



## Preventing Injury and Death Due To Motor Vehicle Crashes: Strategies for the States

### Executive Summary

Motor vehicle crashes take an enormous toll in the United States. More than 37,000 Americans were killed in motor vehicle crashes in 2008. This represents an average of 102 deaths every day – or one every 14 minutes. An additional 2.3 million Americans are injured in motor vehicle collisions every year.<sup>i</sup> The human and emotional toll due to these tragedies includes 230.6 billion dollars (as of 2001) in health care costs, lost wages, property damages, travel delays, and legal and administrative fees.

To address this issue, on May 11, 2010 the Association of State and Territorial Health Officials (ASTHO) and The Center for Disease Control and Prevention (CDC), National Center of Injury Prevention and Control (NCIPC), convened multiple stakeholders including health and transportation officials to discuss how they can join forces to decrease preventable injuries and deaths due to motor vehicle crashes. The meeting, *Addressing a Winnable Battle: Transportation and Public Health Officials Join Forces to Decrease Preventable Injuries and Deaths Due to Motor Vehicle Crashes*, reflected a commitment by ASTHO and NCIPC to urge states to act quickly and implement evidence-based interventions that prevent injuries and death due to motor vehicle crashes.<sup>ii</sup> This focused work has been characterized as a “winnable battle” by Dr. Thomas Frieden because interventions are available to the states that offer measurable impacts in reducing death over a relatively short period of time.<sup>iii</sup>

The overarching recommendation to state health officials emanating from *Addressing a Winnable Battle* was to move their state toward a comprehensive culture of safety which would include adopting multiple strategies across the existing spectrum of available interventions. A number of policy options were discussed on May 11, 2010 and are described below in a more comprehensive fashion. These evidence-based policies have shown either proven results; or, research and experience have shown that they are promising practices. It is recommended that state health officials consider, prioritize and adopt these policies in a way that makes sense for their home state. As of October 2010 over 32 health officials pledged to focus on injury prevention and to make reducing injury and death due to motor vehicle crashes a priority area.

### Evidence-Based State Policies for Traffic Safety

An evidence-based policy supports decision making by providing the best available peer-reviewed evidence. Information systems are used systematically, program-planning frameworks are applied that often have a foundation in behavioral science theory, the community is engaged in assessment and decision making, sound evaluation is conducted, and what is learned is disseminated to key stakeholders and decision makers. Evidence-based policies, including laws and other interventions that are known to prevent injuries caused by motor vehicle crashes, are available to the states. If effectively implemented within a state’s political, systemic, and enforcement environment, these policies save lives.

The last 20 years have taught us a great deal about what works in motor-vehicle safety. Information on evidence-based interventions, including policies and laws that prevent motor vehicle-related deaths and injuries, can be found in *The Guide to Community Preventive Services* published by the CDC.<sup>iv</sup> The Guide relies upon data from systematic reviews which are formal processes used to identify relevant studies, assess their quality, and summarize the evidence. Additional publications offering a similar body of information have been published by the National Traffic Highway Traffic Safety Administration (*Countermeasures That Work*), the National Council of State Legislators, The Governor's Highway Safety Association, The University of North Carolina Highway Safety Research Center and others.

Although the toll of motor vehicle crashes is substantial, it does not represent an insurmountable problem. We know how to prevent these tragedies through technological and behavioral intervention and, through policies supporting these interventions. The impact of policies can be significant. For example:

- 4,000 lives could be saved each year if everyone used seat belts.
- 8,000-9,000 lives could be saved each year through attainable reductions in impaired driving.
- 175 lives could be saved each year with enhanced graduated driver's license policies. These policies could also prevent 350,000 nonfatal injuries.

Participants at Addressing a Winnable Battle discussed policies that:

- Were established to address the readiness/fitness of drivers, such as graduated driver's licensing and medical advisory boards.
- Are responsive to distracted, aggressive, and impaired drivers.
- Are responsive to the environment in which motor vehicle crashes occur, including seat belt use and child passenger safety; the environment where tertiary care is provided, such as trauma care and emergency medical services; and the state regulatory and educational environment in which policies are developed and implemented.
- Encourage collaboration between state departments of transportation and public health, including active participation by state health departments in the development and implementation of the state strategic highway planning process and collaboration on health impact assessments (HIA).

