Preparing the Public Health Community for Autonomous Vehicles: A Resource Guide

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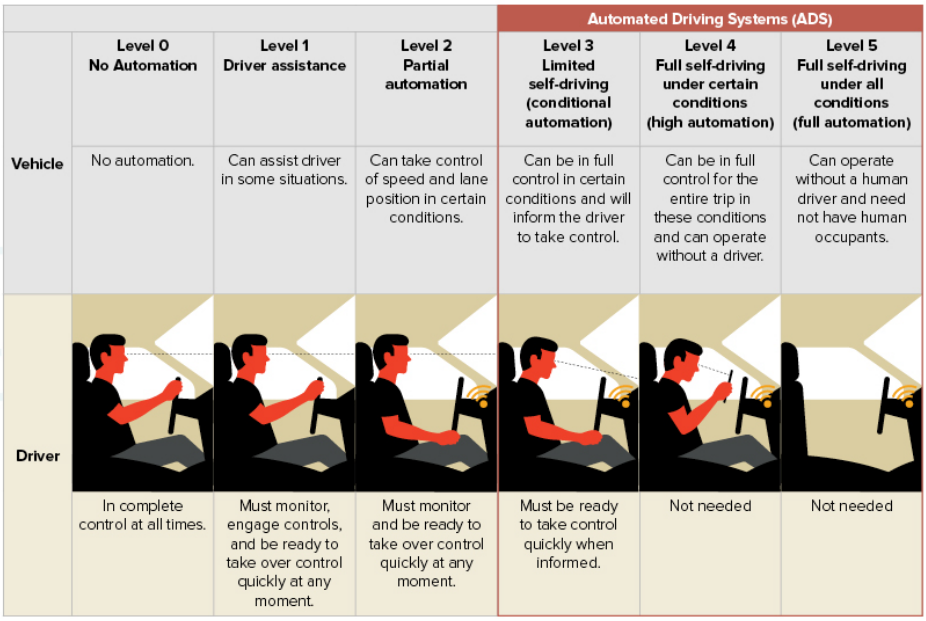
Introduction

Studies have found that 95% of the nearly 33,000 annual fatal motor vehicle crashes that occur in the US are caused by human driving errors. (National Highway Traffic Safety Administration 2018)[1] Autonomous vehicles are expected to mitigate some of these human errors. The goal of the Motor Vehicle National Peer Learning Team (MV-NPLT https://www.cdc.gov/injury/stateprograms/peer.html) is to prepare the public health community in the transition to these technologies. In this guide, we highlight current resources related to the introduction of new motor vehicle technologies such as autonomous vehicles (AV) and advanced driver assistance systems (ADAS) (see sidebar definitions) in preventing motor vehicle crashes.

Levels of Automation

From the Governors Highway Safety Association (GHSA)



Defining Key Terms:

Automated or Autonomous Vehicle Systems are equipped to sense the driving environment and are able to navigate with reduced or no driver input using a variety of technologies called ***advanced driver assistance systems (ADAS)***. There are six levels of automation ranging from full driver control of braking, steering, etc. (Level 0) to systems that are fully autonomous in every environment that do not need any human monitoring or engagement (Level 5).

Connected Vehicle (CV) Technology exchange information between cars on the road (vehicle-to-vehicle [V2V]), between roadside infrastructure (vehicle-to-infrastructure [V2I]), and with the internet "Cloud." Connected vehicle technology can improve not only vehicle safety, but also vehicle efficiency and traffic congestion.

While autonomous and connected vehicle strategies are described separately above, there is considerable overlap in the control technologies and crash avoidance functionality of each.

