

BUILDING SAFER STATES



SAFE STATES

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Core Components of
State Public Health Injury &
Violence Prevention Programs

About the Safe States Alliance

Established in 1993, the Safe States Alliance is a national non-profit organization and professional association whose mission is to strengthen the practice of injury and violence prevention. Safe States is the only national non-profit organization and professional association that represents the diverse and ever-expanding group of professionals who comprise the field of injury and violence prevention. Safe States Alliance engages in a variety of activities to advance the organization's mission, including:

- Increasing awareness of injury and violence throughout the lifespan as a public health problem;
- Enhancing the capacity of public health agencies and their partners to ensure effective injury and violence prevention programs by disseminating best practices, setting standards for surveillance, conducting program assessments, and facilitating peer-to-peer technical assistance;
- Providing educational opportunities, training, and professional development for those within the injury and violence prevention field;
- Collaborating with other national organizations and federal agencies to achieve shared goals;
- Advocating for public health policies designed to advance injury and violence prevention;
- Convening leaders and serving as the voice of injury and violence prevention programs within state health departments; and
- Representing the diverse professionals making up the injury and violence prevention field.

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Acknowledgments

This overview of effective state public health injury and violence prevention (IVP) programs relies on the wisdom and experience of those who know the most about these programs: the members of the Safe States Alliance.

In September 2012, a group of Safe States members and partners – including directors of state IVP programs – met to discuss developments that have occurred in the decade since the previous edition of this document, *Safe States, 2003 Edition*, was published. During the meeting, the group identified new content, challenges, and opportunities that became the outline for this document. As this document was drafted, Safe States members and partners participated in key informant interviews and provided examples of resources that illustrated the core components in action. The project team is deeply grateful to the Safe States members and partners who took the time to share both their successes and challenges and helped to make this report possible. These individuals are listed in Appendix A.

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Executive Summary

Injuries and Violence in the United States

Injuries and violence affect everyone – at every age, and in every community. Each year, 180,000 Americans lose their lives to injuries or violence, succumbing to the consequences of falls, car and bicycle crashes, homicides, suicides, unintentional poisonings, fires, and drownings. This means that almost every three minutes, another American dies from an injury – making injuries the leading cause of death for Americans under the age of 44, and the third leading cause of death for Americans overall.¹ In 2010 in the United States, injuries caused more deaths for people between the ages of 1 and 44 than infectious and non-communicable diseases combined.

Injuries and violence are not only lethal and disabling, but costly. In a single year, injuries will ultimately cost \$406 billion including lifetime medical care costs and lost productivity.² This ultimately translates into an annual cost of nearly \$1,303 for every individual living in the United States. Unfortunately, national and state investments in preventing violence and injuries – and their associated costs – are not commensurate with their burden. During the 2011 federal fiscal year, only about \$101 million was invested nationally in state public health injury and violence prevention programs, including funding from state, federal, and private funding sources. This amount resulted in an overall national average investment of only \$0.32 per person for state-level injury and violence prevention efforts.³

The lack of investment in injury and violence prevention (IVP) is frustrating to public health IVP professionals because these events are not inevitable. Injuries and violence – which can occur at every stage of life and in every community – can be prevented. A public health approach to understanding and intervening in the causes of injuries and violence can alter the behaviors and environments that keep us from living the safest lives possible.

Despite the significant imbalance between the burden of injuries and violence – as well as the lack of national, state, and local investments to prevent these events – those working at the state level can continue to enhance their efforts and strengthen the impact of their programs. The six core components of a state IVP program described in this document recognize the resource constraints under which state IVP programs operate, but also reflect the creativity, flexibility, and innovation state programs have used to strengthen and expand their work.

The Core Components

Defined by the Safe States Alliance, the core components are essential, foundational elements that describe IVP program capacity. They include:

Core Component #1: Build and Sustain a Solid, Stable Infrastructure

Whether a state IVP program is small or large, relatively new or well-established, it requires:

- A stable and supportive **organizational home** – typically, a state health department;
- **Core staff** that includes a director, an injury epidemiologist, and program staff capable of wearing many hats, including program planning and implementation, evaluation, partnership and coalition building, policy work, training and technical assistance, and communications;
- **Leaders** who can identify and make the most of complex challenges and opportunities despite an atmosphere of lean resources and support;
- **Planning capacity** and visibility that gives injury and violence prevention programs a place at the table when funding and other decisions are made; and
- **Funding** drawn from multiple sources and commensurate with the size of the problem.

Core Component #2: Collect, Analyze, and Disseminate Injury and Violence Data

The very foundation of public health decision-making is data. Like other public health entities, state IVP programs have always been data driven. The wide range of injury types and risk factors means that multiple data sources are required to develop a comprehensive and accurate picture of injury and violence trends.

Core Component #3: Select, Implement, and Evaluate Effective Program and Policy Strategies

Almost any IVP intervention reflects the idea that rates of injuries and violence yield to a combination of strategies geared to education and individual behavior change, as well as policies which aim to change environments, influence population-level behavior change, and make safer choices easier and more routine. Whether an intervention veers more toward the programmatic or the policy realm – or straddles both – it should: have evidence behind it, fit with desired outcomes and community characteristics; consider both risk and protective factors (factors that are associated with negative or positive health outcomes); and be evaluated to determine if it worked as intended.

Core Component #4: Engage Partners for Collaboration

The scope of injury topics and functions is so broad that no state program – no matter how large or well established – can or should successfully tackle them alone. State IVP programs find that collaboration and coordination with partners is essential to amplify their work and achieve health impact. Often collaboration occurs through one-on-one partnerships; however, state IVP programs also play an important convening role, and bring multiple partners together to work on a range of injury and violence prevention issues. Partnership activities can include: sharing data, involving partners in program planning, exchanging funds, collaborating on policy, or exchanging training and technical assistance. Often, partnerships yield general support for shared initiatives, but they become increasingly meaningful when resources – data, funding, training and staff – are shared or exchanged.

Core Component #5: Effectively Communicate Information to Key Stakeholders

Translating the implications and nuances of injury and violence prevention data into action is a stubbornly tough sell. As IVP programs become more and more lean and are forced to function with fewer full-time equivalents (FTEs)[†] for core functions such as epidemiology and evaluation, it is understandable that these programs may lack other skills, such as communications expertise. Nevertheless, communication skills – from using infographics to conducting media advocacy – are essential to effectively reach key audiences, including policy makers, partners, and the public.

Core Component #6: Training and Technical Assistance

State IVP programs face a dual training and technical assistance challenge: keeping their own skills and knowledge current, while also sharing their expertise with partners and other stakeholders (such as colleagues in local health departments, fire departments, hospitals, and other community settings). State IVP programs should identify or provide trainings and technical assistance for their staff and partners founded on the *Core Competencies for Injury and Violence Prevention*.

Conclusion

Given the unpredictable future of IVP programs and the state environments in which they operate, building the next generation of state IVP programs will require addressing the many challenges programs face, as well as taking advantage of new opportunities for creativity, innovation, and partnership.

It is our hope that this edition of *Building Safer States* will acknowledge the very real challenges programs currently face, while also generating renewed energy and enthusiasm for future IVP successes.

[†] Full-time equivalents (FTEs): The total number of hours worked by an individual employee divided by the total number of work hours in a full-time scheduled (defined as 40 hours per week).



Introduction

A baby's parents put her to sleep on her back, as they've learned from a Safe to Sleep campaign designed to prevent suffocation deaths in cribs — a leading cause of death among infants.

A registered nurse provides home visits to a young, first-time mother each week until her son's second birthday. During her visits, the nurse teaches the young mother essential parenting skills that empower her to protect her son from abuse and neglect.

A child falls while at a playground. Although bruised and startled, he avoids a more serious injury because a safer, impact-absorbing playground surface is required by local ordinances.

When a teen learns her friend has been mercilessly bullied at school – both physically and online – she provides a sympathetic ear, as well as a referral to suicide prevention hotline. Soon after, the teen rallies her peers to start a bullying prevention program and asks school officials to adopt a school-wide anti-bullying policy.

A group of young adults, out for a birthday celebration, designates a driver to ensure that no one drives under the influence. In the car, they all buckle up. After all – it's the law.

A former gang member approaches a group of young men to diffuse a potentially volatile conflict. Now dedicating his life to preventing firearm-related violence, he provides youth with education, guidance, and job leads – efforts that can help prevent the disease-like spread of violence in his community.

Before filling a prescription for a painkiller, a physician first registers the information using her state's prescription drug monitoring program. This program can help prevent prescription drug abuse — now responsible for nearly 15,000 deaths and 475,000 emergency department visits annually.

At a senior center, a group tries a new activity borrowed from an ancient tradition: tai chi. The slow, graceful movements that not only reduce stress but prevent falls, a leading cause of injury deaths and hospitalizations among those over 65.

As the examples above illustrate, injuries and violence can occur at any age and in any community. Yet, like other public health events, injuries and violence do not occur at random. They follow patterns that can be detected, interrupted, and ultimately prevented. Injury and violence prevention (IVP) professionals pursue every opportunity to anticipate injuries and violent events before they occur, so that these events never happen in the first place.

IVP efforts provide safety across the lifespan. When we are successful, we increase the chances that children and youth can grow into healthy adults and seniors who live to their fullest potential. Successful IVP interventions across the lifespan include those that keep people:

- Safe from **abuse and neglect** because their caregivers learned positive parenting skills;
- Protected from **drowning** because swimming pools were properly fenced;
- Safe in a **motor vehicle** because they were properly secured in a child passenger safety seat, wore a seat belt, or drove without drinking, texting, or being otherwise distracted;

- Protected from the consequences of repeated **concussions** and other sports injuries because of school policies and provider education;
- Safe from **fires** because they are living and working in buildings with functioning smoke alarms;
- Protected from **bullying, sexual assault, suicide, and homicide** because their communities implemented effective programs and policies using a public health approach, supported changes in societal norms, and created a culture of safety;
- Alert to signs of **prescription drug misuse and abuse** among their family members or co-workers because of education campaigns;
- Less likely to **fall** because their mobility has been strengthened and maintained; and
- Empowered to use important caregiving skills that keep seniors in their family safe from **elder maltreatment**.

When we succeed, we change expectations about what is possible. Given the decades of research and experience under our collective IVP belts, we have learned a great deal about what works to respond to these problems – and also what doesn't. Persistent rates of injuries and violence are often part of broader, interconnected, and complex problems that require sustained and multifaceted responses. We continue to develop, evaluate, and refine strategies that prevent injuries and deaths, and we have success stories and statistics to prove it.

Many dedicated practitioners, researchers, funders, evaluators, and advocates have worked together to help the field of injury and violence prevention mature and grow. While our work depends on strong alliances with federal, state, and local partners, this document presents current challenges and opportunities from the vantage point of state IVP program directors - those who hold comprehensive, "umbrella" responsibility for the entire spectrum of unintentional and intentional injury prevention at the state level. In this document - which provides a 10-year update of the Safe States core components - we present examples, resources, and strategies that will help IVP programs face and meet the many challenges and opportunities that await them in the next decade and beyond.

Purpose and Audience

Given that the core components were originally designed to define the capacity of state IVP programs, this document has been developed primarily for those involved in state-level IVP efforts – many of whom form the core membership of the Safe States Alliance. However, the applicability of the core components does not stop here. As foundational elements of capacity, the core components are useful to anyone working to enhance the effectiveness of their IVP programs, no matter where they may be. It is hoped this edition of *Building Safer States* will support the work of professionals, advocates, funders, researchers, elected officials, and the many other partners who are working to prevent injuries and violence.

Specific features of the core components presented here – and the challenges and opportunities related to them – were the subject of a group discussion among Safe States members (specifically the directors of state IVP programs) and partners held in September 2012. Participants in this discussion also provided ideas, tools, resources, and examples from their own experiences, which formed the core content of this edition.

Wherever possible, current or recent examples are included to illustrate how state IVP programs have made the most of the opportunities they have identified.

Another key source of information about state injury and violence prevention programs came from the *State of the States (SOTS)* report, a publication developed by the Safe States Alliance with financial support from the Centers for Disease Control and Prevention (CDC). SOTS is the only national assessment of capacity among state IVP programs and is organized based on the core components. Implemented every other year since 2005, the SOTS report illustrates trends in state IVP program capacity over time. Data from the 2011 SOTS survey and report are incorporated throughout this edition.

