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A national landscape: Injury and violence prevention health equity scan findings and implications for the field of practice*

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Abstract

Introduction: Many federal and national partners have a renewed commitment to addressing health equity and racial equity as a public health issue of concern. These are especially important issues in addressing many injury and violence prevention (IVP) topic areas. In developing and updating approaches to address injury and violence-related health and racial equity challenges, CDC and Safe States Alliance wanted to better understand how partners in the field are already approaching these issues. An environmental scan was conducted to explore how IVP professionals advance health equity and racial equity in their programmatic work.

Methods: Data collection occurred from multiple sources including focus groups and surveys. Health equity and racial equity-related questions were added to the *Safe States Member Survey: Evaluating the Impact of COVID-19 on the IVP Workforce and Assessing Equity Initiative (COVID Impact and Equity Survey)*. An analysis of secondary data sources was conducted through ongoing evaluation initiatives at Safe States Alliance (the COVID Impact Evaluation and Connections Lab Evaluation Focus Groups).

Conclusions: Successes and challenges were identified through the environmental scan that primarily fell into three categories: (1) Injury and Violence Prevention Strategies and Programs, (2) Using IVP Data to Inform Equity Approaches, (3) Equity Approaches in IVP Infrastructure.

Practical Applications: Practical applications were identified that can be supported at the local, state, and federal/national level and are specific to the areas of IVP strategies and programs, IVP data and surveillance, and IVP organizational infrastructure. A few examples include: (1) Ensuring

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The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

decision-making power and ownership of programs is shared between community partners and funders; (2) Working with national/federal surveillance system partners to ensure demographic fields/variables are improved to identify disparities and inequities; (3) Development of an “Injury and Violence Prevention Equity Institute” to better prepare IVP professionals to address health and racial equity challenges.

Keywords

Health equity; Racial equity; Social determinants of health; Health disparities; Injury and violence prevention

1. Introduction

Unintentional injuries and violence are a significant public health issue and continue to be one of the top leading causes of death in the United States (Centers for Disease Control and Prevention, 2021). The burden of injuries and violence have been disproportionately experienced within and across economically and socially marginalized communities. Racial and health inequities are well documented in the United States and have been a part of government statistics since the founding of colonial America (Bailey et al., 2017). The COVID-19 pandemic has elevated the pervasive inequities embedded into many of the country’s systems (e.g., policy, healthcare, housing, criminal justice, education, built environment) as scholars continue to examine structural racism as a critical social determinant of health. Health equity is defined as the assurance of the conditions for optimal health for all people. Achieving health equity requires valuing all individuals and populations equally, recognizing and rectifying historical injustices, and providing resources according to need (Jones, 2017). Adopting an equity lens into injury and violence prevention (IVP) strategies provides a framework to address confounding factors and meet the specific needs of individuals and communities that are at greatest risk for experiencing intentional and unintentional injuries.

In 2021, the National Center for Injury Prevention and Control (NCIPC) at the Centers for Disease Control and Prevention (CDC) partnered with the Safe States Alliance to conduct an environmental scan looking at how injury and violence prevention (IVP) professionals advance health equity or racial equity in their programmatic work. The Injury and Violence Prevention Health Equity Scan took a deep dive into upstream (National Collaborating Centre for Determinants of Health, 2021) approaches that incorporate health equity and racial equity in their IVP work across various disciplines.

A secondary analysis of in-depth focus groups and a national partner survey identified how various sectors (i.e., healthcare, academia, nonprofits, tribal entities, health departments, and private entities) had incorporated an equity lens into their IVP work. While the findings look at equity approaches across all sectors, this specific assessment highlights equity approaches and examples used by healthcare sectors, local health departments, and state health departments. Additionally, the review of these data sources yielded a range of challenges these entities face and technical assistance opportunities that can further support these agencies in addressing health inequities.