Public health has made an important contribution to promoting motor vehicle safety and reducing crashes. The widespread embrace and use of seat belts and air bags are two such examples, achieved through the use of evidence-based strategies that prompted the acceptance, adoption, and implementation of new technologies and behaviors. Dr. James Hedlund of Highway Safety North has researched traffic safety for decades and identified six key issues on which public health can exert its influence to reduce motor vehicle crash fatalities: data and surveillance, evaluation, education, emergency response, legislation and policy, and funding

[1] Hendricks, D. L., Fell, J.C., Freedman, M. The Relative Frequency of Unsafe Driving Acts in Serious Traffic Crashes: Summary Technical Report https://one.nhtsa.gov/people/injury/research/UDAshortrpt/index.html

allocation[2]. Addressing each of these issues through a public health lens – discretely and collectively – offers important contributions to the process and landscape of integrating automated systems to reduce motor vehicle crashes, injuries, and fatalities. For example, public response to the concept of exciting new technologies such as driverless motor vehicles, has overall been positive and supportive of the integration of these systems. While most of the public is unaware of the difference between autonomous (vehicles able to sense and respond to surroundings, with an expectation of human driver interaction with the vehicle) and driverless vehicles (vehicles operating at SAE level 5 without input of human driver, possibly without human passengers)[3], the recent fatalities involving autonomous motor vehicles could quickly decrease the trust in and use of either technology. Use of a public health approach to educating the public to increase awareness of these systems and their capabilities and limitations, could result in broad public support for their investment, uptake and correct use. The MV-NPLT has identified a number of critical topics on the impacts, unintended consequences, and safety features of motor vehicle technologies helpful for policymakers and legislative mandates, reviewed in this guide.

The purpose of this resource guide is to help local and state injury prevention programs, in partnership with their local or state autonomous vehicle safety groups and highway and transportation safety partners, respond to the introduction of and transition to advanced technologies into the motor vehicle fleet. Additionally, this guide provides resources to promote equity and reduce disparities in access to ADAS and AV among key populations (e.g. teen drivers, residents of urban and rural communities, individuals of lower socio-economic status, and/or individuals more likely to operate older vehicles[4]). This guide contains links to national organizations, prevention strategies and programs, data, research studies, reports, and information on policy and legislation that address ADAS and AV. The following sections provide information about resources for helping public health practitioners and their partners advance the adoption of life-saving motor vehicle technologies. The resources included in this guide are not meant to be comprehensive nor are the listings intended as endorsements.

[2] Hedlund, J. "Looming on the Horizon: Autonomous Vehicles", January 19, 2018 Listening and Learning Session webinar to MV-NPLT Core Team.

[3] Is there a Difference Between Driverless and Autonomous Vehicles? https://chryslercapital.com/blog/is-there-a-difference-between-driverless-and-autonomous-vehicles Retrieved 7/15/2020

[4] Y. Guo *et al*. A systematic overview of transportation equity in terms of accessibility, traffic emissions, and safety outcomes: From conventional to emerging technologies. Transportation Research Interdisciplinary Perspectives, 4, (2020), https://doi.org/10.1016/j.trip.2020.100091, retrieved 6/30/2020

Social Equity and Autonomous Vehicles

The CDC defines health equity as the opportunity for every person to "be as healthy as possible" [5] and describes health disparities as the "preventable differences in the burden of disease, injury, violence, or in opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other population groups, and communities."[6] Unfortunately, disparities in access, community and transportation system design, motor vehicle pollution, and the consequences of motor vehicle crashes persist despite efforts to identify and implement motor vehicle injury prevention best practices.

> *"A future with shared, electric autonomous vehicles holds many promises. But without an intentional focus on equity, it may exacerbate existing barriers and increase inequality."*
>
> *Can We Advance Social Equity with Shared, Autonomous and Electric Vehicles?* Institute of Transportation Studies at the University of California (2017)

These disparities are experienced by multiple populations: teen and novice drivers, low-income residents, residents of urban and rural communities, racial/ethnic minority populations, children, -- people with disabilities, people with limited access to transportation, and older adults. Such disadvantages are rooted in systematic and/or historical and contemporary public policies, institutional practices, and social norms that adversely affect the economic and social conditions in the places where people live, learn, work, and play (i.e. social determinants of health). For example, novice and teen drivers and low-income residents are less likely to have access to vehicles with advanced safety features due to the cost of those vehicles. Many urban and rural communities, and those with predominantly minority racial/ethnic (e.g. African American, Latinx, indigenous) or immigrant populations often lack the infrastructure or design that supports AV testing or use. Urban communities often also suffer the health and environmental consequences of exhaust emissions from highway and transportation design. Such policies, practices, and social norms must be addressed to achieve health equity.