## Policies/Laws Established to Address Inexperienced and Medically at Risk Drivers

### ***Graduated Drivers Licensing Laws (GDL)<sup>v</sup>***

As of 2010, twelve percent (7,460) of drivers involved in fatal crashes are between the ages of 15 and 20 years. The elevated crash risk for beginning drivers is universal, and graduated drivers licensing laws have consistently proven effective in reducing such risk. Peer-reviewed evaluations of GDL's effectiveness in New Zealand, Canada, and the United States show that crashes involving new drivers have been reduced by 9% to 43%.<sup>vi</sup> Graduated licensing laws usually include three distinct levels of licensing.

- A learner stage in which a young person must be accompanied by an adult while driving
- An intermediate stage in which the teen may drive without adult supervision providing he or she observes some restrictions. This might include a restriction on the times of day that a teen can

drive (e.g. no driving at night except to or from work) and a restriction on the number of teen passengers that can be in a car with an intermediate-licensed driver

- Full licensure without restrictions after two years.

The AAA Foundation for Traffic Safety published a *Nationwide Review of Graduated Drivers Licensing* in February 2007 that stated the, “most restrictive GDLs are associated with reductions of 38% and 40% in fatal crashes and injury crashes of 16-year-old drivers.”

Forty-nine states have implemented some form of a GDL law. However, the laws vary greatly. Some do not meet the standards set forth by the Insurance Institute for Highway Safety’s standards for a “good” GDL law. Three places that have effective GDL laws include California, the District of Columbia, and Washington. In each of these jurisdictions the law requires the following.

- A learner stage with a mandatory holding period of at least six months.
- A learner stage with a minimum amount of supervised driving required.
- An intermediate stage with a nighttime driving restriction and passenger restrictions.

### ***Medical Advisory Boards Regulating Adult Drivers Who are Medically At Risk Drivers<sup>vii</sup>***

Like young novice drivers, older adult and other medically at risk drivers are disproportionately involved in motor-vehicle collisions. The physical frailties of old age make it more likely that an elderly driver will be seriously injured when involved in a collision.

Functional screening measures can help identify older and other medically at risk drivers who may be at high-risk of being at-fault in crashes before those crashes take place. Some states have created a medical review process that supports the preservation of driving as a privilege while identifying individuals who should no longer be operating a car. Only two-thirds of the states have medical advisory boards to review the driving ability of medically at risk adult drivers. Even in these states, many of these medical advisory boards review relatively few cases each year. Establishing an effective and equitable process to understand who should be allowed to operate a motor vehicle and who should not be allowed to drive is essential. The AAA Foundation provides recommendations pertaining to the formation of medical advisory boards.

## **Policies Pertaining to Distracted, Aggressive, and Impaired Drivers**

### ***Cell Phone and Texting Laws<sup>viii ix x xi</sup>***

According to an examination of driver distraction data recorded in NHTSA databases, in 2008 an estimated 2,346,000 people were injured in motor vehicle crashes. The number of people injured with reported distraction was estimated at 22% or 515,000 persons. A number of states have passed laws to prevent motor vehicle crashes caused by the distraction of hand-held communication devices while driving.

- As of 2010, eight states and the District of Columbia, and the Virgin Islands prohibit drivers from using handheld cell phones or similar devices while driving. Except in Maryland, all of these laws allow primary enforcement—that is, a police officer may cite a driver for using a handheld device without any other traffic offense taking place.

- Thirty states and the District of Columbia, and Guam ban text messaging for all drivers. All but four of these laws allow primary enforcement laws.
- Thirty-one states and the District of Columbia ban all cell phone use – including the use of ‘hands-free’ phones - by novice drivers (defined either by age or time since receiving license).
- School bus drivers in eighteen states and the District of Columbia may not use a cell phone when passengers are present on the bus. Two states restrict school bus drivers from texting while driving.
- Many states include a category for cell phone/electronic equipment distraction on police accident report forms.

While progress has been made, there is much left to do. In some states cell phone use is an offense only if a driver is also committing some other moving violation (other than speeding) when using a phone. Eleven localities plus the District of Columbia have passed their own distracted driving bans which may preempt state laws. Some states prohibit localities from enacting such laws.

