Work, 73(2), 639-650.

Kim, J. S., & Jeong, B. Y. (2020). Universal safety and design: Transition from universal design to a new philosophy. Work, 67(1), 157-164.

Laal, F., Mohammadian, F., Khoshakhlagh, A., Madvari, R. F., Dehghan, S. F., & Pordanjani, S. R. (2022). Effect of anthropometric and demographic factors on musculoskeletal disorders in nurses' aides. Work, 72(4), 1205-1213.

Laberge, M., Beaupré, A., Messing, K., Riel, J., & Caroly, S. (2022). Overview of the "Gender & Work" track at the IEA 2021 Congress. Work, 73(1), S127-S139.

Lloyds Register Foundation. (2022). Global Experiences of Violence and Harassment. Available at https://wrp.lrfoundation.org.uk/LRF_2021_report_safe-at-work.pdf (Accessed: 30 September 2023).

Milligan, J. (2019). Inclusive Safety: Providing Tailor-made PPE for Women. Professional Safety, 64(8), 24-25.

Siordia, C., & Galley, F. (2020). Participation of workers of Asian ancestry in high-risk occupations in the United States: 2009 to 2017. Journal of Immigrant and Minority Health, 22(5), 1010-1016.

Skillings, R. (2022). More Inclusive PPE for women starts with finding the right fit: everyone deserves to feel safe on the job. Occupational Health and Safety, 64-65.

Sterud, T., Tynes, T., Mehlum, I. S., Veiersted, K. B., Bergbom, B., Airila, A., . . . Flyvholm, M. -A. (2018). A systematic review of working conditions and occupational health among immigrants in Europe and Canada. BMC Public Health, 18(1)

Stoesz, B., Chimney, K., Deng, C., Grogan, H., Menec, V., Piotrowski, C., . . . Turner, N. (2020). Incidence, risk factors, and outcomes of non-fatal work-related injuries among older workers: A review of research from 2010 to 2019. Safety Science, 126(3).

van Eck, D., Dobusch, L., & van den Brink, M. (2021). The organizational inclusion turn and its exclusion to low-wage labor. Organization, 28(2), 289-310.

Varianou-Mikellidou, C., Boustras, G., Nicolaidou, O., Dimopoulos, C., Anyfantis, I., & Messios, P. (2020). Work-related factors and individual characteristics affecting work ability of different age groups. Safety Science, 128.

Wipfli, B., Wild, S., Richardson, D. M., & Hammer, L. (2021). Work as a Social Determinant of Health: A Necessary Foundation for Occupational Health and Safety. Journal of Occupational & Environmental Medicine, 63(11), e830-e833.

Yanar, B., Nasir, K., Massoud, A., Usmani, S., Premji, S., & Smith, P. (2022). Employers' experiences with safe work integration of recent immigrants and refugees. Safety Science, 155.

Appendix II: Survey and Interview Instruments

Q1 In what ways does your organization acknowledge the relationship between DEI and workplace safety and health?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Our organization conducts regular sessions to raise awareness about the connection between DEI and workplace safety.					
Our organization has specific policies recognizing the relationship between DEI and workplace safety.					
We consider DEI in workplace risk assessments and develop strategies to mitigate risks.					
We have channels for employees to report DEI and safety concerns, which we take seriously and investigate promptly.					
We actively involve our diverse workforce in discussions and decision-making processes related to workplace safety and health.					

Q2 To what extent do you agree with the following statements?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
DEI is a critical factor for your organizational safety policies					
DEI informs your organization's general safety procedures					
My organization focuses on ensuring compliance with standard safety and health standards					

Q3 Does your organization consider DEI part of workplace safety?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Yes, DEI is a fundamental aspect of workplace safety, and our organization actively promotes diversity, equity and inclusion to ensure a safe work environment.					
Our organization recognizes the importance of DEI in ensuring workplace safety, and we are committed to fostering diversity, equity and inclusion as components of our safety practices.					
Our organization acknowledges the relevance of DEI in the workplace, but its direct impact on workplace safety may vary.					
While our organization values diversity, equity and inclusion, we do not consider them directly linked to workplace safety.					
No, DEI has no connection to workplace safety in our organization, and our focus is solely on traditional safety measures.					