2. Methods

The key findings were extracted from multiple sources that included focus groups and surveys. An analysis of secondary data sources was conducted through other ongoing evaluation initiatives at *Safe States Alliance*: the COVID Impact Evaluation and Connections Lab Evaluation. Additionally, the *Safe States Member Survey: Evaluating the Impact of COVID-19 on the IVP Workforce and Assessing Equity Initiative (COVID Impact and Equity Survey)* provided additional information on the degree to which organizations are incorporating equity into their IVP work and help fill in the gaps identified in the secondary analyses. This was a non-research project and as such, IRB review was not requested.

The primary aim of the COVID Impact Evaluation was to learn about the impacts of the COVID pandemic on the IVP workforce and identify training or technical assistance opportunities that *Safe States* can provide. The eight semi-structured, virtual focus groups were conducted with *Safe States* members recruited from:

- State health departments (4 focus groups with a total of 27 participants),
- Local health departments serving at the city and county levels from urban and rural settings (2 focus groups with a total of 10 participants), and
- Hospital-based IVP programs (2 focus groups with a total of 15 participants).

The primary aim of the Connections Lab Evaluation was to understand the impact of the Connections Lab site on IVP work and how users are incorporating a shared risk and protective factor approach into their injury and violence prevention work. The Connections Lab is a website developed for injury prevention practitioners to explore elements of shared risk and protective factor approaches. A total of four semi-structured, virtual focus groups were conducted with 14 participants. These focus group participants were Driver Behavior Seed Grant Program recipients, Core State Violence and Injury Prevention Program (SVIPP) (<https://www.grants.gov/web/grants/view-opportunity.html?oppId=280410>) grant recipients, and participants or leaders in the Regional Network Coordinating Organizations (RNCO)/ National Peer Learning Teams (NPLT).

The *Safe States Member Survey: Evaluating the Impact of COVID-19 on the IVP Workforce and Assessing Equity Initiative (COVID Impact and Equity Survey)* was completed by 108 out of the 595 *Safe States* members invited to complete the survey. Many industry sectors participated in the survey, including healthcare, academia, nonprofits, tribal entities, health departments, and private entities. The survey aimed to obtain information on how the COVID-19 pandemic has impacted the IVP workforce and how IVP practitioners address health and/or racial equity in the IVP field. The survey data provided a broader perspective on how various industry sectors address health and/or racial equity and also filled in some informational gaps in the secondary analyses.

A thematic analysis using Dedoose was conducted with qualitative data collected from the focus groups to identify resonating themes. The emerged themes from the qualitative data were summarized and organized by the research objectives. Quantitative data from the

survey were summarized in Tableau using descriptive statistics to add additional context to the research objectives and qualitative findings.

3. Findings and results

According to the COVID Impact and Equity Survey, most respondents (81%, 83 out of 102) reported that their agencies were currently addressing health equity and racial equity in their IVP-related work, and over one-quarter (26%, 18 out of 70) reported doing this for at least six years. Survey participants also agreed that the national, state, and local responses to the COVID-19 pandemic intensified and exacerbated health and racial inequities, particularly in their IVP work. The majority of the survey respondents (82%, 78 out of 95) agreed or strongly agreed that the COVID response increased and catalyzed the interest in addressing inequities in their organizations. During the focus group discussions in the COVID Impact and Connections Lab evaluations, participants acknowledged that incorporating equity approaches is an essential part of their IVP work. While most survey respondents reported incorporating equity into their IVP work, many survey respondents and focus group participants struggled to provide concrete and tangible examples of how they incorporate equity approaches. Nearly all examples provided by the focus group participants revealed that most IVP programs are in the early stages of putting equity into action.

“We’ve always had the concept of health equity in our work, but I kind of almost feel like it’s been at a surface level. And the pandemic, for sure, has just made it very clear how it impacts every area of society. And it’s not just health. We’ve made a big change as a state as a whole in this area (specifically in our department), but I think beforehand we were already addressing it, but definitely not at the level that needed to be addressed.”

[--State Health Department (Core SVIPP Funded)]

3.1. COVID impact evaluation focus group

A resonating theme in both the COVID Impact Evaluation and Connections Lab Evaluation is the differences in the framing and language used to describe health equity and racial equity approaches. Focus group participants often used the following terminology interchangeably to describe the extent to which their agency incorporates equity into their IVP work: equity, social determinants of health, and shared risk and protective factors. The equity scan provided examples that described the process used to incorporate equity by engaging community-level partners in strategies and programs, utilizing injury and violence data, and strengthening organizational infrastructure.