Finally, each section includes links to tools and resources for those interested in more detailed information than this summary can provide.

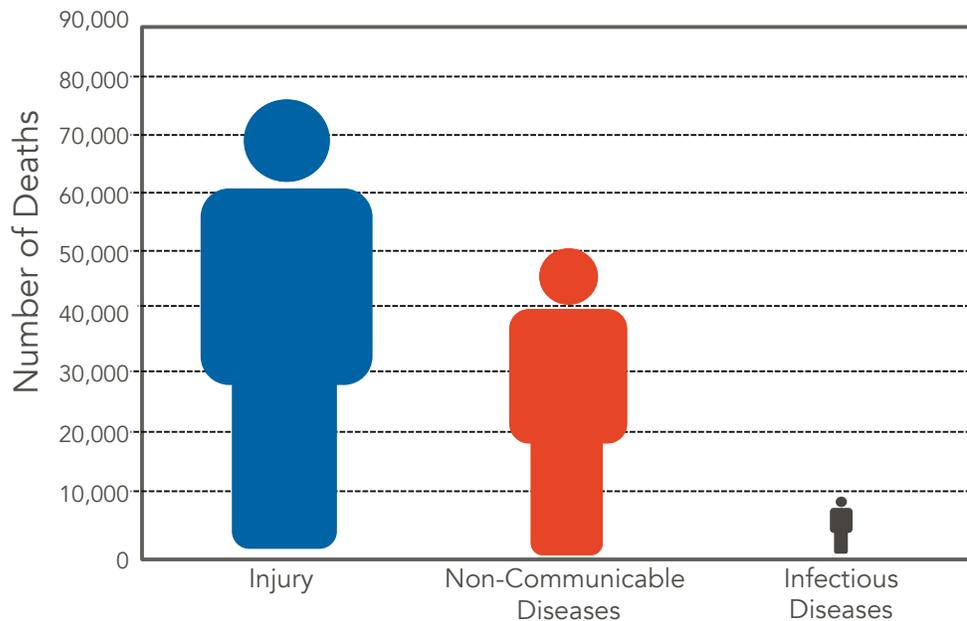
This combination of core component descriptions, examples from state IVP programs, and insights about opportunities and challenges is designed to provide a current snapshot of where state IVP programs find themselves today – and where they would like to move in the future.

The Burden of Injuries and Violence

Over successive decades, hundreds of thousands of fatal and non-fatal injuries have been prevented by the efforts of injury and violence prevention practitioners – both in the United States and around the world. Despite this progress, however, nearly 180,000 Americans still lose their lives to injuries or violence each year and succumb to falls, car and bicycle crashes, homicides, suicides, unintentional poisonings, fires, and drownings.

Every three minutes, another American dies from an injury, making injuries the leading cause of death for Americans ages 1-44 and the third leading cause of death for Americans overall.⁴ According to the Centers for Disease Control and Prevention (CDC), in 2010, injuries caused more deaths among people ages 1-44 than infectious and non-communicable diseases combined.

Figure 1:
Injury Deaths Compared to Other Leading Causes of Death for Persons Ages 1-44, United States, 2009



Note: Injury includes unintentional injury, homicide, suicide, legal intervention, and those of undetermined intent. Non-communicable diseases include cancer, cardiovascular, kidney, respiratory, liver, diabetes, and other diseases. Infectious diseases include HIV, influenza, pneumonia, tuberculosis, and other infectious diseases.

Data Source: National Vital Statistics System using CDC Wonder (<http://wonder.cdc.gov>).

Injuries are detrimental both physically and financially, particularly given the pain, suffering, and lifelong disability that many individuals must endure long after the event. Fifty million people – nearly one in five in the United States – are injured seriously enough each year to require medical treatment, with 29 million people seeking treatment in emergency departments (EDs) for their injuries.⁵

Year after year, injuries are responsible for \$406 billion in lifetime costs, driven by a combination of medical care costs and lost productivity.⁶ This ultimately translates into an annual cost of nearly \$1,303 for every individual living in the United States.

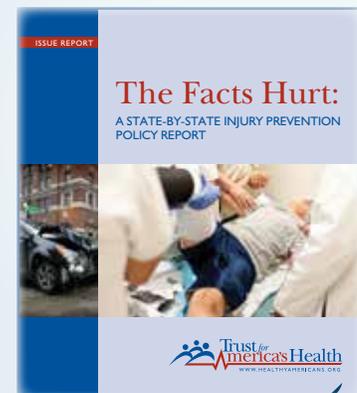
However, these nationwide statistics mask considerable variation across states. An issue report from the Trust for America's Health – *The Facts Hurt: A State-by-State Injury Prevention Policy Report* – notes that injury death rates range from 97.8 per 100,000 people in New Mexico to 36.1 per 100,000 in New Jersey. The report assessed each state in terms of 10 key policies that could be enacted to prevent injuries. According to the report's findings, only two states had 9 of the 10 policies in place. No state had enacted all 10 policies; twenty-one states had five or fewer policies in place.⁷

Injuries generate the second-highest medical costs among all preventable health issues, but only receive between 1.3% and 4.95% of all available funding from the CDC.⁸ While the CDC is the main source of federal funding for most state IVP programs, it only funds them at an average *per capita* rate of \$0.28.⁹ Even when other non-CDC sources are included, funding remains low for state-level injury and violence prevention efforts. Within the 2011 federal fiscal year, only about \$101.5 million was invested nationally in state public health IVP programs, including funding from state, federal, and private funding sources. This amount resulted in an overall national average investment of only \$0.32 per person for state-level injury and violence prevention efforts.¹⁰

Despite the significant imbalance between the burden of injuries and violence and the national, state, and local investments made to prevent these events, IVP professionals can continue to enhance their efforts and strengthen the impact of their programs. The six *Core Components* described in the following pages of this document recognize the resource constraints under which state IVP programs operate, but also reflect the creativity, flexibility, and innovation state programs have used to strengthen and expand their work.

The Facts Hurt

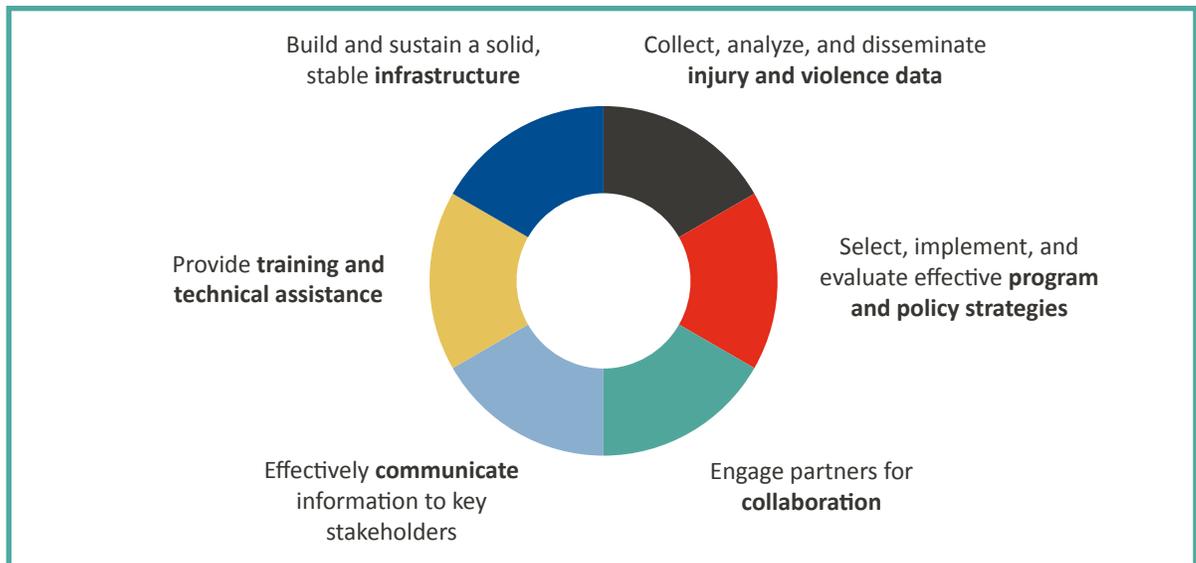
Download from the Trust for America's Health website at: healthyamericans.org/reports/injury12/





The Core Components

As fundamental elements that define IVP capacity, the “core components” reflect the evolution of state IVP programs over time and embody their efforts to continually become more sustainable and effective. With another decade of data and experience to draw upon since the core components were last updated, the Safe States Alliance has identified six core components of an effective state IVP program:



Build and Sustain a Solid, Stable Infrastructure

Whether a state IVP program is small or large, established or relatively new, it needs basic capacity and infrastructure to deliver on the potential that IVP interventions offer. Key elements of infrastructure include:

- Adequate staffing, including professionals skilled in epidemiology, program coordination, coalition building, evaluation, policy, and communications;
- The leadership and influence of an effective IVP program director; and
- The ability to carry out a variety of essential functions, including collecting and analyzing data, implementing programs, providing education to inform policy development, evaluating programs and policies, communicating with various audiences, developing partnerships, and securing funding.

Collect, Analyze, and Disseminate Injury and Violence Data

Like all areas of public health, injury and violence prevention is a data-driven field. State IVP programs must be able to access and use essential core data sets, as well as pursue and strengthen linkages to data sets maintained by local, state, regional, and national partners. State IVP programs must also support broader efforts to improve the quality and timeliness of injury-specific data. Finally, after being collected, data must be analyzed and disseminated to partners to advance prevention efforts and inform decision-makers.

Select, Implement, and Evaluate Effective Program and Policy Strategies

With limited resources for implementation and many options for interventions, state IVP programs are faced with important and often difficult choices about which strategies are most likely to be effective and yield improved outcomes within their state's unique context. To make these choices, state IVP programs must be able to use the best science and evidence available to select, implement, and evaluate policies and programs that can prevent injuries and mitigate their human and financial costs.

Engage Partners for Collaboration

Given the complex and multifaceted factors that contribute to injuries and violence, no state IVP program can be effective alone. State IVP programs play a crucial role in convening multiple partners to work collaboratively. However, to do so, state IVP programs work diligently to cultivate meaningful relationships with partners that share their prevention goals. This level of collaboration requires investing time, resources, and expertise in both building and maintaining partnerships and coalitions.

Effectively Communicate Information to Key Stakeholders

IVP programs have powerful and compelling stories to tell – but unfortunately, these stories often remain untold. The ability to regularly and effectively communicate with partners, decision makers, the media, the public, and those affected by injuries and violence is paramount. State IVP programs need storytellers and strong communicators within their programs to ensure that data, partnerships, and strategies garner the support they need to be sustained and successful.

Provide Training and Technical Assistance

IVP efforts encompass a vast array of topics, expertise, and functions. Therefore, having staff that are knowledgeable, multi-skilled, and cross-trained is essential for an IVP program to succeed. Therefore, state IVP programs need the ability to regularly support continuing education and training for their staff members. Furthermore, as a central hub for IVP-related information and activities, state IVP programs can also provide training and technical support to state and local professionals, students, and the general public. Given that many IVP professionals lack formal training in IVP or come from fields outside of public health, providing ongoing training for these individuals is critical. By sharing and exchanging training and technical assistance with key partners, IVP programs can boost their own capacity while also building the capacity of others.

Changes from Previous Versions of the Core Components

Two of these six components – communicating effectively with stakeholders and engaging partners for collaboration – were formerly embedded in the other components and were considered cross-cutting functions. However, Safe States members felt that these components were essential aspects of state IVP programs' work and warranted more visibility as distinct components.

Another change was to combine program and policy interventions into one section on strategies, rather than treating these as separate realms. In practice, there is considerable overlap between programs and policies, even though these approaches often require different types of expertise and evaluation. An effective IVP program finds ways to use these strategies together, which is why they are included as two important parts of one core component.

In the sections that follow, each core component is described in terms of its basic features, as well as the areas in which Safe States members have seen both challenges and opportunities.