### ***Speed Management Laws<sup>xii xiii</sup>***

In 2008, speeding was a contributing factor in thirty-one percent of all fatal crashes. According to the National Highway Safety Association (NHTSA) the economic cost to society as of 2008 was \$40.4 billion. Countermeasures to reduce aggressive driving and speeding available to the states include speed limits, aggressive driving laws, automated enforcement, high-visibility enforcement, penalties, diversion, and public information supporting enforcement. Broad public acceptance and active enforcement is needed to achieve maximum results.

### ***Impaired Driving<sup>xiv</sup>***

Alcohol-related crashes in the United States cost the public an estimated \$114.3 billion in 2000, including \$51.1 billion in monetary costs and an estimated \$63.2 billion in quality of life losses. People other than the drinking drivers paid \$71.6 billion of the alcohol-related crash bill.

Enacting effective impaired driving laws could save 8,000-9,000 lives each year. These laws include:

- Blood alcohol content per se laws<sup>1</sup> of at least 0.08 percent (federal law)
- Administrative license revocation
- Child endangerment (if convicted of impaired driving in a motor vehicle in which children were passengers)
- Dram shop laws<sup>2</sup>
- Hospital blood alcohol reporting
- Ignition interlocks
- Mandatory assessments
- Mandatory education

<sup>1</sup> Per se laws declare it illegal to drive a vehicle above a certain alcohol level, as measured by a blood or breath test.

<sup>2</sup> Dram shop laws govern the liability of taverns, liquor stores and other commercial establishments that serve alcoholic beverages.

- Penalties for refusing to take a blood alcohol content test
- Sobriety check points
- Social host liability
- Vehicular homicide (if a driver is impaired and causes a collision resulting in a death)

Table 1 indicates the number of states that have passed each of these laws.

Thirteen states have made ignition interlocks mandatory or highly incentivized for all convicted drunk drivers, even first-time offenders. California’s new interlock law covers all offenders in four counties, but these counties represent a significant portion of the population in the state. Forty-two states, the District of Columbia, and Guam have increased penalties for high BAC.

Underage drinking laws such as .02 or less blood alcohol levels for drivers under twenty-one years of age supported by zero tolerance enforcement, youth programs, and school education programs are effective.

Table 1. Impaired Driving Laws	
Name of Law	No. of States
.08 Per Se Law	50
Administrative License Revocation	46
Child Endangerment	41
Dram Shop	41
Hospital BAC Reporting	6
Ignition Interlock	47
Mandatory Assessments	42
Mandatory Education	40
Mandatory BAC	37
Penalties for Test Refusal	36
Sobriety Check Points	40
Social Host Liability	34
Vehicular Homicide	45
Underage Drinking Laws (.02)	34

## Policies Responsive to the Environment

### ***Seat Belt Laws<sup>xv</sup>***

Seat belt laws are divided into two categories: primary and secondary. Primary seat belt laws allow law enforcement officers to ticket a driver for not wearing a seat belt, without any other traffic offense taking place. Secondary seat belt laws state that law enforcement officers may issue a ticket for not wearing a seat belt only when there is another citable traffic infraction.

Recent statistics are as follows.

- Thirty-one states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands have primary seat belt laws.
- Eighteen states have secondary laws.
- New Hampshire has a primary child passenger safety law for children under the age of 18 years.

Passage of a primary seat belt law by every state, and consistent and efficient enforcement of these laws, would go a long way in reducing the toll of motor vehicle deaths and injuries.

## **Booster Seat Laws** <sup>xvi xvii xviii xix</sup>

In the United States during 2008, 968 children ages 14 years and younger died as occupants in motor vehicle crashes, and approximately 168,000 were injured. One CDC study found that, in one year, more than 618,000 children ages 0-12 rode in vehicles without the use of a child safety seat or booster seat or a seat belt at least some of the time. Child safety seats reduce the risk of death in passenger cars by 71% for infants, and by 54% for toddlers ages 1 to 4 years. There is strong evidence that child safety seat laws, safety seat distribution and education programs, community-wide education and enforcement campaigns, and incentive-plus-education programs are effective in increasing child safety seat use.


## **Policies for Trauma Facilities and Emergency Medical Services** <sup>xx xxi xxii xxiii</sup>

The reductions in motor vehicle injuries are largely due to vehicle design improvements and advances in emergency medical and trauma care. Because the number and distribution of trauma centers are very uneven across the nation, there is a large difference in access to trauma care from state to state. According to a study published in the *Journal of the American Medical Association* in 2005, approximately 46.7 million Americans have no access to a trauma center within an hour of their location. Most of these people live in rural areas. Sixty percent of all traffic fatalities occur on two lane rural roads. Many of these lives would be saved if trauma centers were available in underserved rural communities.