3.2. Equity approaches in IVP strategies and programs

Most survey respondents reported using social determinants of health to address health equity and/or racial equity in their IVP programs and policy strategies. Survey participants ($n = 77$) primarily addressed access to quality healthcare (63%) or looked at the social/community context (61%) of their IVP work. Focus group discussions revealed how IVP practitioners are addressing social determinants of health to promote health and achieve health equity with their partners. According to the COVID Impact and Equity Survey, two

out of every three respondents (55 out of 83) specifically incorporated a health and racial equity focus to their program implementation, policy strategies, service delivery, client engagement, or evaluation activities. The most common IVP topics addressed with an equity focus were:

- Motor vehicle injury ($n = 38$)
- Firearm injury/gun violence ($n = 30$)
- Suicide ($n = 30$)
- Child abuse and neglect ($n = 29$)
- Domestic and Intimate Partner Violence ($n = 29$)
- Prescription drug overdose/Unintentional poisoning ($n = 29$)

IVP programs within the state health departments, local health departments, and healthcare organizations shared similar examples and challenges addressing health inequities. They primarily did this through establishing community-level partnerships. Fig. 1 provides key examples and challenges of incorporating equity approaches into IVP strategies and programs expressed by focus group participants.

3.3. Equity approaches using IVP data

IVP programs use public health data to understand and monitor changes to injury and violence matters. Collecting and analyzing injury and violence data is critical to track incidences of injuries and violence, identify underlying causes, identify groups at highest risk, recommend prevention priorities, and measure the effectiveness of policies and programs. Injury and violence data are also a valuable asset to guide health equity and racial equity approaches to the IVP work.

According to the focus groups, IVP practitioners use injury and violence data in various ways to inform their approaches to equity. Fig. 2 shows examples of how focus group participants use data to inform their IVP work with an equity lens and some common challenges when using IVP data.

3.4. Equity approaches in IVP organizational infrastructure

Organizational infrastructure creates an environment and climate that can impact how the IVP workforce can adequately carry out various essential functions, including implementing effective IVP programs. This is often influenced by effective leadership and funding directives. According to the COVID Impact and Equity Survey, 45% of respondents (37 out of 83) specifically incorporated equity approaches into their organizational infrastructure. Fig. 3 shows examples of how focus group participants integrated equity into their IVP infrastructure.

4. Discussion

This assessment showed us that while most organizations (81% of those surveyed) report incorporating equity approaches into their IVP work, many struggled to provide concrete

and tangible examples of how they were doing so. The examples that were provided demonstrate that most IVP programs are in the early stages of incorporating equity in their IVP work. Many survey participants also agreed that national, state, and local responses to the COVID-19 pandemic intensified and exacerbated health and racial inequities. The majority also agreed that the COVID response increased and catalyzed the interest in addressing inequities in their organizations. Because of this, there is a clear need to provide examples of what is working, lessons learned from what is not working, and tools and resources to support the inclusion of equity approaches into IVP work. CDC is identifying health disparities related to specific injury topic areas such as Traumatic Brain Injury and Opioid Overdose in Tribal Communities. These resources can serve as examples for how to capture disparities related to specific injury areas.