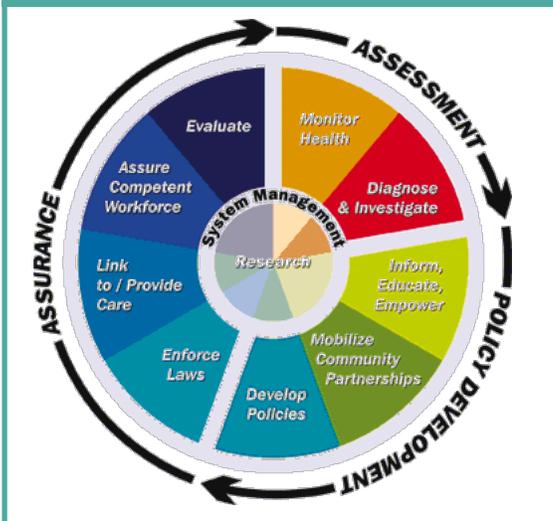
Core Component #1: Build and Sustain a Solid, Stable Infrastructure

What are the basic building blocks that a state IVP program needs to function effectively? Whether a program is small or large, relatively new or long established, state IVP programs need:

- A stable and supportive **organizational home** – typically, a state health department;
- **Core staff** that includes a director, an injury epidemiologist, and program staff capable of wearing many hats, including program planning and implementation, evaluation, partnership and coalition building, policy work, training and technical assistance, and communications;
- **Leaders** who can identify and make the most of complex challenges and opportunities despite an atmosphere of lean resources and support;
- **Planning capacity** and visibility that give IVP programs a place at the table when funding and other decisions are made; and
- **Stable funding** drawn from multiple sources and commensurate with the size of the problem.

Organizational Home: Under One Roof, Yet Lots of Movement

Figure 2:
10 Essential Public Health Services



Because of their mandate and sources of public health funding, most comprehensive state IVP programs are housed within state health departments. These government settings are both appropriate and critical for state IVP programs, as their efforts are part of the *10 Essential Public Health Services* (Figure 2) – public health activities that all communities should undertake.¹¹ For state IVP programs, these essential services range from monitoring the status of IVP issues statewide and mobilizing partners to address these issues to educating the public and developing policies and plans that support IVP efforts.

While health departments are natural settings for state IVP programs, this does not mean that a state IVP program's location is stable over time. State budget environments have led to downsizing, reorganizing, and streamlining across state governments in order to improve efficiency and reduce costs. These reorganizations have led to extensive changes for IVP programs: According to SOTS survey results, nearly half of state IVP programs moved from one organizational home to another within their state health departments at least once between 2005

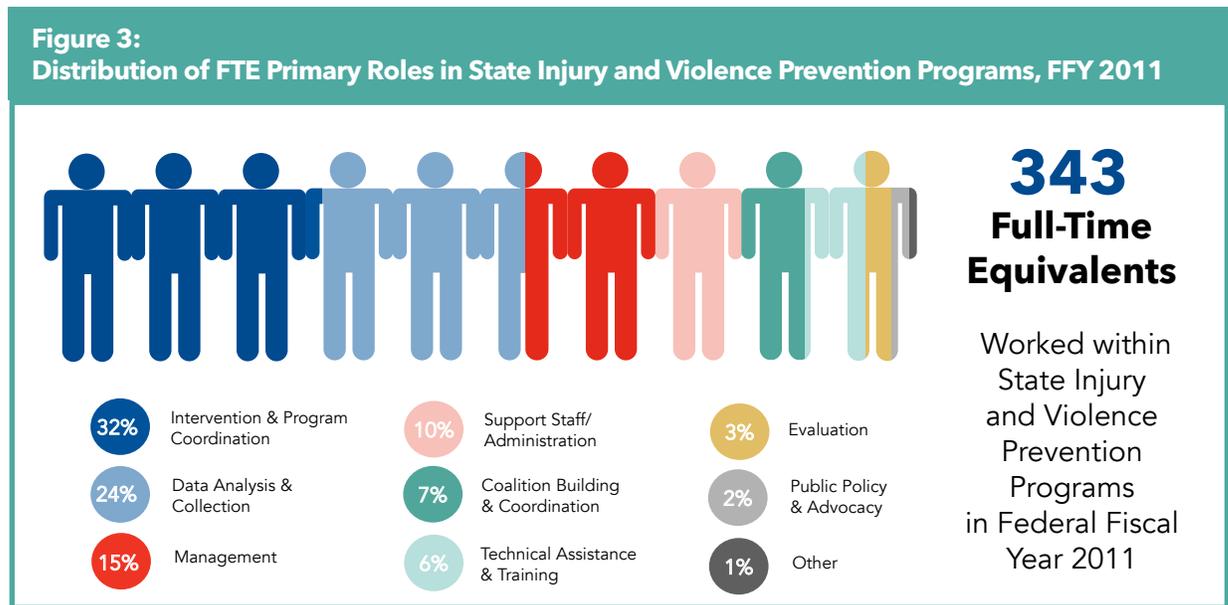
and 2011. Four programs changed locations three times during this period.

More states than ever – 89% (41 states total) – reported having an identified IVP program in 2011. At the same time, states reported significantly more decentralized IVP programs across health department divisions and departments; nearly a third (32%) reported decentralized activities in 2011 compared to just 6% in 2009. While the integration of IVP within other state health department activities can be beneficial, it is also critical that state IVP programs have significant coordination with and connections to decentralized programs, activities, and resources.

Staffing Capacity: Seeking Competency, Functionality, and Resourcefulness

Comprehensive IVP programs, by definition, have always addressed a diverse set of topics and have required a wide range of expertise. State IVP programs have also used a functional approach to their work, including addressing communication, policy, and evaluation issues across topic areas. As a result, state IVP programs have benefited from having staff with a variety of skills that are broadly applicable. However, the need for such multi-skilled staff impacted on the hiring practices of state IVP programs: some state IVP program directors suggested that it might be more useful to recruit applicants with functional competence across injury areas, rather than those that have deep expertise in IVP-specific topic areas.

As shown in figure 3, below, a total of 343 Full-time equivalents (FTEs)[†] were funded in state IVP programs in FFY 2011. Approximately 25% of state IVP programs had fewer than 1.5 FTEs on staff, while half had between 1.5 and 13.2 FTEs. The remaining 25% quarter had more than 13.2 FTEs. Even though several state programs had comprehensive staffing portfolios, none had staff covering all primary staff roles.



Another challenge for state IVP programs is that staff roles are often scattered into portions of an FTE – “10% here, 15% there,” as one state IVP program director put it. The lack of FTEs funded to fulfill roles full-time has made it difficult to focus concentrated efforts on key functions and tasks. Given that many state IVP program directors have only portions of FTEs to work on statewide prevention efforts, they face additional management challenges. A related issue for state IVP programs is the constant need to pursue funding that will allow them to maintain and enhance staffing levels. In some instances, this can lead to having funding requirements – rather than data – determine the direction or emphasis of programs.

The Safe States Alliance has found that a full-time program director is essential to the success and sustainability of a state IVP program. In addition, IVP programs require access to an epidemiologist with injury surveillance expertise, an evaluator, and staff devoted to program implementation, relationship building, policy work, and communications.

[†] Full-time equivalents (FTEs): The total number of hours worked by an individual employee divided by the total number of work hours in a full-time scheduled (defined as 40 hours per week).

The 2011 SOTS survey found that most states lacked FTEs devoted primarily to public policy, evaluation, and technical assistance and training. Although these roles are not as commonly staffed as full or even partial FTEs, at least some degree of expertise in these areas (fulfilled through targeted trainings, for example) is essential among existing staff and likely to become more so in the future.

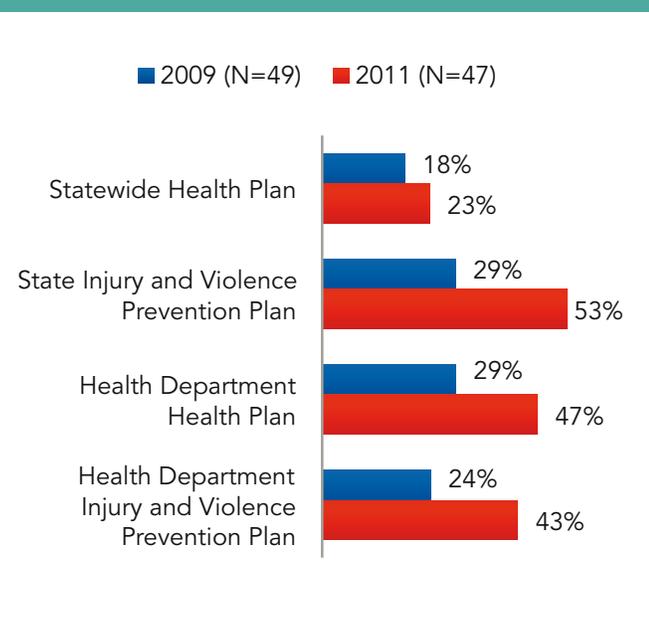
Leadership

What are the hallmarks of a well-led program? An effective state IVP program director:

- Ensures the program meets the state’s needs and achieves its intended outcomes by effectively managing resources, staff, partnerships, and relationships (both inside and outside the agency).
- Cultivates and wins the support of other leaders within the state hierarchy, making the case for IVP with the State Health Official, the Governor’s Office, and senior-level staff within these offices. From these relationships, IVP programs can obtain greater visibility for IVP issues and for the program overall. These relationships can also ensure the state IVP program staff is “at the table” when key decisions are made, which can integrate IVP priorities into broader state plans and initiatives.
- Builds, strengthens, and sustains meaningful collaborative relationships inside and outside the state health agency. These relationships are not only based on personal rapport and respect, but are sustainably institutionalized through mechanisms such as Memoranda of Agreement, and are thus more likely to survive changes in personnel.
- Mobilizes communities and local agencies to initiate and participate in evidence-informed IVP initiatives; and
- Makes the most of national resources and linkages by participating in professional associations and networks, and engaging funding agencies and academic institutions.

Planning Capacity: A Tool for Monitoring, Evaluation, and Engagement

**Figure 4:
The Use of Different Plans Across States**



Strategic planning processes and documents can be opportunities for engaging partners and the public in IVP efforts – in addition to monitoring and evaluating program activities and outcomes. These may dovetail with other planning and reporting frameworks (such as funding requirements), or stand alone. Figure 4 shows how the use of different plans has increased across states between 2009 and 2011, but is still not standard across most states.

Several Safe States members look back on earlier plans and advise patience with the incremental, step-by-step approach that many have followed. “We couldn’t do everything in the first year or the first plan,” was one typical observation. “It takes time to build relationships and surveillance systems.”

Funding: A Puzzle with Many (Small) Pieces

In a single year, injuries and violence in the United States will ultimately cost \$406 billion in medical costs and lost productivity – an average ultimate cost of nearly \$1,303 per person in the U.S.

BUILDING IVP LEADERSHIP SKILLS IN FLORIDA

In Florida, each member of the state health department’s IVP staff serves as “goal liaison” for a specific goal in the department’s strategic plan. They convene and lead groups, monitor specific action plans, and interact with partners - all of which allow them to develop and practice leadership skills. Team members also rotate management roles in the Director’s absence, which creates a deeper repository of staff with strong leadership skills.

EXAMPLES OF STATE IVP PLANS

Florida – www.doh.state.fl.us/DEMO/InjuryPrevention/PDF/09-13StrategicPlan.pdf

North Carolina – www.injuryfreenc.ncdhhs.gov/fullivpstrategicplan.pdf

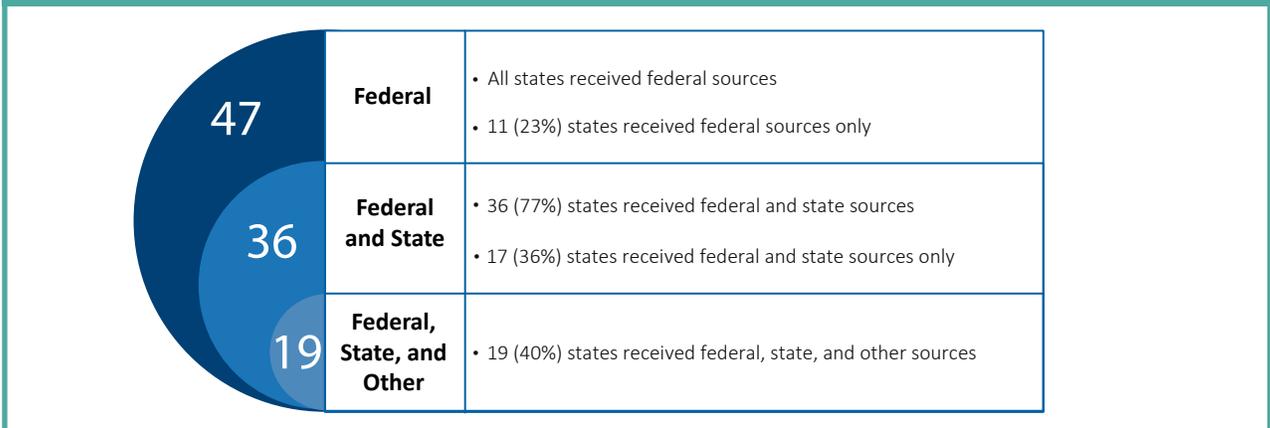
Hawaii – hawaii.gov/health/healthy-lifestyles/injury-prevention/PDF/HIPP%20Final%20Aug%202012.pdf



Investments in preventing injuries and violence fall far short compared to the costs associated with these events. In FFY 2011, only \$101.5 million was invested nationally in state public health injury and violence prevention programs. This amount, which includes federal, state, and other sources, translates to an average expenditure of merely \$0.32 per person. Compared to the national average, 18 state IVP programs spent less than \$0.32 per person on injury and violence prevention; thirteen of these 18 programs spent less than \$0.17 per person. On the other end of the spectrum, sixteen states invested more than the national average, and six state programs invested over \$1.00 per person. However, even an average investment of \$1.00 per person is remarkably small compared to the per capita cost of injuries and violence. These figures reflect low levels of per capita public health and prevention investments overall, especially compared to costs devoted to downstream aspects of the health system (such as acute care and treatment).