For the introduction of ADAS and AV technology to lead to rapid and widespread reductions in motor vehicle crashes, injuries, and fatalities, it is critical for all populations to encounter minimal or no barriers to access, use, and benefits. However, such prioritization will likely require use of incentives to ensure early attention to address current or historical inequities. Working in partnership, public health practitioners, vehicle manufacturers, researchers, transportation/highway policy makers and advocates can share a focus on actions that have potential to increase health equity and reduce motor vehicle crash, injury, and fatality burdens borne by disadvantaged populations.

Further Reading on Equity and ADAS/AV

Autonomous Vehicle Heaven or Hell? Creating a Transportation Revolution That Benefits All | Greenlining Institute (2019)

[5] CDC Office of Minority Health and Health Equity. https://www.cdc.gov/healthequity/index.html
[6] Community Health and Program Services (CHAPS): Health Disparities among Racial/Ethnic Populations. https://www.cdc.gov/healthyyouth/disparities/

http://Greenlining.Org/Publications/2019/Autonomous-Vehicle-Heaven-Or-Hell-Creating-A-Transportation-Revolution-That-Benefits-All/

Can We Advance Social Equity with Shared, Autonomous, and Electric Vehicles? | Institute of Transportation Studies at the University of California (2017)
https://3rev.ucdavis.edu/sites/g/files/dgvnsk6431/files/files/page/3R.Equity.Indesign.Final_.pdf

Equity | US Department of Transportation (2013)
https://www.transportation.gov/mission/health/equity

Holding the keys to health? A scoping study of the population health impacts of automated vehicles |BMC Public Health (2019)
https://doi.org/10.1186/s12889-019-7580-9

Social Equity Considerations in the New Age of Transportation: Electric, Automated, and Shared Mobility | Journal of Science Policy & Governance (2018)
https://www.sciencepolicyjournal.org/uploads/5/4/3/4/5434385/fleming.pdf

Transportation Equity, Health, and Aging: A Novel Approach to Healthy Longevity with Benefits across the Life Span National Academy of Medicine (2019)
https://nam.edu/transportation-equity-health-and-aging-a-novel-approach-to-healthy-longevity-with-benefits-across-the-life-span/

Motor Vehicle National Peer Learning Team Webinar Series

Between August 2018 and February 2020, the MV-NPLT Core Team developed and hosted a six-session webinar series exploring several issues surrounding the uptake of evidence-based technologies, including practical guidance and steps partners can take towards conversion of the motor vehicle fleet. Webinars were open to anyone interested, and broadly advertised. A list of the webinars, presenters and a description of the webinar content, with links to webinar recordings and resources is below.

Webinar 1: ***Building the Frame: Exploring the Role of Public Health in New Technologies for Motor Vehicle Safety*:**

Presenters: Rebekah Thomas, Massachusetts Department of Public Health Director of Injury Prevention and Control and MV-NPLT Core Team member; and Dr. James Hedlund, Principal of Highway Safety North.

Rebekah Thomas's presentation, **'MV-NPLT Phase 1 Learnings: Systems Surrounding AV Technologies'** reviewed values and key learnings of the MV-NPLT Core Team from initial presentations and research on technology-driven safety features, efforts to develop a systems map of issues impacting fleet infiltration and driver adoption of AV, and the complexity of the process. Dr. Hedlund's presentation, '**Public Health Role in Automated Vehicles'** provided a context of the potential impact of AV and the current status of AV development and challenges. Dr. Hedlund also provided recommendations for public health professionals and policy makers of topics on which the successes of public health can serve to address challenges to the development, integration and adoption of AV that will lead to rapid reductions in motor vehicle crashes, injuries and fatalities.