Q4 Are there any strategies/tactics (or support services) your organization plans on implementing in the next two to three years to ensure alignment of DEI to your safety policies? [check one]

- ☐ We have a strategy in place
- ☐ We are developing a strategy
- ☐ We have no strategy in place and no plans to do so

Q5 What departments/business groups at your organization view DEI as a workplace safety concern? [check all that apply]

- ☐ Executive/Management Function
- ☐ Safety and Health Function
- ☐ Sustainability and ESG Function
- ☐ DEI Function
- ☐ HR Function
- ☐ General Staff
- ☐ Other _____

Q6 Which departments/business groups at your organization do you feel are responsible for championing the alginment of DEI with safety and health? [select all that apply]

- ☐ Executive/Management Function
- ☐ Safety and Health Function
- ☐ Sustainability and ESG Function
- ☐ DEI Function
- ☐ HR Function
- ☐ General Staff
- ☐ Other _____

Q7 What level of influence do the following personnel in your organization have in developing DEI-informed safety and health practices and procedures? [select from key contributor, significant contributor, minor contributor or no involvement]

	Key Contributor	Significant Contributor	Minor Contributor	No Involvement
CEO				
COO				
Head of Safety and Health				
Head of HR/People				
Chief DEI Officer				
Chief Sustainability Officer				
Chief Risk Officer				
Other: _____				

Q8 Does your organization gather demographic data alongside workplace injury data (i.e. Sex, Gender, Race, etc.)?

- ☐ Yes
- ☐ No
- ☐ Unsure

Q9 Which function is the primary collector and user of demographic and workplace injury data? [select one]

- ☐ Executive/Management Function
- ☐ Safety and Health Function
- ☐ Sustainability and ESG Function
- ☐ DEI Function
- ☐ HR Function
- ☐ General Staff
- ☐ Other _____

Q10 Does this data get factored in when considering changes to or replacing workplace health and safety policies?

- ☐ Yes
- ☐ No
- ☐ Unsure

Q11 What challenges do you see in trying to understand the connection between DEI and workplace safety and health? (Please state most signifcant challenges)

_____

_____

_____

_____

Q12 What challenges do you see in trying to align DEI concepts and practices with workplace safety and health practices and policies? (Please list those that you see most relevent)

_____

_____

_____

_____

Q13 How are workers involved in sharing their experiences regarding safety in the workplace, encompassing both physical and mental aspects?

_____

_____

_____

_____

Q14a

Do you believe focusing on DEI issues can improve workplace safety and health outcomes at your organization?

- ☐ Yes
- ☐ No
- ☐ Unsure

Q14b

If no or unsure, why?

_____

_____

_____

_____

Q15

In what ways could integrating DEI concepts and practices into health and safety policies and practices improve business outcomes?

_____

_____

_____

_____

Qualitative Interview Guide

Theme	Qualitative Question
Maturity	What does DEI look like to your organization?
Maturity	What challenges have you faced in ensuring equity in physical and psychological safety across diverse workforces?
Maturity	Do you see a connection between DEI and workplace safety?
Maturity	What level of awareness and communication is there across your wider organization about the connection between DEI and safety?
Maturity	Has a co-worker ever highlighted any safety concern coming from a DEI perspective? How did you deal with it?
Maturity	What practices does your organization undertake to integrate DEI into workplace safety?
Implementation	Are you developing any further strategies or tactics for operationalizing an aligned DEI and safety approach?
Best Practices	How does your organization ensure your health and safety policies foster inclusion and take an intersectional lens?
Employee Engagement	How do you engage your employees to ensure safety policies are understood and implemented across the organization?
Best Practices	Do you have a standardized approach to communicate or do you adapt your communications to reach your diverse workforce across teams?
Challenges	What challenges do you see in integrating DEI into your safety policies and procedures?
Data Collection and Reporting	What metrics would you/do you associate with improved safety across diverse workforces?
Data Collection and Reporting	Are there any challenges with collecting that data?
Challenges	Do you see any gaps in your organization's understanding/are there areas where there is an appetite to learn more about DEI as a workplace safety issue?
Outlook	From your perspective, to what extent do you feel a focus on DEI would improve physical workplace safety?
Outlook	What about psychological workplace safety?
Stakeholder Involvement	Which stakeholders in your organization are responsible for championing DEI and safety?
Stakeholder Involvement	How are they involved in developing your DEI or safety strategies?
Stakeholder Involvement	How much authority does this group have over defining the strategy?

Appendix III: Advisory Group

The National Safety Council would like to gratefully acknowledge the individuals who provided interviews and feedback to contribute to this report:

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Jennifer Lastra | 360immersive
Amy May | Boeing
Mark McBride – Wright | EqualEngineers
Katie McLaughlin | ISN
Billie Jo Moyer | Sauder Woodworking
Alberto Munuera Moreno | AECOM
Travis Parsons | Laborers' Health and Safety Fund of North America
Dheera Phong-anat | Work Promotion Association
Wayne Pignolet | White Men as Full Diversity Partners
Dani Rigg | Nutrien
Emily Spearman | BP
Jessie Strickland | Lloyd's Register
Patti Swope | RTX
Jason Townsell | Paramount
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