The funding challenges faced by state IVP programs are numerous. While overall funding for IVP is limited, state IVP programs must piece together the few resources that are available through small grants from many different funding sources. The dependence of states on this “patchwork” of funding is particularly apparent at the national level: In FFY 2011, 47 state IVP programs relied on 332 separate funding awards from 23 different sources. Figure 5 shows the breakdown of funding sources by federal, state, and other sources.

Figure 5: Funding Source Types Awarded to State Health Department IVP Program, FFY 2011



To contend with ongoing funding challenges, state IVP programs can:

- **Cultivate relationships and partnerships that can lead to funding support** – even if the pay-off does not occur for many years. In California, the state IVP program’s partnership with the California Department of Transportation began with sharing IVP program data on pedestrian fatalities. Over time the partnership evolved; Caltrans invited the state IVP program to participate on a state task force and provided IVP program with funding for Safe Routes to School – a national, federally-funded initiative. Furthermore, participation in built environment and active living initiatives placed the state IVP program at the table to receive Community Transformation Grant (CTG) funds and provided opportunities for the IVP program to make decisions related to these initiatives. Eventually, the partnership was so strong and well-institutionalized, that Caltrans funded specific staff to work on pedestrian and bike-related safety efforts within the state health department and under the supervision of the state IVP program director.

PUTTING INJURIES ON YOUR PLATE IN CALIFORNIA

In California, specialty license plate fees for a “Have a Heart, Be a Star, Help Our Kids” option goes to a Child Health and Safety Fund. A quarter of the fund’s proceeds go to the state injury prevention program and support child care safety, child abuse prevention,



- **Redirect fees and fines** – Several states have worked with advocacy groups and state legislators to earmark a portion of collected fees and fines to support both state and local IVP programs. Depending on the size of the fees or fines, these amounts can add up to significant line items in a program budget. In Montgomery County, Maryland, for instance, jurors have the option of donating their \$15 daily jury duty reimbursement to domestic violence prevention efforts.

- **Integrate program implementation and funding with other public health programs** – such as chronic disease prevention or maternal and child health. The state IVP program in Colorado made a strategic decision to work with their chronic disease division to integrate IVP efforts into chronic disease prevention programs.

This resulted in the development of a comprehensive plan

between the two divisions that will help them to implement integrative programs that address and enhance the health department’s overall public health goals.

- **Turn selected aspects of program implementation and expansion over to other partners** – This would allow partners to take on key aspects of program implementation while state IVP programs take on roles of promotion, facilitation, and support for both program implementation and evaluation. Sharing these responsibilities would also allow state IVP programs to build capacity and buy-in among their partners.
- **Explore reimbursable funding streams from payers**, such as Medicare for older adult falls prevention or Medicaid for IVP efforts focused on low-income children and youth.

MAKING THE MEDICAID CASE ON THE COSTS OF CHILDHOOD INJURIES IN ALASKA

State IVP program staff in Alaska analyzed trauma registry data to determine causes of injury among Medicaid patients and the costs associated with these injuries. A Memorandum of Agreement with the state Medicaid agency supported technical assistance and training, programs to prevent common injuries, tools and resources for partners (e.g., “Injury Prevention in a Bag” – a home safety education kit for home visiting staff that included a room-by-room safety checklist), support for surveillance and data analysis activities related to the state’s trauma registry, and linkages to the Medicaid Management Information System. Another successful effort directs proceeds from tickets for violating car seat laws to local health department car seat programs for low-income families.



Core Component #2:

Collect, Analyze, and Disseminate Injury and Violence Data

The very foundation of public health is data. Like other public health agencies, state IVP programs have always been data driven. Given the wide range of injury types and risk factors, multiple data sources are required to develop a comprehensive and accurate picture of injury and violence trends.

Recommended Data Sets

In 2007, the Safe States Alliance convened an expert Injury Surveillance Workgroup (ISW) to update the report, *Consensus Recommendations for Injury Surveillance in State Health Departments*, which was originally published in 1999. The ISW recommendations include 14 injury risk factors that can be monitored by state IVP programs using 11 “core” or essential data sets. Workgroup members recommended that state IVP programs identify their priorities using these 11 core data sets, as they include surveillance on conditions with a high burden of morbidity and mortality and are generally feasible for most states to collect.

Ideally, core data sets are used to track the incidence of injuries and violence, identify underlying causes of injuries, identify the groups or populations at highest risk, set geographic or demographic priorities for prevention programs, and support the evaluation of programs and policies. States also use these data sets to develop materials to increase public awareness and report key findings to decision-makers.

The 2007 ISW report notes that injuries recommended for surveillance rely on two core data sets: vital records and hospital discharge data. All states have vital records data, but not all currently have hospital discharge data (HDD). Expanding states’ access to hospital discharge and emergency department (ED) data essential to ensure that IVP programs have access to the most basic data sets for prevention efforts.

Since the recommendations were published, there has been greater interest in linked data sets. An example is the National Violent Death Reporting System (NVDRS) – a joint CDC/state effort to create a more comprehensive picture of the circumstances surrounding violent deaths in the United States. As of 2013, NVDRS includes data from only 18 states.

In FFY 2011, SOTS survey data Figure 6, showed that state IVP programs had consistent access to vital records (death certificates), the Behavioral Risk Factor Surveillance System (BRFSS), Hospital Discharge Data (HDD), and the Youth Risk Behavioral Surveillance System (YRBSS). Between 2009 and 2011, there were some drops in access to and use of Child Death Review (CDR) and Fatality Analysis Reporting System (FARS) data, as well as less access to Emergency Medical Services (EMS) and National Occupant Protection Use Survey (NOPUS) data.

RESOURCE: INJURY SURVEILLANCE WORKGROUP (ISW) 5 RECOMMENDATIONS

The ISW’s *Consensus Recommendations for Injury Surveillance in State Health Departments* (published in September 2007) is available at www.safestates.org/ISW5.



Figure 6:
Access to Core Data sets and Use of Core Data sets for Programmatic Decisions, 2011 (N=47)
and 2009 (N=49)

	2011		2009	
	Accessed Dataset (N)	Used the Data N(%)	Accessed Dataset (N)	Used the Data N(%)
Vital Records	47	43 (91%)	45	43 (96%)
Behavioral Risk Factor Surveillance System (BRFSS)	46	33 (72%)	46	39 (85%)
Hospital Discharge Data (HDD)	43	38 (88%)	43	39 (91%)
Web-based Injury Statistics Query and Reporting System (WISQARS)*	43	31 (72%)	<no data available>	
Youth Risk Behavior Surveillance System (YRBSS)	42	32 (76%)	44	34 (77%)
Child Death Review (CDR)	33	22 (67%)	42	30 (71%)
Emergency Department (ED)	33	26 (79%)	28	28 (100%)
Fatality Analysis Reporting System (FARS)	33	20 (61%)	42	29 (69%)
Medical Examiner	32	24 (75%)	27	21 (78%)
Emergency Medical Services (EMS)	31	18 (58%)	38	19 (50%)
Uniform Crime Reporting System (UCR)	30	19 (63%)	35	27 (77%)
National Violent Death Reporting System (NVDRS) †	25	20 (80%)	20	19 (95%)
State Surveys †	23	19 (83%)	23	19 (83%)
National Occupant Protection Use Survey (NOPUS)	19	14 (74%)	23	11 (48%)
National Trauma Data Bank †	11	3 (27%)	<no data available>	

*Not part of the 11 Core Datasets

Injury Surveillance 2.0: New Data Sets and Linkages

As their injury surveillance systems become more comprehensive, states have utilized data from a variety of other data sets, including trauma registries, crash reports, child death reviews, and prescription drug monitoring programs (PDMPs). Even when data are only available nationally (as is the case for some national surveys on drug use, poisoning, and suicide by the Substance Abuse and Mental Health Services Administration or SAMHSA), states can use these data sets to identify possible questions, modules, and analyses for their own state surveys.

Since one or two data sets rarely offer a truly comprehensive picture of injuries and violent events, states continue to explore ways to link existing data sets. For example, the expanded use of Electronic Health Records (EHRs) offers opportunities to follow patients as they move through the health care system, from an ED admission to inpatient stays to rehabilitation and other longer-term outcomes. NVDRS draws upon data from death certificates, coroner/medical examiner reports, and police reports. Data from transportation agencies, state Departments of Motor Vehicles (DMV), and crash reports also provide multiple options for understanding crash patterns and related opportunities for prevention.

STATE IVP PROGRAMS HELP HOSPITAL CODERS UNDERSTAND THE VALUE OF BEING SPECIFIC

Data sets on which injury and violence prevention programs rely are dependent on accurate coding from personnel working within other systems, such as hospitals, law enforcement, or EMS. Often, these systems have different priorities and frameworks than public health and prevention-focused health department programs.

In New York, after E-coding of hospital emergency department (ED) data was mandated, the state IVP program staff noticed a large number of “falls, unspecified” codes. They worked closely with ED data collectors to help them understand why more specific codes were necessary to help them target prevention activities.

In Colorado, problems with the hospital discharge data prompted IVP program staff to use part of a traumatic brain injury (TBI) grant to fund trainings through the state’s hospital association. These trainings helped hospital staff improve the specificity of their E-coding. The training worked – and continued to have positive impacts long after the funds stopped flowing.

MAKING INJURY DATA WIDELY ACCESSIBLE: CALIFORNIA’S ONLINE EPICENTER

A versatile and comprehensive source of statewide injury data, California’s web-based “EpiCenter” databases allow members of the public, researchers, policymakers, and others to build their own data tables for California populations. Data can be queried and retrieved by county, year, age, gender, race/ethnicity, and injury topic (intentional and unintentional). The data tables can also be compiled using different data sets (e.g., crash-medical data from crash reports and medical data). An example of a diverse partnership, EpiCenter was designed by the state IVP program, constructed by the state health department’s information technology division, and supported by public and private funds, including foundations and the CDC. The website is epicenter.cdph.ca.gov/.

The screenshot shows the EpiCenter website interface. At the top, there are logos for the California Department of Public Health, CDPH, EpiCenter California Injury Data Online, and Safe and Active Communities. Below the logos is a navigation bar with tabs: Overall Injury Surveillance, Selected Injury Topics, Injury Data Summaries, Traumatic Brain Injuries, Violent Death Circumstances, Alcohol/Drug Consequences, Population Data, and Linked Crash-Medical Data. The main content area features a sidebar on the left with links like 'About our data', 'Tell us how you use our data', 'Help with building tables', 'Help with ICD-9 and ICD-10 codes', 'EpiCenter Home', 'CDPH Home', 'SAC Branch Home', and 'Contact Us'. The main content area has a prominent red header: 'NEW - 2011 Hospital and ED Data! Build Your Own Tables'. Below this, there are three columns of data categories: 'Overall Injury Surveillance' (describing the comprehensive source of injury data), 'Selected Injury Topics' (listing injuries like assault, bicycle, firearm, heat, motor vehicle occupant, pedestrian, self-inflicted, senior falls, assaults on females, and intimate partner assaults), and 'Injury Data Summaries' (listing summaries by cause and age, top five causes, and trends). There are also links for 'Traumatic Brain Injury (TBI)', 'California Electronic Violent Death Reporting System', and 'Alcohol and Other Drug (AOD) Health Consequences'.