Recording Link: http://edc.adobeconnect.com/pe8zht6ua1wg/

Webinar 2: ***Setting the GPS: Incentivizing Widespread Use of Motor Vehicle Safety Technologies***:

Presenters: Dr. Jessica Jermakian of Insurance Institute for Highway Safety; Dr. Jeffrey Michaels and Dr. Johnathon P. Ehsani of the Johns Hopkins Bloomberg School of Public Health; and MV-NPLT Core Team member Dr. Rebecca Spicer, Senior Research Scientist at Impact Research.

Dr. Spicer's presentation '**Emerging Technologies for Driver Assistance'** provided context for the session by reviewing the current state of advanced driver assistance systems and several of the related technological and humanistic system influencers anticipated to impact the speed and acceptance of motor vehicle safety technologies. Dr. Jermakian's presentation '**Vehicle technology and a data-driven approach to consumer information programs'** discussed the need to balance the promise of new technology with data-driven evaluation of real world benefits, and the role of non-regulatory programs in helping consumers identify effective safety technologies and incentivizing vehicle manufacturers to fit effective technologies to vehicles. During their presentation, '**Steering the deployment of automated mobility to provide safe and equitable transportation,'** Dr. Ehsani and Dr. Michael discussed factors affecting the deployment of motor vehicle technologies, the potential widespread benefit of these new technologies and services on health disparities, and reviewed system level influences of public health to more fully and quickly address the development and deployment of automation technologies.

Recording Link: http://edc.adobeconnect.com/pzfpycd8p3qg

Webinar 3: ***Convening Stakeholders: Bringing a Public Health Perspective to the Table***:

Presenters: Jane Terry of the National Safety Council; Dr. Eric Jackson, of the Connecticut Transportation Safety Research Center and University of Connecticut; and MV-NPLT Core Team member Dr. Kevin Borrup of the Connecticut Children's Medical Center.

Dr. Borrup's presentation '**Perspectives on Autonomous Vehicles'** set the tone by noting the level of mistrust and questions about AV safety by the public, highlighting the opportunities and role public health practitioners can and should play in promoting understanding and uptake of these AV technologies, without overselling the benefits. Dr. Jackson reviewed the various levels of technologies with ADAS, benefits and current challenges of ADAS, and how Connecticut is working to engage key populations in discussions and ongoing research. Ms. Terry's presentation, '**My Car Just Beeped at Me—Now what do I do?**' highlighted the work of the National Safety Council on empowering driver understanding of vehicle technologies as well as the collaborative discussions to address the disparate language and standards within development of ADAS and AV.

Recording Link: http://edc.adobeconnect.com/phfysuf1d64c/.

Webinar 4: ***Viewing the Dashboard: AV Tracking, Surveillance and Data – What's needed?***

Presenters: Dr. Thomas Dingus, Director, Virginia Tech Transportation Institute; Dr. Kristin Poland, Deputy Director, Office of Highway Safety, National Transportation Safety Board

(NTSB); and MV-NPLT Core Team member Dr. Joyce Pressley, Associate Professor of Epidemiology and Health Policy and Management at Columbia University.
As moderator, Dr. Pressley's presentation, **'Public Health Surveillance: Past, Present and Future,'** reviewed current and needed surveillance data on motor vehicle crashes and how the advent of ADAS and AV systems will exponentially expand the available data, and the expertise required by crash investigators for analysis and development of advanced technologies. Dr. Dingus's presentation **'Deploying Safe, Robust, and Reliable AV Technologies: What's Next?'** discussed the reality of automated/autonomous vehicle deployment occurring over a more extended timeframe than currently being predicted, and that this pre-deployment period is critical to developing broad and objective data derived from case studies and naturalistic driving studies. Dr. Poland's presentation, **'Crashes Involving Automated Vehicle Systems,'** reviewed NTSB conclusions and recommendations from several crash investigations involving automated vehicles, revealing several of the unique challenges associated with the design and deployment of these advanced systems.

Recording Link: http://edc.adobeconnect.com/p6p63w4lvo9j/

Webinar 5: ***Where the Rubber Meets the Road: Strategies for Educating and Engaging the Public***

Presenters: Rachel Sturm, Manager of Traffic Safety Research & Analysis, and Lee Howell, State Relations Manager, American Automobile Association (AAA); Brad Stertz, Director, Audi Government Affairs and Co-Chair of PAVE Campaign (Partners for Automated Vehicle Education); and MV-NPLT Core Team member Sharon Gilmartin, Deputy Director, Safe States Alliance.