In general, emergency medical services (EMS) are woefully underfunded. A report of a survey published in January 2010 by the National Association of State Emergency Medical Services Officials clearly demonstrated that federal dollars for EMS were rapidly declining. The states that participated in this survey in both 2006 and 2009 experienced a 59 percent decline in the total amount of their EMS budget over this period. This loss is unprecedented and likely to impact the quality and quantity of emergency medical services available to the public. If treated at a level one trauma facility, a person's survival rate is increased by twenty-five percent. To locate trauma facilities nationwide the Centers for Disease Control and Prevention provides a mapping tool to the public.

The National EMS Information System (NEMSIS) was created to standardize the collection of pre-hospital data. The project is collecting state and local data that will be used to create a national database. There are currently twenty-three states submitting NEMSIS compliant data to the national database. All states have committed to eventually become NEMSIS compliant. The information created by this system will be invaluable in understanding how pre-hospital care can be improved to reduce the impact of injuries and save lives.

The type of emergency care provided to an injured person significantly impacts the patient's treatment outcome. When severely injured persons receive care at a Level 1 trauma center rather than a non-trauma center, they have a 25 percent reduction in mortality. However, it is not necessary to transport all or even many injured patients to such a high level of care; many patients with less severe injuries may be appropriately cared for at lower level trauma centers or community hospitals. Getting patients to the right place for their injuries not only ensures appropriate medical care is delivered to the patient in a timely fashion, but also maximizes the resources of the EMS and trauma system. The 2006 Guidelines for Field Triage of Injured Patients are designed to help local EMS providers get the right patient to the right place at the right time. Policies are needed that encourage local EMS providers to



use the 2006 Guidelines for Field Triage as the basis for their local transport and destination criteria for systems to implement the recommendations of the “Recommendations from the Expert Panel: Advanced Automatic Collision Notification and Triage of the Injured Patient.”

## Policies that Foster Collaboration between State Transportation and Health Departments and other Partners

Collaborations between state departments of transportation and health have proven to be a powerful force in addressing motor vehicle-related injuries. Expanding these coalitions to include other state stakeholders (sometimes in the form of a traffic safety commission) has also proved effective. In his remarks to *Addressing a Winnable Battle*, Larry Cohen, Executive Director of the Prevention Institute, listed a number of reasons why multidisciplinary collaborations are valuable. Multidisciplinary groups can:

- Identify common and divergent approaches to traffic safety.
- Take stock of individual and collective resources.
- Identify who (or what) is missing from the effort and engage additional partners.
- Forge comprehensive approaches and joint solutions to problems.
- Clarify how people from each discipline view and approach an issue.

Actively participating in the development and implementation of the state strategic highway safety planning process is one of the most effective activities these coalitions can initiate. Strategic highway safety planning is required for all states and territories by the federal government. This process helps create a shared vision, promotes a diverse network of partners, assists in identifying resources, supports allocation of funding to and alignment of traffic safety priorities, and promotes the achievement of state and national traffic safety goals. According to the American Association of State Highway and Transportation Officials (AASHTO) eighty percent of the states include a key state health partner in this process. AASHTO recommends that every state invite a representative from the state public health department to participate in the process. ASTHO and its members have a key role to play as a convener of multiple stakeholders.

Others who can play a valuable role in the state strategic highway planning process or other state-level coalitions include:

- State highway safety offices
- State motor vehicle administrations
- State police
- Federal Highway Administration regional offices
- National Highway Traffic Safety Administration regional offices
- Metropolitan planning organizations
- State office of emergency medical services



Collaboration between state transportation and health departments and other stakeholders in the use of health impact assessments can also play an important role in preventing motor-vehicle related injuries. This is a process that is used to assess the potential health impacts of a project, such as the building of a new highway connector, or a policy such as a gasoline tax. The steps in conducting a health impact assessment include the following.<sup>xxiv</sup>

- Identifying projects or policies for which an HIA would be useful
- Identifying which health impacts to assess
- Identifying which people may be affected and how they may be affected
- Suggesting changes to proposals for projects or policies to mitigate adverse health effects or promote positive health impacts
- Reporting the results to decision-makers and stakeholders
- Evaluating the effect of the HIA on the ultimate decision

### Supporting a Culture of Motor Vehicle Safety<sup>xxv</sup>

While policy is fundamental to decreasing deaths and injuries associated with motor vehicle crashes, it is only part of the answer. Policies are most effective when they take place within a culture that values motor vehicle safety. States can work to create such a culture. Washington, for example, has achieved a culture of safety by implementing a comprehensive policy approach. See Table 2 below for a summary of Washington’s plan.