Challenges and Opportunities

Some of the challenges related to injury data and surveillance are not new. Data systems are not always consistent (within and across states) in terms of data elements, quality, and completeness; moreover, electronic access to surveillance systems varies. Because of these variations and other factors, timeliness is an issue: many programs continue to struggle with compiling, cleaning, and using data sets that they feel are already out-of-date the minute they become available. Data on many of the behaviors and choices that affect injuries and violence remain difficult to obtain. Even improvements – such as conversions to electronic systems, the addition of data partners, and more injury-specific details generated by updated coding schemes – can be time-consuming and cause temporary delays as people adjust to new systems and procedures.

Despite these ongoing challenges, there are a number of emerging opportunities for state IVP programs to expand the types of data available to state-level programs. These include:

- **National EMS Information System (NEMSIS).** NEMSIS is a national repository for EMS data from every state. Although these standardized data elements may not map exactly to ICD codes or be as focused on injuries and violence as would be ideal, conversations with state EMS and EMSC (EMS for Children) programs can reveal which data sets and analyses are available (or could be in the future). In addition, EMS personnel are valuable injury prevention partners, as they perform car seat checks, conduct fall risk assessments, and support smoke detector installation programs. Partnerships between EMS and state IVP programs are anticipated to become even stronger through the expanding field of community paramedicine.
- **Electronic Health Records (EHRs).** The increasingly widespread use of electronic health records is expected to revolutionize the types and ranges of data available and generate them closer to real-time. IVP professionals need to participate in discussions at state and national levels to contribute to ongoing deliberations about the meaningful use of these data sets and standards associated with them.
- **Social media.** At the state and national levels, interest has grown in using social media activity to gauge the public's interest in health topics and new public health information. For instance, the geographic spread of flu was tracked by monitoring online searches about flu remedies or symptoms.
- **Cloud based syndromic surveillance systems (BioSense)** may help identify clusters of injury issues, such as prescription drug overdose (PDO) or suicide.

LINKING DATA IN THE TEXAS TRAUMA REGISTRY

In Texas, various efforts are underway to transform the state's trauma registry into a broader source of information on injuries. This has involved extensive reviews of possible data elements with various partners, including rehabilitation and Long Term Acute Care facilities to track spinal cord and traumatic brain injuries (SCI/TBI)

To explore the opportunities to link data and gain a more comprehensive picture of traumatic events, an epidemiologist conducted a case study of linked hospital, EMS, and crash data records. Using a probabilistic linking algorithm to look for close matches in various sets of records, the case study showed that these three sources of data could be aligned, despite persistent issues with data completeness that varied with each source. This linked data has the potential to answer questions about how a variety of factors affect patient outcomes, including EMS response times, geographic location, and other elements (e.g., speed, weather, road conditions, protective devices, etc.).



Core Component #3:

Select, Implement, and Evaluate Effective Policy and Program Strategies

Program and Policy Interventions: Working in Combination to Reduce Injuries and Violence

Dr. William Haddon, Jr., the first director of the National Highway Traffic Safety Administration (NHTSA), is credited with launching the modern field of injury prevention in the 1960s. Haddon recognized that injuries were not acts of fate or “accidents.” On the contrary, injuries resulted from a predictable convergence of human factors (a vehicle or agent) with the surrounding environment (physical and social). Dr. Haddon captured this comprehensive approach to injury prevention in what has become known as the “Haddon Matrix.” If the causes of injuries could be understood more fully, Dr. Haddon reasoned, then opportunities to intervene could be crafted at all levels – before, during, and immediately after an event.

In the decades since the Haddon Matrix was introduced, researchers and practitioners have used the matrix to analyze how programs and policies can intervene to prevent injuries. For example, in Washington State, a collaboration between Seattle Children’s Hospital and the state’s IVP program led to a Haddon Matrix, which identifies risk factors, policy strategies, and priority areas to prevent open water drowning.

Figure 7: Using the Haddon Matrix to Define Risk Factors and Policy Strategies for Open Water Drowning in Washington State

	Personal Factors	Equipment	Physical Environment	Social Environment
Pre-Event	<ul style="list-style-type: none"> Lack of supervision Lack of knowledge about water risks Alcohol consumption by victim/caregivers Lack of education about open water or swimming lessons Developmental issues Gender (male) Medical condition, e.g. epilepsy Need to access water for functional purposes, e.g., fishing Transport on water Recreational use of water Cultural norms/beliefs Socioeconomic status Race/ethnicity <p><input checked="" type="checkbox"/> PRIORITY AREA: Swimming Skills and Water Safety Education, Boating Under the Influence</p>	<ul style="list-style-type: none"> No life jacket available Life jacket for swimming not allowed in pools or lifeguarded areas Lack of life jackets or other life-saving devices in boat Lack of lifeguards Unprotected water hazards Unsafe/overloaded watercraft <p><input checked="" type="checkbox"/> PRIORITY AREA: Safer Water Recreation Sites, Life Jackets</p>	<ul style="list-style-type: none"> No access to lifeguarded or regulated swim areas No life jacket loaner program Lack of barriers Lack of signage Lack regulation of site Lack of open container laws Attractive nuisance i.e., off shore buoy Unfamiliar environment; slippery, uneven, unstable or steep surfaces near or in water; Weather conditions, e.g., floods, strong sea currents Inadequate physical infrastructure, such as bridges or safe crossings Lack of warning of severe weather <p><input checked="" type="checkbox"/> PRIORITY AREA: Safer Water Recreation Sites, Life Jackets, Boating Under the Influence, Surveillance</p>	<ul style="list-style-type: none"> Low adult use of life jacket Lack of supervision or child care; reliance on peer or older child supervision Failure of authorities to remove potential hazards; Lack of fencing legislation; l Lack of water safety instruction and community awareness programs Lack of agency oversight/prevention Lack of authority to close high-risk waterways Lack of marine patrol staffing Boating while intoxicated accepted <p><input checked="" type="checkbox"/> PRIORITY AREA: Safer Water Recreation Sites, Life Jackets, Boating Under the Influence, Partnerships</p>
Event	<ul style="list-style-type: none"> Poor swimming ability Not wearing life jacket Rescuer unable to swim and/or lacks rescue skills Lack of swimming and/or water survival skills Overestimation of swimming ability Lack of comprehension of situation Panic response Swimming alone Lack of personal alerting devices or knowledge of emergency signals <p><input checked="" type="checkbox"/> PRIORITY AREA: Life Jackets, Swimming Skills and Water Safety Education</p>	<ul style="list-style-type: none"> No life jacket use-child or adult <p><input checked="" type="checkbox"/> PRIORITY AREA: Life Jackets</p>	<ul style="list-style-type: none"> No lifeguarded swim areas Variable water depth; unstable footing; snags in water Lack of escape mechanism e.g., ladder, ropes, flotation device Cold water; deep water River and rip currents Sneaker waves; big waves <p><input checked="" type="checkbox"/> PRIORITY AREA: Safer Water Recreation Sites</p>	<ul style="list-style-type: none"> Low adult use of life jacket Poor access to information and resources for minimizing risk Inadequate infrastructure to call for emergency health services Beyond age of life jacket requirement Cultural belief that drowning is fate <p><input checked="" type="checkbox"/> PRIORITY AREA: Life Jackets, Swimming Skills and Water Safety Education</p>
Post-Event	<ul style="list-style-type: none"> Lack of water survival skills Lack of CPR training Delay in rescue Inaccessible first-aid kits Lack of knowledge by caregiver about what to do immediately Lack of alerting mechanism (such as mobile phone, flares) <p><input checked="" type="checkbox"/> PRIORITY AREA: Safer Water Recreation Sites, Swimming Skills and Information</p>	<ul style="list-style-type: none"> Victim carried away from shore by current <p><input checked="" type="checkbox"/> PRIORITY AREA: None</p>	<ul style="list-style-type: none"> No lifeguards Long emergency or fire department response time <p><input checked="" type="checkbox"/> PRIORITY AREA: Safer Water Recreation Sites</p>	<ul style="list-style-type: none"> Low adult use of life jacket Inadequate care; poor access to acute care hospitals and rehabilitation services; Little community support for victims and families Lack of standards for drowning death data collection Lack of enforcement or penalties for BUI <p><input checked="" type="checkbox"/> PRIORITY AREA: Life Jackets, Boating Under the Influence, Surveillance</p>

Adapted from: Peden M, Oyegbite K, Ozanne-Smith J, Hyder A, Branche C, Rahman AKM, Rivara F, and Bartolomeos K (eds). World Report on Child Injury Prevention (2008). Information on Haddon Matrix: Christoffel T and Gallagher SS. Injury Prevention and Public Health. Aspen Publishers, Inc. Gaithersburg, Maryland, 1999. Developed by Seattle Children’s Hospital and Washington State Department of Health. To learn more, visit: www.seattlechildrens.org/dp. Supported by grant #1U7CE001778-01 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors, and do not represent the official views of the Centers for Disease Control and Prevention.

Dr. Haddon’s comprehensive approach is reflected in the “three Es” of injury prevention: environment, education, and enforcement. For example, dramatic reductions in motor vehicle crash fatalities and injuries are the result of many prevention strategies at work simultaneously: safer cars and roads (the environment), individual use of seat belts and avoidance of drunk driving (education leading to changes in behaviors and social norms), and enforcement of motor vehicle safety laws (such as primary belt laws and DUI citations) that discourage these behaviors.

Almost any IVP intervention could point to a similar mix of strategies that use the three Es, policies and programs, or Haddon’s convergence of human/vector/environment factors. Easy-to-install smoke alarms – which can make a home environment safer – are even more likely to be effective if combined with education about home fire hazards, reminders to change the batteries semiannually, and building codes that require smoke alarms on each floor of a home.

When equipment, services, or information are provided to individuals or communities for a defined amount of time and with a specific goal in mind, we tend to classify these strategies as **programs** or **programmatic interventions**. Programmatic interventions have been an effective cornerstone of injury and violence prevention programs for decades, helping to raise awareness and change individual or group behaviors.

When strategies focus on laws, regulations, rules, or contracts with the goal of setting a standard or requirement, we classify them as **policy interventions**. A definition of public health policy used by CDC is:

“a law, regulation, procedure, administrative action, incentive or voluntary practice of governments and other institutions . . . [operating] at the systems level, applying to large sectors or populations and set the context in which individual decisions and actions are made.”¹²

Even when they are at their most effective, programmatic interventions are limited in the number of people or the proportion of a population they can reach. To extend their impact and the sustainability of positive behavior changes, programmatic interventions often are paired with policy interventions that attempt to change the environment in which risks unfold.

The CDC and others go on to distinguish types of policies according to their scope. For example, **legislative** policies are those created by elected officials – such as primary seat belt laws. **Regulatory** policies are created by administrative agencies and use mechanisms such as rules and regulations or procedures to advance goals originally created by legislation. Examples of regulatory policies include designating which diseases must be reported to public health authorities by private providers.

Finally, **organizational** policies are practices that are applied within an agency or organization; these are sometimes referred to as “internal” policies. Although more narrow in scope, organizational policies can be extremely effective in changing and spreading new norms and standards for practice – e.g., changing TBI treatment protocols in a hospital ED, forbidding texting while driving an official vehicle on agency business, requiring screening for suicidality in substance abuse programs, or changing procurement practices and contractual procedures.

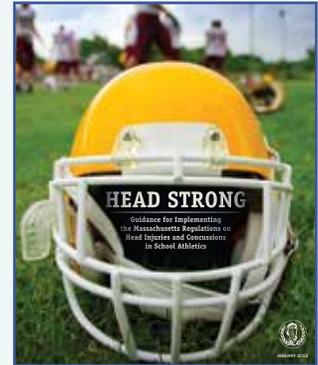
Whether an intervention veers more toward the programmatic or the policy realm – or straddles both – the intervention should: have evidence behind it, fit with both desired outcomes and community characteristics; consider both risk and protective factors (i.e., factors that are associated with negative or positive health outcomes); and be evaluated to determine if the intervention worked as intended.

