

The purpose of the following report (one of six) is to orient readers to the professional skills and potential contributions of Public Health Professionals for advancing Vision Zero. These reports were produced by the 2022 – 2023 NC Vision Zero Capstone team at UNC-Chapel Hill and are the result of a sector-specific landscape scan and interviews with experts in the field.

The Diverse Roles of Public Health Professionals in Achieving Vision Zero

Introduction

Vision Zero is a growing movement throughout the United States to eliminate all traffic-related deaths and serious injuries and to ensure the safe and equitable mobility for all road users, no matter how they get around. This approach to transportation safety requires collaboration among diverse groups of professionals, working in collaboration with communities to ensure transportation decision-making is evidence-driven and equitable across diverse road users. The diverse groups and coalitions needed to support Vision Zero implementation include local traffic planners, engineers, policy makers, public health professionals, emergency responders, community members, and other key partners.

The Public Health Sector

Public health is a diverse and wide-reaching sector that seeks to improve the health of communities by preventing and treating diseases and injuries, and promoting healthy behaviors. The field of public health works across national, state, regional, local, and tribal levels to monitor disease outbreaks, prevent sickness and injury, and provide insight into the social and economic factors that influence differences in health outcomes. Public health professionals promote health and wellness by implementing educational programs, recommending health policy and infrastructure, managing research and data collection, and engaging with communities and partners.

“And then we started framing it in light of well, ‘How many coworkers would it be okay to die of yours? How many people in your community would you be okay with? How many members of your family would you be okay with?’ And when you frame it like that, then I think Vision Zero makes a lot of sense, that really there aren’t an acceptable number of roadway fatalities.”

– Public Health Professional

Case Study #1

Led by a Special Projects Coordinator at the New York City, NY Department of Health Injury and Violence Prevention Program, the Vision Zero Data Working Group was designed to develop rigorous and thorough research and evaluation metrics for Vision Zero initiatives. This agenda serves as a systematic process to evaluate topics central to successful implementation.



Case Study #2

The City of Chicago, IL department of Public Health developed a plan to identify objectives and strategies to reach goals that maximize health and well-being through equitable access to resources and opportunities. The plan uses data and surveillance in several areas to address root determinants of health including built environment and transportation.



How Public Health Can Support Vision Zero

Leadership

- Establishing traffic-related injury and fatality prevention as priorities for local, city, county, and state health departments
- Framing roadway fatalities as a preventable public health crisis
- Facilitating cross-sector partnerships and building coalitions to address transportation safety

Resources

- Assisting partners with improving data analysis and surveillance, particularly through data linkage efforts
- Funding, conducting, and publishing research that studies traffic-related injury as a public health problem
- Connecting Vision Zero efforts with existing community-based partnerships

Skills and Knowledge

- Providing frameworks and guidance for prevention (e.g., Haddon matrix)
- Including an understanding of the role of the built environment as a risk factor for injuries and fatalities
- Strategic planning and systems-thinking

Research

- Investigating risk and protective factors for traffic injury and death
- Identifying systems-level factors (e.g., policies) that influence traffic-related injury and death
- Supporting the connection between research and practice among interdisciplinary groups working in transportation safety

Interventions and Programming

- Designing, implementing, and evaluating strategies or interventions to reduce traffic injury and death
- Funding and supporting upstream programs that reduce risk
- Developing evidence based communications (e.g., social marketing, social norms campaigns, etc.)

Data Accessibility

- Analyzing surveillance data to note trends, identify disparities across populations and geographies
- Identifying social determinants of health that may contribute to disparities in road fatalities
- Assessing community needs at a population level

Case Study #3

The San Francisco, CA Department of Public Health led a project to gather more holistic data on traffic injury and death that included a variety of surveillance systems that link injury data to transportation, road safety, mobility, and pedestrian factors. For example, the Transportation-related Injury Surveillance System monitors transportation-related injuries and deaths together with hospital, police, emergency service, and other data to inform Vision Zero efforts. The Surveillance System allows San Francisco Vision Zero partners to identify concentrated areas where severe and fatal transportation-related injuries occur.



Key Resources for Emergency Service Professionals Interested in Learning More About Vision Zero



- [Vision Zero Core Elements Summary](#)
- [Connecting Transportation and Health](#)
- [A Research Roadmap for Transportation and Public Health](#)
- [A Guide to Building Healthy Streets](#)

“City managers, people, commissioners, and council members...need to have an education in public health to understand what a walkable city is...what social and physical determinants of health are, why they're important, and what actually drives your public safety issues.”

– Public Health Professional



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