Moderator Sharon Gilmartin launched the session by reviewing the historical and current public understanding and expectations of AV, and balancing technology driven advances by addressing the risk and protective factors that still contribute to most motor vehicle crashes. Rachel Sturm discussed AAA's research on public attitudes towards ADAS (Advanced Driver Assistance Systems) and autonomous vehicles and recommendations for how auto manufacturers can increase public acceptance with greater attention to how systems are promoted. Lee Howell shared several recommendations for manufacturers, insurers, and policymakers for communicating use of ADAS and AV to meet shared safety goals. Brad Stertz reviewed the work of manufacturers to address mobility and equity through engineering design, and how broad alliances such as the PAVE Campaign can address public trust.

Recording Link: http://edc.adobeconnect.com/prh8c1dpzfdq/

Webinar 6: ***Mapping the Future: Reviewing our Strategic Approach***

Presenters: Russ Martin, Director of Policy and Government Relations, Governors Highway Safety Association (GHSA); David Strickland, Democratic Staff Director, U.S. Senate Committee on Commerce, Science and Transportation; Kevin Ro, Director, Technical and Regulatory Affairs, Toyota Motor North America, Inc.; and MV-NPLT Core Team member Kristin Kingsley, KKingsley Consulting: Auto Safety Strategies.
Moderator Kristin Kingsley led this session as a panel discussion, focusing on current and future opportunities as identified by manufacturers and policy makers for emerging technologies to reduce motor vehicle injuries and fatalities, and how each of their

organizations are working to overcome barriers to deployment. Panelists reviewed both the current state and public perceptions on the state of AV technology, the impact and phasing of regulations on innovation and deployment, how and why to speed testing and deployment, and shared insights on the potential future of mobility.
Recording Link: http://edc.adobeconnect.com/p7m6ei91hjpb/

Data and Surveillance

Data and surveillance are essential for public health practitioners and their partners to assess the impact of ADAS and AV on motor vehicle safety. Without identification of outcome indicators, data sources and broad sharing of crash data, public health practitioners will not be able to determine the effect of ADAS and AV on motor-vehicle related fatalities. The following information is intended to help orient practitioners to data considerations and data sources related to ADAS/AV and MV crashes.

CDC LINCS Guide: Linking Information for Nonfatal Crash Surveillance | CDC
https://www.cdc.gov/motorvehiclesafety/linkage/index.html

CDC WISQARS (Web-based Injury Statistics Query and Reporting System) | CDC
https://www.cdc.gov/injury/wisqars/index.html

CDC WONDER (Wide-ranging ONline Data for Epidemiologic Research) Multiple Cause of Death Data (MCOD) | CDC
MCOD https://wonder.cdc.gov/mcd-icd10.html

Crashworthiness Data System (CDS) | NHTSA
https://www.nhtsa.gov/national-automotive-sampling-system-nass/crashworthiness-data-system

Fatality Analysis Reporting System (FARS) |NHTSA
https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars

General Estimates System (GES) | NHTSA
https://www.nhtsa.gov/national-automotive-sampling-system-nass/nass-general-estimates-system

National Center for Statistics and Analysis (NCSA) | NHTSA
NCSA Overview
https://www.nhtsa.gov/research-data/national-center-statistics-and-analysis-ncsa

NCSA Resources
https://cdan.nhtsa.gov/

National Emergency Medical Services Information System (NEMSIS) |NHTSA
https://nemsis.org/

Policy and Legislation

There are a host of legislative and policy considerations for local, state and regional decision makers. The following resources highlight policy issues for deliberation - from promoting AV testing to determining mandates, exceptions to current legislation, and public support or political will.