PROGRAM? POLICY? BOTH? RETURN TO PLAY LAWS IN MASSACHUSETTS

Changing a state law or policy is an achievement worth celebrating, but it's not the end of the story. Policy implementation can look a lot like program implementation, requiring similar sustained attention and work. One example is "return to play" laws designed to prevent student athletes from being sent back onto the field too soon after a concussion.

Massachusetts passed one of the first "Return to Play" laws in 2010. Although the law required schools to have policies in place, it did not specify the organizational policies that schools needed to meet the new requirements. As a result, the state IVP program devoted significant resources to working closely with schools to help them write responsive policies. Meetings, trainings, and technical assistance on specific issues such as medical clearance implications and what schools should expect from clinicians were all part of the implementation – all serving to strengthen the new regulations and help them fulfill their purpose of protecting developing brains.

Lessons learned from these many conversations were captured in a guide for schools that offers sample policies as a starting point, as well as tips for communicating with students, parents, teachers, coaches, and medical providers. Called Head Strong, it is available from www.mass.gov/eohhs/docs/dph/com-health/injury/head-injury-reg-guide-acc.pdf.



Spectrums and Pyramids

To ensure that interventions are selected as strategically as possible, Safe States members have utilized frameworks such as the *Spectrum of Prevention* and the CDC's *Health Impact Pyramid*.

The **Spectrum of Prevention** (Figure 8) provides a continuum of six levels that begin with educating individuals and extend to changing systems, practices, and policies. The levels of the spectrum complement one another and are maximally effective when addressed simultaneously.¹³

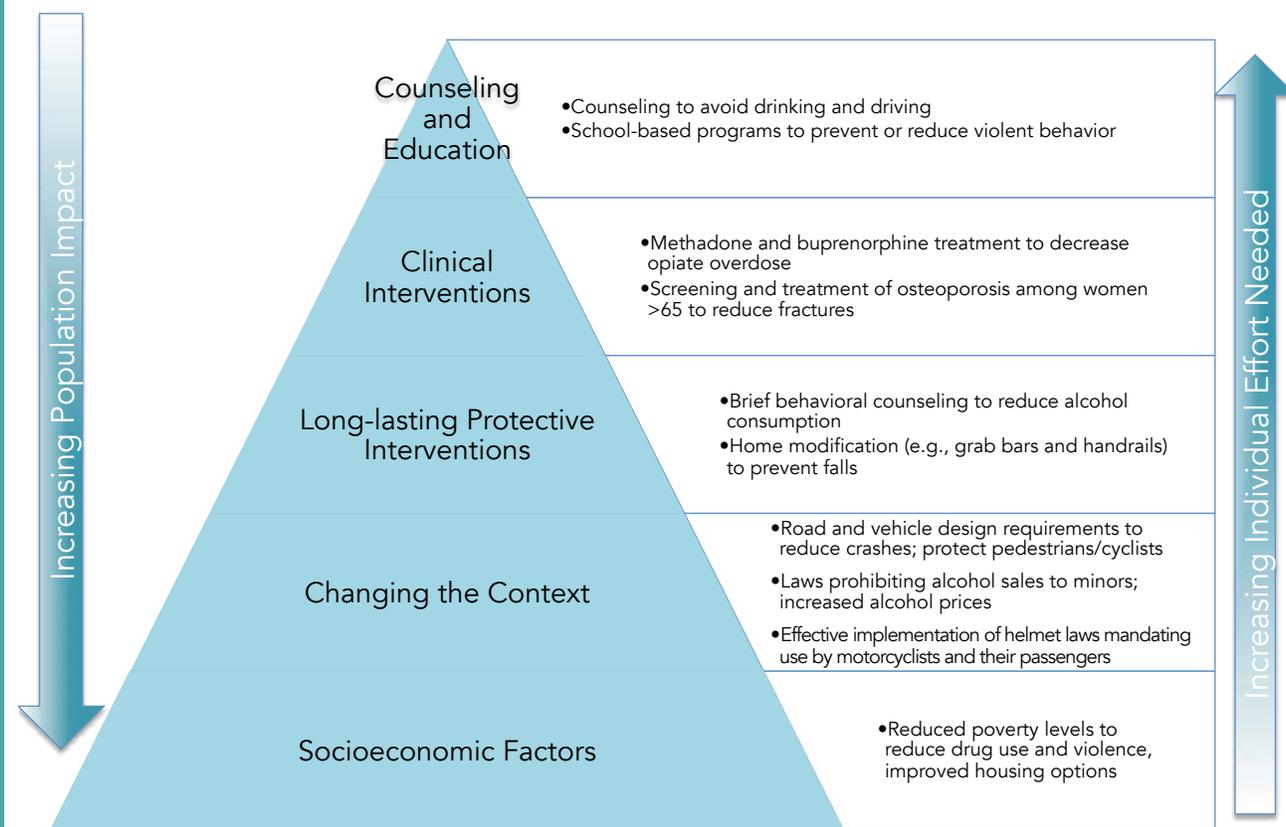
Figure 8:
The Spectrum of Prevention, Prevention Institute

LEVEL OF SPECTRUM	DEFINITION OF LEVEL
6 Influencing Policy and Legislation	Developing strategies to change laws and policies to influence outcomes
5 Changing Organizational Practices	Adopting regulations and shaping norms to improve health and safety
4 Fostering Coalitions and Networks	Convening groups and individuals for broader goals and greater impact
3 Educating Providers	Informing providers who will transmit skills and knowledge to others
2 Promoting Community Education	Reaching groups of people with information and resources to promote health and safety
1 Strengthening Individual Knowledge and Skills	Enhancing an individual's capability of preventing injury or illness and promoting safety

The Health Impact Pyramid (Figure 9) shows interventions with the greatest potential impact at its base. In ascending order are tiers that require *increasing* levels of individual effort (culminating in clinical interventions, counseling, and education at the top) but offer *decreasing* levels of population-wide impact. Dr. Thomas Frieden, the current director of the CDC, has used the Health Impact Pyramid as the basis of his “Winnable Battles” initiative. He notes: “Interventions focusing on lower levels of the pyramid tend to be more effective because they reach broader segments of society and require less individual effort.” However, like the Spectrum of Prevention, Dr. Frieden notes that, “implementing interventions at each of the levels can achieve the maximum possible sustained public health benefit.”¹⁴

As both the Spectrum and Pyramid frameworks suggest, policy changes are appealing to public health leaders because they have the potential to affect larger numbers of people in ways that are likely to create long-term, population-level change. However, passing legislation or changing a regulatory or organizational policy is only the beginning. Successful policy changes require educational efforts to support those impacted by the policy, as well as follow-up and enforcement during the years and decades that follow. Enforcing laws, ensuring they are appropriately implemented, investing the time and effort to evaluate them, and ensuring they are not retrenched or repealed in the future, are all part of the longer-term work required after a policy change is successfully enacted.

Figure 9:
An Injury and Violence Prevention Health Impact Pyramid



The Role of Evidence

Each day, programmatic and policy interventions are being developed, tested, and vetted by researchers and practitioners alike. State IVP program staff must choose among these interventions and select ones they feel are both likely to be effective and are contextually appropriate for the communities involved. These interventions must also be implemented with fidelity and on a scale that will provide the desired impact.

According to the CDC, evidence-based decision making requires three complementary forms of evidence to determine whether or not a prevention program, practice, or policy can achieve its intended outcomes¹⁵:

1. **Best available research evidence:** Information derived from scientific inquiry; the more rigorous the evaluation in its research design, (e.g., randomized control trials, quasi-experimental designs with matched comparison groups), and implementation (e.g., fidelity), and the extent to which it has been replicated in different settings and with different populations, the more compelling the research evidence
2. **Experiential evidence:** The collective experience and expertise of those who have practiced or lived in a particular setting over time
3. **Contextual evidence:** A collection of measurable factors in a community that may impact the success of a prevention strategy (e.g., community history, organizational capacity, social norms, etc.)

State IVP program staff can use these three forms of evidence to make decisions about which programs or policies to implement, ensuring they are grounded in research evidence and informed by contextual and experiential evidence from the field.

Oftentimes, descriptions of model programs, best practices, and rigorously evaluated interventions can imply that adaptations may undermine the likelihood of achieving intended outcomes. While it is important to implement evidence-based programs with fidelity, practitioners have also understood that the very best evidence-based intervention or stellar model program will not be a perfect fit for every situation. As such, individual communities may benefit from programs that have built in flexibility and adaptations. However, as these modified, “evidence-informed” programs are evaluated, they too can contribute to the evidence base and add to the range of effective implementation options.

Figure 10:
CDC’s Framework for Thinking About Evidence



Another emerging concept is that of “practice-based evidence” – a complement to evidence-based practice. Practice-based evidence refers to learning as much as we can about the real-world application of evidence-based practices – not just how a program works in a pilot or ideal situation, but how a program works in reality. Instead of treating departures from a model program as threats to fidelity or rigor, a practice-based evidence approach would incorporate the experiences of those who use and implement a program as part of the evidence base.

The Role of Evaluation

Evaluation – the systematic determination of merit, worth, or significance¹⁶ – is essential to determine the effectiveness of any program or policy intervention. While the importance of evaluation is undeniable, state IVP programs face many challenges to evaluating interventions, including insufficient resources to complete a robust evaluation, limited staff capacity, and a lack of internal evaluation expertise and support. These challenges can also be compounded by unrealistic expectations from funders who want to see substantial health impacts within short grant cycles.

Not surprisingly, the capacity to undertake evaluation activities has positive impacts on other aspects of injury and violence prevention work. For example, the 2011 SOTS report found that state programs with access to an evaluator were also significantly more likely to use varied methods to inform public policy – such as creating or encouraging the adoption of organizational policies, participating in boards or commissions, requesting opportunities to review bills, or inviting state or local legislators to meetings and events.

EVALUATION RESOURCES

- Demonstrating Your Program’s Worth: A Primer on Evaluation for Programs to Prevent Unintentional Injury (www.cdc.gov/ncipc/pub-res/demonstr.htm)
- CDC Framework for Program Evaluation (www.cdc.gov/eval/framework/index.htm)
- Getting to Outcomes: A Toolkit to Help Communities Implement and Evaluate Their Prevention Programs (www.rand.org/health/projects/getting-to-outcomes.html)
- University of Wisconsin Extension Program Development and Evaluation Resources (www.uwex.edu/ces/pdande/evaluation/index.html)
- W.K. Kellogg Foundation Evaluation Handbook (www.wkkf.org/knowledge-center/resources/2010/w-k-kellogg-foundation-evaluation-handbook.aspx)
- W.K. Kellogg Foundation Logic Model Development Guide (www.wkkf.org/knowledge-center/resources/2006/02/wk-kellogg-foundation-logic-model-development-guide.aspx)

Challenges and Opportunities

Whether state IVP programs implement programmatic interventions, engage in policy work, or combine these types of interventions, they face challenges unique to each type of intervention. The process of selecting appropriate programs and policies can be complicated, even when data and surveillance point the way. Partners – both new and well-established – must be engaged in different ways to support programs and policies, and assist with activities such as policy development, strategic planning, implementation, evaluation, and communication.

Some challenges are unique to policy interventions. Chief among these is a combination of real and perceived restrictions on engaging in policy work at all. Though a recent exploration of this topic by the American Public Health Association (APHA), interviews with eight state IVP directors revealed that “state laws or policies limiting state employees’ interaction with legislators” was the chief challenge in working on policy initiatives.¹⁷

Confusion about the distinctions among education, advocacy, and lobbying sometimes prevents IVP programs from engaging more fully in the policy realm. Rules governing direct contact with policy makers vary by state, so it is essential to fully understand each specific agency’s rules and state laws. The following distinctions generally apply¹⁸:

- **Education** involves providing factual information without conveying a value judgment or linking to legislative action. For example, a program can provide data about the burden of an injury or violence problem, descriptions of existing programs, evidence of effectiveness, costs, and the number of people a program might serve. Facts and evidence used to educate legislative staff and others are considered more neutral and thus allowable, since they do not take a stance. In general, providing scientific evidence and epidemiological data about injuries and violence – and even about the potential effect of an intervention and policy – are not usually restricted.
- **Advocacy** moves away from neutrally providing “just the facts” to conveying a value based on those facts. Advocacy generally involves supporting or promoting a cause, practice, or recommendation. The line between education and advocacy can sometimes be blurred: For example, many IVP interventions – e.g., primary seat belt laws – have scientific evidence behind them showing that they save lives and prevent costly injuries. Saying that “seat belts save lives” is advocacy in that it conveys a positive value about seat belts. However, like education, advocacy is not directly linked to any specific legislative action.
- **Lobbying** is any written or oral communication to a legislative or executive official (or their staff) that requests action on a specific piece of legislation or policy, including (but not limited to): proposals, rules, regulations, or executive orders. Lobbying also involves endorsing or opposing a specific piece of legislation, budget appropriation, amendment, or regulation.