In synthesizing findings across the three areas of strategies and programs, data, and infrastructure, the one activity that kept coming up as critical to success in incorporating equity approaches was engaging community level partners. In strategies and programs, this is often accomplished through sharing decision-making power and ownership between funders and community partners. For data, it means engaging community partners before collecting data, in the data collection process, and in the interpretation of data. In building equity approaches in organizational infrastructure, this means having staff or community-level partners representing the communities and populations of interest engaged throughout the process. Examples of how funders shared decision making power and ownership include providing expertise and evidence-based approaches with community level partners, and then having the partners modify those programs to be more culturally appropriate and resonate with the populations of interest. Evaluating community/population specific modifications is also critical to ensure the specific modifications and programs overall are still effective. When talking about how to engage community partners in the data process, a place to start is having community organizations conduct community needs assessments to really determine the specific issues and challenges facing communities of interest. Having community input into primary data collection processes will yield much more meaningful data. Once data are collected, whether it be primary or secondary data, having workshops or community roundtables to interpret the data can bring static data to life by revealing the lived experiences behind the data and what it is actually saying. In thinking about how to increase the cultural competency and humility of your organizational workforce, it is critical to think outside the box when it comes to hiring and contracting approaches. Identifying ways to have community-level partners representing the communities and populations of interest in their IVP work and hiring those individuals to execute the work in the communities is often critical to successful implementation. Considering options such as bi-lingual requirements on position descriptions, term-limited positions, or sub-contract options with contracts and grants can all support the goal of increasing community member engagement in the development process.

5. Practical applications

Organizations that are successful in addressing racial inequity in their organizations and communities start by fully committing to that goal and engaging with community partners

to identify what their specific needs are at the moment. However, there are some broad actionable suggestions that can be pursued by national, state, and local partners.

At the national and federal levels, organizations can work to:

1. Develop resources to prepare and support IVP practitioners in their discussions with other non-public health partners regarding the importance of shared risk and protective factor approaches to address health equity and racial equity.
2. Provide case studies and examples of how IVP programs improved community engagement for in-person and virtual programs.
3. Provide IVP programs with tools to address the data gaps and quality of data that impede their ability to identify health disparities. These tools should include guidance on conducting community assessments to collect primary data or tips to access other data sources that can provide indicators of health inequities (i.e., community needs assessments conducted by nonprofit hospitals).
4. Provide IVP programs with examples of protocols for recruiting and retaining diverse and culturally competent IVP staff and guidance on how to advocate for these positions within their organization.
5. Explore ways to better capture limited demographic fields or variables in datasets that inhibit the ability to determine health disparities and inequities.
6. Allow for greater flexibility in leveraging and braiding funding to address shared risk and protective factors that impact health and racial equity in communities.

State and local partners can pursue strategies to better address health and racial equity such as:

1. Discuss innovative hiring and contracting options with Human Resources/ financial resources offices to ensure community partners are supporting IVP efforts from data collection and interpretation to program implementation and evaluation.
2. Engage community level partners and organizations early in the planning phase. Allow them the opportunity to help shape what and how interventions are implemented in their communities.
3. In communication and dissemination material, utilize language that resonates with community members and partners - even if that doesn't always align with language used by state and federal partners.
4. Work with your organizational leadership to publicly commit to advancing health equity and aligning equity approaches into organizational work plans and funding opportunities.

6. Conclusions

The IVP Health Equity Scan results showed us that there is a renewed commitment to addressing health and racial inequalities at the national, state, and local level amongst IVP

practitioners. It also showed us that there is still much work to be done in this area to truly impact outcomes of interest. While 81% of organizations surveyed are addressing health and racial equity, that still leaves almost 1/5 of organizations that are not. In public health broadly and IVP specifically, the more organizations addressing health equity, the better we can serve the needs of our communities and populations at highest risk. Even amongst the 81% addressing equity, as previously discussed, many are new to this work. This presents an opportunity for both top down, and bottom up approaches to be instilled. Federal funders can incentivize health and racial equity work through direct funding and incorporating into existing funding opportunities. They can also provide resources and tools to help state and local partners identify and implement this work. State and local partners can work closely with community organizations and constituents to address their specific needs and make culturally based adaptations to programs. This information can then be shared back with federal funders and the field at large. Overall, the findings provide a solid base for what is working and important to consider in implementing equity approaches, and where there is still work to be done that national, state, and local partners can continue to build on.

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Biographies

Brandon Nesbit has been a health scientist at CDC for 9 years and is currently the Evaluation Team Lead in the Division of Injury Prevention (DIP) in the National Center for Injury Prevention and Control. Mr. Nesbit's team oversees program evaluations including the Core State Violence and Injury Prevention Program, Tribal Opioid Overdose Prevention Programs, and multiple suicide prevention programs. Brandon has an MPH in Health Policy and Epidemiology from the University of Georgia.