Governor's Highway Safety Association (GHSA)
https://www.ghsa.org

Automated Vehicle Safety Expert Panel: Engaging Drivers and Law Enforcement
https://www.ghsa.org/resources/AV19

Preparing for Automated Vehicles: Traffic Safety Issues for States
http://ghsa.org/resources/AutomatedVehicles18

National Conference of State Legislatures | NCSL
https://www.ncsl.org/

Autonomous Vehicles State Bill Tracking Database

https://www.ncsl.org/research/transportation/autonomous-vehicles-legislative-database.aspx

Legislative Brief: Crafting Inclusive Autonomous Vehicle Policies

https://www.ncsl.org/research/transportation/crafting-inclusive-autonomous-vehicle-policies.aspx

Autonomous Vehicles | Self-Driving Vehicles Enacted Legislation

https://www.ncsl.org/research/transportation/autonomous-vehicles-self-driving-vehicles-enacted-legislation.aspx

National Governors Association (NGA)
https://www.nga.org

Governors Staying Ahead of the Transportation Innovation Curve: A Policy Roadmap for States | NGA

https://www.nga.org/wp-content/uploads/2018/07/Transportation-Innovation-Roadmap-Final-Hi-Res-for-Posting-Online.pdf

RAND Corporation
https://www.rand.org/

Autonomous Vehicle Technology: A Guide for Policymakers

https://www.rand.org/pubs/research_reports/RR443-2.html

Organizations and Websites

Organizations and websites listed below include a partial list of presenters and partners of the MV-NPLT modeling a public health approach to the adoption and widespread acceptance of AV technologies.

American Automobile Association (AAA) AAA is a federation of affiliated automobile clubs in the United States and Canada, providing research and member services.
http://www.aaa.com

AAA Foundation for Traffic Safety is a non-profit research and education organization, focused on traffic safety and the reduction of crashes and injuries.
https://aaafoundation.org/

Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control (NCIPC) "works to understand exactly how injury and violence impact all of us and what we can do to prevent it." CDC's Injury Center works on many injury and violence topics, including motor vehicle safety. NCIPC works to reduce injury and death due to motor vehicle crashes and promote safe travel.
https://www.cdc.gov/injury/index.html

CDC's Motor Vehicle Safety Webpage
https://www.cdc.gov/motorvehiclesafety/

Governors Highway Safety Association (GHSA) is the nonprofit association of US state and territory highway safety offices implementing federally funded programs to promote motor vehicle safety behavioral strategies and issues.
http://ghsa.org

Insurance Institute for Highway Safety (IIHS) is a non-profit education and scientific organization dedicated to the reduction of personal and economic insurance losses (property costs, injuries and deaths) due to motor vehicle crashes. The Highway Loss Data Institute (HLDI), which publishes insurance loss rates of auto and motorcycle models on American and Canadian roads, is part of IIHS.
https://www.iihs.org/

National Highway Traffic Safety Administration (NHTSA) NHTSA is the federal agency within the Department of Transportation responsible for ensuring safety on American highways. NHTSA's mission is to 'save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement'.
https://www.nhtsa.gov/

National Safety Council (NSC) the NSC's mission is to eliminates preventable deaths at work, in homes and communities, and on the road through leadership, research, education and advocacy. NSC leads the My Car Does What? and The Road to Zero national safety campaigns.
https://www.nsc.org/

National Transportation Safety Board (NTSB) is the independent federal agency legislatively charged with investigation of major transportation accidents affecting rail, highway, marine, and pipeline systems, and all civil aviation accidents. In addition to investigations, the NTSB coordinates assistance to the victims of transportation accidents and their families, determines the probable

cause, and issues safety recommendations to mitigate similar disasters. The NTSB is also responsible for conducting transportation safety studies.
https://www.ntsb.gov/

Partners for Automated Vehicle Education (PAVE) Coalition is a coalition of automobile industry, nonprofit organizations, and academic institutions dedicated to educating policymakers and the public about automated vehicles to ensure widespread education on the current facts and future state of vehicle technology, and the potential benefits.
https://pavecampaign.org/

@PAVECampaign https://twitter.com/pavecampaign?lang=en

Safe States Alliance is a national non-profit organization and association of public health professionals focused on strengthening the practice of injury and violence prevention.
https://www.safestates.org/

Reports, Publications and Articles

There is frequent and rapid development, testing and research of AV/CV capabilities and perceptions. The resources listed below include seminal perspectives on driver and passenger safety, innovation and the measuring the impact of AV.