Another challenge facing policy interventions is that government interventions can be perceived as intrusive limits on individual rights and freedoms. Throughout the country and across the public health spectrum – from helmet laws to soda taxes – politicians and their constituents have sometimes resisted policy interventions that seek to change individual behavior.

While social norms can be slow to change, they can and do shift. Whether or not the subject is contentious, Safe States members note that it is worthwhile to take the time to understand the state or community’s political context and legislative history – including recent shifts in opinion and support – as fully as possible.

Despite the restrictions and challenges associated with policy interventions, state IVP programs have many opportunities to bring policy initiatives front and center and to use them to amplify the effectiveness of specific programmatic interventions. These opportunities include:

- Identifying natural affinities with a broad range of partners and coalition members.
- Linking types of injuries that share common risk factors – e.g., the role of alcohol and substance abuse in unintentional and intentional injuries.¹⁹
- Utilizing data systems and research partners – e.g., ICRCs– to help quantify the prevalence and costs of injuries and violence.
- Incorporating injury and violence prevention into a broader “Health in All Policies” approach. In California, IVP staff and public health advocates are eyeing state Cap and Trade revenues (fees that companies pay related to their greenhouse gas emissions) as a potential source of funding for safe walking and biking paths.
- Connecting injury and violence prevention within state health departments to other national public health programs and policy priorities, such as:
 - **Chronic disease** – e.g., Poorly managed hypertension or diabetes can be a contributing factor to older adult falls; violence and the fear of violence may prevent community members from using parks, walking to school, playing outside, or accessing healthier foods from grocery stores.
 - **Early childhood health** – The Adverse Childhood Experiences Study, or the ACE Study, connects childhood traumas to adult chronic disease, mental health, and substance abuse problems in a stark dose-response relationship; policies governing eligibility for and access to universal pre-school and family supports have been considered as prevention strategies.
 - **Health disparities** – Many injury and violence-related problems are symptoms of persistent and profound disparities in health, socioeconomic status, and education, resulting in high rates of premature death in affected communities.
 - **Built environment, livability, and community design** – Evidence shows that safer neighborhoods and streets make communities not only more livable but safer too. For instance, a study found that as the number of people walking and bicycling in a community increases, bicycle and pedestrian injuries and deaths decrease.²⁰

LEGISLATIVE 411, FLORIDA STYLE

While many state IVP program staff can be constrained from conducting advocacy activities themselves, they can rely on partners to do so, while still providing data and evidence that can help partners make the case. In Florida, the IVP program staff realized that many of their partners were missing opportunities to advocate for injury and violence prevention. To help partners identify and capitalize on these opportunities, they developed a guide to make the process easier. "A key to successful advocacy is knowing your legislators and establishing a relationship with them," the guide advises. "Doing your homework before contacting an elected official will help you craft an advocacy strategy and avoid political pitfalls." *Injury Prevention Legislative Advocacy: A Brief Guide* helps partners by describing the nuts and bolts of contacting and communicating with legislators, providing an overview of Florida's legislative process, and listing the members of the House and Senate (as well as Committees). The guide even provides a map of Florida's Capitol Center. To download a copy, visit www.safestates.org/FloridaIVPAAdvocacyGuide.

SAFE STATES CONGRESSIONAL OUTREACH GUIDE

As experts in the field of injury and violence prevention, Safe States Alliance members add a powerful voice to policymaking. Congressional recesses represent an important opportunity for IVP practitioners to meet with members to share information about the burden of injuries and violence within their districts and to highlight the prevention activities that help reduce that burden. The Safe States Congressional Outreach Guide can help IVP program staff understand the distinctions between education, advocacy, and lobbying; identify Congressional representatives and members of key committees; utilize key talking points; and learn strategies for interacting with Congressional members and local media. To download a copy of the guide, visit www.safestates.org/advocacytools.





Core Component #4: Engage Partners for Collaboration

The scope of injury topics and functions are so broad that no program – no matter how large or well established – can or should successfully tackle them alone. Collaborating with both internal and external partners is essential for state IVP programs to achieve their outcomes and amplify their work. In addition to serving as key partners, state IVP programs also serve as conveners, bringing multiple partners together to work on a range of injury and violence-related issues.

Partnerships bolster the overall capacity and effectiveness of state IVP programs. The value of partnerships is not only in their ability to expand the reach and impact of IVP programs, but also in the mutual benefits that can occur for both partners – such as the ability to share data, provide or receive training, reach key populations, or collaborate on policy efforts.

The 2011 SOTS survey found that states maintained an average of 13 partnerships within their state health departments, nine with other state agencies, 11 with non-governmental organizations, and six with federal agencies. The SOTS survey asked respondents to describe the strength of their partnerships in each of these categories. While each state and the nature of its partnerships are unique, the SOTS survey results offer clues about the partnerships that are most common:

- Within state health departments: vital statistics, maternal and child health, epidemiology, EMS, and aging.
- With other state agencies: highway safety, Departments of Transportation, criminal justice/law enforcement, fire departments and Fire Marshalls, and state universities.
- With non-governmental organizations: Safe Kids Coalitions, Children's Safety Network, Brain Injury Associations, Injury Control Research Centers (ICRCs), and healthcare associations.
- With federal agencies: CDC, the National Highway Traffic Safety Administration (NHTSA), Health Resources and Services Administration (HRSA), Administration on Aging, and Substance Abuse and Mental Health Services Administration (SAMHSA).

USING TAI CHI TO ENGAGE NEW PARTNERS IN FALLS PREVENTION IN OREGON

In Oregon, the state IVP program is aligning with several broader trends in health policy: the movement of health providers and systems toward coordinated care models and, on the public health side, toward broader definitions of community health. These trends have dovetailed into an innovative effort to enlist local health systems in fall prevention.

Using CDC's compendium of effective fall interventions (*Preventing Falls – What Works for Community-Dwelling Adults*) as a starting point, the state IVP staff approached health systems with ideas about preventing falls within their hospitals and clinics, as well as the homes of their patients at risk for falls. A first step was to revamp electronic health records (EHRs) to receive referrals from fall prevention screening programs and to add falls as a subset of billing claim forms. Now, local clinics and hospitals can obtain data and referrals for fall assessments through these mechanisms.

Next, a variety of fall prevention classes and programs drawn from the CDC compendium were instituted. These included tai chi classes offered for Medicare Advantage members, which will soon be offered through hundreds of local fitness centers and gyms. Another large hospital system – with facilities in Oregon and several other states – plans to include another fall reduction program as a member benefit. A trauma hospital is following suit, as is a local Veterans Affairs (VA) facility, which will become the first VA facility to offer tai chi to veterans.

Outside of the health system, the Portland Department of Parks and Recreation also will begin offering tai chi classes, including some in Spanish.

None of this would have been possible without a CDC Core grant that supported staff time to attend meetings, make presentations, and enlist partners. The grant also supported sending partners' representatives to train-the-trainer courses, helping to expand local capacity as well.

It is important to note that cultivating partnerships and relationships is a long-term strategy, requiring years of patient investment, despite scarce time and resources. Several Safe States members described years of going to meetings, providing data and information, and working steadily to be credible (and, ideally, indispensable) sources of information to make their partnerships expand, grow, and mature. Much of the work of cultivating partnerships, Safe States members report, is a matter of being at the table often and long enough to make IVP issues and programs more visible. "You need to be entrepreneurial," one says. "If you don't stick your nose out, elbow your way in, find new tables, sprinkle new seeds – your program won't grow."

Figure 11 lists several additional partners with whom Safe State members have worked successfully, as well as some of the topics and benefits state IVP programs can offer to connect to these partners.

What makes all this effort worthwhile? The SOTS survey describes several types of ongoing partnership activities: sharing data, involving partners in program planning, exchanging funds, collaborating on policy, and exchanging training and technical assistance. Often, partnerships yield general support for shared initiatives, but they become increasingly meaningful when resources – data, funding, training, and staff – are shared or exchanged.

Figure 11:
Ideas for Connecting to New Partners

PARTNER	CONNECTION(S) TO IVP PROGRAMS
4-H Programs	4-H6 rural network with strong connections to youth and the capacity to fund training and other events; their mission of safety and prevention makes them natural partners.
Administration for Children and Families (ACF) and Maternal and Child Health (MCH)	Home visiting programs have core requirements to link to IVP programs to implement child maltreatment prevention efforts. The Maternal and Child Health Title V Block Grant includes two national performance measures related to injuries and violence.
County Extension Agents	In rural areas, County Extension Agents work with youth and adults; they are eager for training that allows them to engage with their constituents on various injury and violence prevention topics (e.g., falls prevention for seniors).
Departments of Corrections	Suicide prevention, sexual violence prevention (for youth and adults), and brain injuries are high-priority topics for those responsible for the health of incarcerated populations.
Education Partners (K-12, colleges and universities)	Many IVP topics are age-specific and thus, are a source of concern for educational institutions. These topics include, but are not limited to: teen dating violence, bullying, child abuse and neglect, and playground safety. In addition to grade schools, colleges and universities can also be key partners. While interventions can be directed at the student populations of these institutions, academicians can also be research and evaluation partners, effective advocates, and providers of trainings and other learning experiences.
Elder Affairs/Aging Agencies	Falls, suicide prevention, and elder maltreatment are all concerns for elder affairs agencies and aging advocates.
Hospitals	Hospitals are key data and program implementation partners, as they are involved in a host of IVP efforts, such as safe sleep for babies, field triage and acute care, prescription drug overdoses, and SBIRT (Screening, Brief Intervention, and Referral to Treatment for alcohol/drug use). Community hospitals also are required to conduct community needs assessments under new IRS requirements, and injury and violence prevention programs can be welcome partners in these efforts.
Labor, Employers, and Workforce Development groups	These agencies can be partners on efforts associated with workplace safety and youth violence prevention (jobs for youth can be a protective factor against violence). They can also be key data partners for calculating productivity losses associated with injuries.
Professional Training Programs	Professional training programs can incorporate IVP best practices into professional development – e.g., Physical Therapy degree programs can incorporate falls prevention; provider training can incorporate prescription drug overdose prevention and return to play guidelines.
State-specific Associations of Counties	These associations can be conduits for trainings and injury/violence prevention messages (e.g., child passenger safety, poisoning prevention). They can be connected to policy makers and are often able to advocate more forcefully and freely than state and federal employees.
Trauma Centers	Level I and II Trauma Centers are required as part of their designation to participate in injury prevention, have a prevention coordinator (with a job description and salary support), to implement prevention activities based on priorities determined by local data, and to collaborate with partner agencies.
Veterans Services	Connections to veterans and their families can lead to conversations about suicide prevention, child safety, home and driving safety, and a host of other injury and violence prevention issues.

In some cases, partnerships are less of a challenge to sell: for example, Trauma Centers are often seeking opportunities to boost their own injury prevention portfolios, which is one of the measures by which they are assessed. “I sit on the Trauma Committee,” a Safe States member said. “They look to me as their injury prevention expert, and when they have funding, they look to me for suggestions.” A similar story came from another Safe States member who had a portion of an injury epidemiologist funded through a state Community Transformation Grant (CTG) – the culmination of years of committee and coalition work from injury staff partnering with chronic disease staff within the health department.

TREATING PARTNERS LIKE VIPs

Colorado’s IVP program supports a website just for partners – the VIPrevention Network – which gives all partners an easy way to post and find new information, resources, events, and media coverage.

CONVENING NEW PARTNERS ON AN EMERGING ISSUE

In Tennessee, the IVP program hosted a prescription drug abuse conference that brought together two new partners who had not previously been involved in injury prevention: the state Department of Mental Health and Drug Abuse and the Department of Environment and Conservation, which was interested in prescription drug take-back programs.



SHOWING PARTNERS THAT WE’RE ALL IN THE SAME BOAT

In Washington State, the Boating Safety Advisory Council is a new partner, that collaborates on boating accident investigation reports that go to the Coast Guard and provides information on contributing factors to boating injuries and fatalities. The IVP program also has helped connect the dots across injury risk factors, helping partners see their shared interest in topics such as the role of alcohol in boating injuries and fatalities, opioid poisoning, and motor vehicle crashes.