Ina I. Robinson, MPH, is a Senior Manager, Programs and Health Equity. She manages a NHTSA funded project to Engage Public Health Leadership to Address Driver Behavior Change, manages several evaluation and technical assistance activities for the CDC Core SVIPP Evaluation project, and facilitates the Safe States Alliance Anti-racism and Health Equity Working Group. Ina has over fifteen years of public health-related experience. Ina earned her Bachelor of Arts in Sociology from Hampton University and her Master of Public Health degree from the University of Pittsburgh. Ina is pursuing a DrPH degree at the University of Georgia.

Ms. Shenée Bryan has extensive experience conducting qualitative and quantitative evaluations. She led many local and state government research projects to analyze public health outcome measures related to injury prevention, motor vehicle traffic safety, substance abuse prevention, and organizational capacity building. She earned her Bachelor of Science in Biological and Environmental Engineering from Cornell University and her Master of Public Health and Master of Public Administration in Public Policy/Health Organization from the University of Alabama-Birmingham.

References

- Centers for Disease Control and Prevention (2021). Web-based Injury Statistics Query and Reporting System (WISQARS) leading causes of death reports Accessed October 20, 2021 <https://www.cdc.gov/injury/wisqars/LeadingCauses.html>.
- Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, & Bassett MT (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet*, 389(10077), 1453–1463.
- Jones C (2017). Systems of power, axes of inequity: Parallels, intersections, braiding the strands. *Medical Care*, 52(10), S71–S75.
- National Collaborating Centre for Determinants of Health. <https://nccdh.ca/glossary/entry/upstream-downstream>. Accessed November 4, 2021

EXAMPLES	CHALLENGES
<ul style="list-style-type: none">• Sharing ownership and decision-making power with community-level partners not only engaged the population groups of interest but empowered community leaders, partners, and members to identify and address the contributing factors that shape health and opportunities in their communities.• Programs (even complex programs) can be successfully implemented when partners can clearly articulate their goals and find common ground with win-win intervention strategies to yield the desired outcomes and be sustainable.• Going beyond the translation of educational materials and including more culturally sensitive and health literacy approaches is key to meaningful and lasting impacts in the communities of interest.	<ul style="list-style-type: none">• Partnerships are relatively new; therefore, IVP programs struggle to establish a complete or shared understanding of the shared risk and protective factor work.• There is low community participation in IVP programs due to limited access to the communities or populations of interest.• No alignment among funding sources to justify or support the collaboration with partners from other disciplines.

Fig. 1. Examples and Challenges from Incorporating Equity Approaches in IVP Strategies and Programs

EXAMPLES	CHALLENGES
<ul style="list-style-type: none">• Engage community-level partnerships to assist in the collection of primary data when conducting community assessments.• Analyze existing data using the population demographics and geographic variables to identify subpopulations and areas that are adversely and disproportionately impacted by the IVP topic of interest.• Engage community-level partners in interpreting data and information to ensure its relevance to the community and select strategies and interventions relevant to the community.	<ul style="list-style-type: none">• IVP datasets have limited demographic fields or variables that can be used for robust analyses to determine health disparities and inequities, which impacts the ability to analyze data and demonstrate statistical significance with confidence.• Some IVP programs do not have access to an injury epidemiologist or skilled staff to analyze and interpret equity-related data.

Fig. 2.
Examples and Challenges from Incorporating Equity Approaches Using IVP Data

EXAMPLES	CHALLENGES
<ul style="list-style-type: none">• Incorporate Diversity, Equity, and Inclusion (DEI) principles into the organization by changing hiring practices.• Organizations make a public commitment to advance health equity and align equity approaches into statewide work plans and funding opportunities.	<ul style="list-style-type: none">• Internal obstacles experienced to hire diverse staff with workforce skills, cultural competencies, or lived experience.

Fig. 3.
Examples and Challenges from Incorporating Equity Approaches in IVP Organizational Infrastructure