**Table 2 - Washington State Comprehensive Plan to Create a Culture of Safety**

- Independent commission structure with broad representation from state and local agencies.
- Strength of partnerships among the state agencies and the governor.
- Data-driven, research-based planning and programming.
- Strong network of local community-based programs and resources which are assisted by the state agencies.
- Intensive legislative involvement and responsiveness to the WTSC and its member agencies.
- Champions in the legislature who delivered key safety initiatives.
- Strength of the House and Senate Transportation Committees in management of all transportation funding and support of public policy issues.
- A formal system of performance accountability to the governor, public, and legislature.
- An aggressive Target Zero goal prior to, and now within, the current strategic highway safety plan.



## Choosing a Winnable Strategy

As states choose and prioritize the policies they will pursue, they will require knowledge of the specific motor-vehicle-related data in their state as well as the political and cultural context in which policies can be successfully developed and implemented. State health agencies are uniquely positioned to support effective policy initiatives that will improve health outcomes. Dr. Frieden has encouraged policymakers to adhere to a conceptual framework called *The Health Impact Pyramid* which has five tiers including education approaches, clinical interventions, long lasting protective interventions, changing frameworks to make individuals default to healthy decisions and socio-economic factors. When an intervention touches all five tiers of the pyramid long-term success takes place.<sup>xxvi</sup>

At the May 11, 2010 meeting *Addressing a Winnable Battle* closed with a request from ASTHO's (2009-2010) President, Dr. Paul Halverson who asked state health officials to "study the data, assess their state, and consider at least one policy strategy that could lessen the burden of preventable injury in their home state." The outcome from the meeting resulted in a raised awareness of data driven evidence based policies; and, a diverse list of policy recommendations for the ASTHO membership discussed below.

If more states become specifically focused on implementing evidence-based interventions pertaining to injuries and deaths caused by motor vehicle-crashes, they should cease to be the leading cause of death for people ages 1-34 years. Policymaking pertaining to this topic area is a winnable battle and a valuable investment of time and resources for a worthy cause.

## Resources

AAA Foundation for Traffic Safety <http://www.aaafoundation.org/home/>  
Association of State Highway and Transportation Officials <http://www.transportation.org/>  
Governors Highway Safety Association <http://www.ghsa.org/>  
*Guide to Community Preventive Services* <http://www.thecommunityguide.org/>  
Health Impact Assessment, CDC <http://www.cdc.gov/healthyplaces/hia.htm>  
*A Highway Safety Countermeasure Guide for State Highway Safety Offices*  
National Association of State EMS Officials <http://www.nasemsd.org/>  
National Center for Injury Prevention and Control, CDC <http://www.cdc.gov/injury/index.html>  
National Conference of State Legislators <http://www.ncsl.org/>  
National Highway Traffic Safety Administration <http://www.nhtsa.gov/>  
UCLA Health Impact Assessment Clearinghouse Learning and Information Center  
<http://www.ph.ucla.edu/hs/hiaclhc/>.  
University of North Carolina Highway Safety Research Center <http://www.hsrb.unc.edu>  
<http://www.ghsa.org/html/publications/countermeasures/index.html>

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<sup>i</sup> Traffic Safety Facts Data Washington, DC: NHTSA. (2007) Retrieved 08-26-10 <http://www.nhtsa.gov>.

<sup>ii</sup> Halverson, P. (2010) *Addressing a Winnable Battle: Transportation and Public Health Officials Join Forces*. Presented at the meeting of ASTHO, Arlington, VA.

<sup>iii</sup> Frieden, T. (2010). A Framework for Public Health Action: The Health Impact Pyramid. *AJPH*. 100, 4.

<sup>iv</sup> Zaza, S., Briss, P. & Harris, K. (Eds.) (2005). *Guide to Preventative Services, What Works to Promote Health?* Oxford Univ. Press. New York, N.Y.