Are parents ready to use autonomous vehicles to transport children? Concerns and safety features| Journal of Safety Research (2020)
Lee YC, Somer L, Lilly H
https://doi.org/10.1016/j.jsr.2019.12.025

Assessing the Long-term Effects of Autonomous Vehicles: A Speculative Approach |Transportation Research Procedia (2016)
Gruel W, Stanford JM
https://doi.org/10.1016/j.trpro.2016.05.003

Automated systems need stronger safeguards to keep drivers focused on the road | Insurance Institute for Highway Safety (2020)
https://www.iihs.org/news/detail/automated-systems-need-stronger-safeguards-to-keep-drivers-focused-on-the-road

Countermeasures that Work: A highway safety countermeasure guide for State Highway Safety Offices, Ninth Edition | National Highway Traffic Safety Administration (NHTSA) (2017)
https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812478_countermeasures-that-work-a-highway-safety-countermeasures-guide-.pdf

Estimating potential increases in travel with autonomous vehicles for the non-driving, elderly and people with travel-restrictive medical conditions |Transportation Research Part C: Emerging Technologies (2016)
https://doi.org/10.1016/j.trc.2016.09.003

Measuring Automated Vehicle Safety: Forging a Framework |RAND Corporation (2018)
Fraade-Blanar L, Blumenthal MS, Anderson JM, Kalra N
https://www.rand.org/pubs/research_reports/RR2662.html

Preparing for automated vehicles: Traffic Safety Issues for States| Governor's Highway Safety Association (GHSA) (2018)
https://www.ghsa.org/resources/AutomatedVehicles18 (Link includes webinar recording, slides, report and toolkit)

Strategies to Address Shared Risk and Protective Factors for Driver Safety | Safe States Alliance (2019)
https://cdn.ymaws.com/www.safestates.org/resource/resmgr/nhtsa_resource_document/NHTSA_BHWG_Recommendations_F.pdf

Wired at Birth: Childhood, Technology Engagement, and Travel Behavior | Journal of the Transportation Research Board (2018)
BouMjahed L, Mahmassani HS
https://doi.org/10.1177/0361198118798460

Prevention Programs and Resources

In addition to prevention of motor vehicle crashes and fatalities, organizations advance both AV and related transportation safety public health models. Below are a selected group of such resources.

Autonomous Vehicles Meet Human Drivers: Traffic Safety Issues for States | Governors Highway Safety Association
http://ghsa.org/resources/spotlight-av17

Connecticut Transportation Safety Research Center Northeast Connected & Automated Vehicles Summit| NECAV (2019)
https://necavsummit.com/

MyCarDoesWhat? |National Safety Council
https://mycardoeswhat.org/

Road to Zero |National Safety Council
https://www.nsc.org/road-safety/get-involved/road-to-zero

Smart DriverTEK[SM] online workshop |AARP
https://campaigns.aarp.org/aarp-smart-drivertek/?cmp=RDRCT-ADS-SMDTEK-0-30917?intcmp=DC-AUTO-LL3-SMC

The (Long) Road to Self-Driving Cars |AARP
https://www.aarp.org/auto/trends-lifestyle/info-2018/self-driving-cars.html

About the Motor Vehicle National Peer Learning Team (MV-NPLT)

The Motor Vehicle National Peer Learning Core Team (MV-NPLT) was formed in 2016 as a component of the CDC-funded Regional Network Coordinating Organization (RNCO; Regions 1 and 2). The Core Team includes injury prevention professionals, researchers, engineers, and traffic safety experts. The purpose of the MV-NPLT is to promote a public health approach to the acceptance and integration of automated safety features that can rapidly reduce automobile crash injuries and fatalities and decrease crash disparities. The MV-NPLT Core Team believes that public health practitioners play an important role in increasing the acceptance and use of life-saving motor-vehicle technologies by understanding the systems that facilitate or impede the uptake of new safety technologies.

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