<sup>v</sup> Graduated Driver Licensing (GDL) Laws. (2010). Governor's Highway Safety Association. Retrieved 08-26-10 from <http://www.ghsa.org>.

<sup>vi</sup> Injury Prevention and Control, Motor Vehicle Safety. (2010). CDC. Retrieved 08-26-10 from <http://www.cdc.gov>.

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- vii Soderstrom, C. (2010) *Medical Fitness to Drive Maryland MVA's Medical Advisory Board Issues*. Presented at the meeting of ASTHO, Arlington, VA.
- viii An Examination of Driver Distraction as Recorded in NHTSA Databases. (2009). Retrieved 09-07-10 from <http://www.nrd.nhtsa.dot.gov1pubs1811216.pdf>.
- ix AAA Public Affairs. (August 26, 2010). Retrieved 09-07-10 from <http://www.aaapublicaffairs.com>.
- x Distraction.gov, Official U.S. Government website for Distracted Driving, U.S. DOT. (n.d.) Retrieved 09-07-10 from <http://www.distraction.gov/statelaws>.
- xi Governors Highway Safety Association "The States Voice in Highway Safety". (2010). Retrieved 09-07-10 from <http://www.ghsa.org>.
- xii Traffic Safety Facts Data Washington, DC: NHTSA. (2008) Retrieved 09-07-10 from <http://www.nhtsa.gov>.
- xiii *Countermeasures That Work: A Highway Countermeasures Guide for State Highway Safety Offices* Fifth Edition. (2010). Retrieved 09-07-10 from [www.ghsa.org](http://www.ghsa.org).
- xiv Impaired Driving in the United States Cost Fact Sheet. (2002). NHTSA. Retrieved 08-26-10 from <http://www.nhtsa.dot.gov>.
- xv Traffic Safety Facts Research Note, Seat Belt Use in 2009 – Overall Results. (Sept 2009). Retrieved 09-07-10 from <http://www-nrd.nhtsa.dot.gov/Pubs/811100.pdf>.
- xvi DOT (US), NHTSA. *Traffic Safety Facts 2008: Children*. Washington (DC): NHTSA; 2009. [cited 2010 August 2].
- xvii Greenspan AI, Dellinger AM, Chen J. "Restraint use and seating position among children less than 13 years of age: Is it still a problem?" *J Safety Research* 2010. 41: 183-185.
- xviii DOT (US), NHTSA, *Traffic Safety Facts 2008: Children*. Washington (DC): 2009. [cited 2010 August 2].
- xix Zaza, S, Sleet DA, Thompson RS, Sosin DM, Bolen JC, Task Force on Community Preventive Services. "Reviews of evidence regarding interventions to increase the use of child safety seats." *Am. J Prev Med* 2001; 21 (4S), 31-47.
- xx Blatt, A.J., Branas, C.C., Flanigan, M.C., MacKenzie, E.J., ReVelle, C.S., Schwab, C.W., Teter, H.M., Williams, J.C. (2005). "Access to Trauma Centers in the United States". *JAMA*. 293:2626-2633.
- xxi Blessing, S. (2010). "Status of State Emergency Medical Services Office Funding and Utilization of Section 402 and 408 Highway Safety Funding (Mono). NASEMSO.
- xxii "A National Evaluation of the Effect of Trauma-Care on Mortality", *NEJM* 2006;354:366-78.
- xxiii [www.cdc.gov/injuryresponse/aacn.html](http://www.cdc.gov/injuryresponse/aacn.html)
- xxiv CDC Healthy Places. (n.d.) CDC. Retrieved 08-26-10 from <http://www.cdc.gov>.
- xxv Creating a Traffic Safety Culture – A Case Study of Four Successful States, *Case Study Three: Washington*, Mercer Consulting Group LLC East Lansing, MI, June 2007.
- xxvi Frieden, T. (2010). A Framework for Public Health Action: The Health Impact Pyramid. *AJPH*. 100, 4.

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The Association of State and Territorial Health Officials is the national non-profit organization representing the state and territorial public health agencies of the United States, the U.S. territories, and the District of Columbia. ASTHO's members, the chief health officials in these jurisdictions, are dedicated to formulating and influencing sound public health policy, and assuring excellence in state-based public health practice.



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