REPLICATING STATE PARTNERSHIPS AT THE LOCAL LEVEL

In New York, a state IVP partnership with the State Office on Aging has been replicated at the local level in half of New York’s counties, with local health departments partnering with local Offices on Aging to promote fall prevention awareness days. Program activities include distributing information and materials such as night lights and eyeglass cleaners with a “Strong Today, Independent Tomorrow” tag line.



Core Component #5: Effectively Communicate Information to Key Stakeholders

Communicating about injuries and violence – including data, prevention activities, and actions for decision makers and the public – can be challenging. As IVP programs cope with budget constraints and must function with partial FTEs to implement core functions, it is understandable they may lack communications expertise. Yet, the importance of communication cannot be overemphasized. Whether communications are directed to policy makers, partners, or the public, these skills are critical to ensure key audiences are aware and supportive of IVP efforts.

What can state IVP programs do to become more visible and more effective in communicating messages about data, interventions, returns on investment, and outcomes? They can:

- **Develop and document a communication plan.** A communication plan can be used to detail key communication strategies and messages and the internal and external stakeholders or audiences to whom these messages are to be conveyed. The plan can include communication goals and objectives, descriptions of key audiences, communication channels that reach these audiences most effectively, and specific messages and talking points that are tailored for each key audience. By having a documented communication plan in place, a state IVP program can ensure that audiences are kept informed and engaged, and that messages are conveyed consistently and effectively. This will ensure that key points are reinforced, even when they are tailored to a variety of audiences.
- **Regularly “over-communicate” with key contacts.** Once a communication plan is developed, it can be used to identify “essential” communication contacts among partners, local or statewide media agencies, and others who should be informed about the IVP program’s work. These contacts should regularly receive updates about ongoing activities, new initiatives, recent data, and any other information that communicates the important work being accomplished by the IVP program. Likewise, if a partner makes a request for information, the request should be fulfilled as quickly as possible. Although there can be a host of competing responsibilities, it is critical that IVP programs make time to communicate regularly and effectively with stakeholders. According to the “Rule of 7” in the field of marketing, it takes seven exposures to a message before anyone remembers it long enough to take action. Therefore, if you think you’ve sent too many press releases, emails, or messages in a month, chances are you’ve sent just enough.

WORKING WITH THE MEDIA ON SHAKEN BABY SYNDROME (SBS)

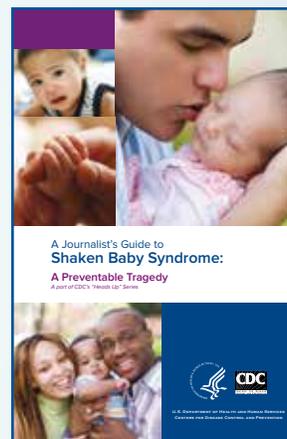
A Journalist’s Guide to SBS is part of the CDC’s “Heads Up” campaign to prevent traumatic brain injuries. It includes responses to the main questions journalists are likely to ask about the five “Ws”: the “what” about SBS, the “who” (facts and figures), the “why” (triggers and risk factors), the “when and how” (tips for accurate reporting), and “where” (CDC experts and other sources).

To view or download the guide, visit

www.cdc.gov/concussion/pdf/sbs_media_guide_508_optimized-a.pdf

For the companion guide for health departments and community-based

organizations, visit www.cdc.gov/concussion/pdf/preventing_sbs_508-a.pdf.



- **Use your organization's public information officer.** State health departments often have public affairs professionals or public information officers that provide communications support for the entire organization. By drawing upon the expertise of these professionals, state IVP programs that lack internal communications expertise can still receive support for communications activities (e.g., developing communication strategies and materials, preparing for interviews, etc.).
- **Create and maintain a photo library.** The most powerful element of any communication effort is always visual. Whenever possible, pictures should be taken at every program, training, or event. These photos should be kept organized in a digital format and regularly included in internal and external communications. These photos will go a long way toward illustrating the work of the IVP program in a way that words and numbers alone cannot.
- **Become fluent in "ROI."** As noted in the discussion of policy interventions, policy makers and other decision makers are interested (sometimes exclusively) in the cost implications of various interventions and their returns on investment (ROI). Although not every injury or violence prevention program yields immediate or significant savings, many do. One ongoing challenge is the relatively short time horizon of many legislators, who expect savings to accrue quickly.
- **Hone framing and other media advocacy skills.** Often, the potential to prevent injuries and violence is overlooked or misunderstood because of the way our society – including media, elected officials, and other influencers of public opinion – frame and discuss these issues. For example, as Berkeley Media Studies Group researchers and others have noted, violence is often discussed and reported through the lens of the criminal justice system. A "police-blotter" focuses on isolated episodes and the most extreme events, playing up arrests, trials, and jail sentences rather than identifying the causes, trends, and opportunities for prevention. The gun control and firearm safety discussions that took place following the Sandy Hook Elementary School tragedy in Newtown, Connecticut are another example. As horrific as they were, the 26 deaths in the Newtown shooting represent only a fraction of firearm-related homicides that occur on average in the U.S. each day; in a year, firearms result in nearly 74,000 injuries and more than 30,000 deaths, including homicides, suicides, and unintentional fatalities.²¹ Many communities believe they have had a "slow-motion" Newtown unfolding in their schools year after year, yet receive none of the media coverage and focus. Everyone involved in IVP can help media representatives and others ask (and answer) better questions that get at the underlying causes of injury and violence – and point the way to solutions.
- **Strengthen storytelling techniques.** Storytelling is a powerful and compelling communication method that can capture an audience's attention, engage them emotionally, and motivate them to act. By telling personalized stories, public health professionals can convey how complex surveillance systems and prevention programs positively impact the everyday lives of adults and children. By strengthening their storytelling skills, state IVP programs can "give life" to data, make abstract concepts meaningful, and connect larger IVP issues to the daily lives of decision-makers and the public.

RESOURCE: A CDC/NCIPC FRAMING GUIDE FOR COMMUNICATING ABOUT INJURY

Adding Power to Our Voices discusses common challenges in trying to communicate about injury and provides many ideas and tools for framing coordinated messages, using the tools of message framing and social math.

The guide can be downloaded from www.cdc.gov/injury/framing/CDCFramingGuide-a.pdf

Additional injury-specific communications tools (such as tips for audience identification, message development, channel selection, evaluation, and communication planning) are available



COMMUNICATING WITH POLICY MAKERS: OHIO'S INJURY PREVENTION RESOURCE

Modeled on a similar guide developed by the Johns Hopkins Center for Injury Research and Policy (*Preventing Injury in Maryland: A Resource for State Policy Makers*), this 2012 Ohio version provides an overview of each injury's impact (in terms of health and economics) on the United States and Ohio, as well as how each could be addressed more effectively through different types of policies. The guide covers youth bicycle safety, concussion in youth sports, falls among older adults, prescription drug overdose, teen driving safety, infant safe sleep, child passenger safety, suicide prevention, child maltreatment, and ATV safety.

In 2012, members of the Ohio Injury Prevention Partnership arranged individual visits with policy makers to introduce the previous version of the guide and answer questions. Nearly 600 copies were distributed during conversational meetings with policy makers or their staff. An updated version will soon be released, which will include stories of Ohioans affected by injuries and violence.

For a copy of the guide, visit sites.google.com/site/ipaag/home/guide.

To see a video workshop presentation from a Pennsylvania injury conference featuring advice and examples from the people behind the original Johns Hopkins Center for Research and Policy guide, visit vimeo.com/42702986.



- **Harness the power of infographics and social math.** Although the field of IVP is grounded in numbers, the ability to translate numerical data into simple visual graphics can be powerful. Infographics – visual representations of information, data or knowledge – can be particularly useful to convey messages by turning complex data into visual concepts for decision-makers and other audiences. A related strategy is social math – “the practice of translating statistics and other data so they become interesting to the journalist, and meaningful to the audience.”²² Social math makes references or comparisons between numbers within the contexts of time or other familiar concepts (e.g., “Every 15 minutes, someone dies in a motor vehicle crash on U.S. roads” or “The total lifetime cost of child maltreatment is \$124 billion each year”). When infographics and social math are combined, they can make particularly compelling communication messages. APHA has released an infographic with social math examples that describe how public health efforts save lives and money. The Safe States Alliance has also developed an infographic that illustrates the ROI for specific IVP initiatives and provides additional injury-specific social math examples.
- **Learn from others’ successes.** Within some state health departments, injury and violence prevention directors have admired the communications strategies deployed by maternal and child health (MCH) programs, among others. In particular, one Safe States member observed that MCH programs have found ways to move away from the inadvertent “finger-wagging” tone of some public health messages to a tone that engages people’s aspirations and strengths.
- **Adapt existing materials.** Many excellent communication materials and guides are incorporated into other materials. For example, CDC’s “Heads Up” campaign to prevent and recognize concussions and other brain

APHA AND SAFE STATES INFOGRAPHICS

APHA: action.apha.org/site/PageNavigator/Infographic_Page_2012_10_04_Round_2.html

Safe States: www.safestates.org/associations/5805/files/Safe_States_IVP_Infosheet_2013_FINAL.pdf

injuries includes materials customized to different audiences (e.g., teachers, coaches, clinicians, and parents), including fact sheets, radio spots, PSAs, posters, magnets, and other materials.

- **Understand the SDH and respect audience priorities.** Injury and violence statistics often illustrate many disparities and equities that exist within communities, reflecting the influence of social determinants of health (SDH) – “the circumstances in which people are born, grow up, live, and work” and how these circumstances are influenced by “economics, social policies, and politics.”²³ It is important to understand how the SDH influence community priorities and how IVP messages can support these priorities. For instance, in neighborhoods where violence is a primary concern, messages on how to prevent community violence may initially need to be prioritized before messages about other issues (e.g., active living, bike helmets, safe sleep, etc.) are introduced.
- **Explore social media opportunities.** Facebook, Twitter, blogging – each of these forms of information sharing can be useful components of a larger communication plan. As such, communications strategies and messages should incorporate these forms of media, along with more traditional ones. One example is the “Text4Baby” campaign of the National Healthy Mothers/Healthy Babies Coalition, which sends free texts to new mothers during their pregnancies and their babies’ first year with health and safety tips. (See <https://text4baby.org> for more information).
- **Include bystanders to change norms.** While IVP efforts frequently and appropriately focus on those at highest risk for a particular injury or form of violence, bystanders play an important role in many of these events by helping to shape social norms (e.g., refusing to let a friend drink and drive, offering support to a stressed parent, or taking a suicide threat seriously). Engaging those who might otherwise look the other way is an important consideration in developing and implementing injury and violence prevention messages.

RESOURCE: UNIVERSITY OF KANSAS COMMUNITY TOOLBOX

The University of Kansas Work Group for Community Health and Development maintains an online “Community Toolbox” with a wealth of free resources to support planning, evaluation, and coalition-building to improve community health and well-being. The toolbox also includes a checklist for building and sustaining relationships. To check it out, ctb.ku.edu/en/default.aspx.



RESOURCE: MAKING THE CASE FOR INJURY AND VIOLENCE PREVENTION:

A Conversation Starter for State Injury and Violence Prevention Directors to Use with State Health Officials and Other Leaders. This document is a companion piece to an Association of State and Territorial Health Officials (ASTHO) guide for State Health Officials (SHOs) – *Spotting Injury and Violence Prevention on Your Radar Screen – Creating a Legacy in Public Health*. It features advice that state injury and violence prevention directors offer to one another – especially to those in the more than 30 states that experienced a recent turnover in their SHOs (and, for many, in their gubernatorial administration and legislatures as well). The strategies and tips were gathered in a series of interviews conducted in April and May 2011 with eight state injury and violence prevention directors and three SHOs, augmented with document reviews. The document is available from this link on the Safe States website: www.safestates.org/MakingtheCaseforIVP



Core Component #6: Provide Training and Technical Assistance

State IVP programs face a dual training and technical assistance challenge: keeping their own skills and knowledge current, while also sharing their expertise with partners and other stakeholders (such as students and colleagues in local health departments). Given the wide range of topics, functions, and skills that IVP professionals must have, keeping up-to-date is a considerable challenge. Efforts to meet training needs can take many forms, ranging from conferences to webinars, and can include a wide variety of information, from updates on specific injury topics to skill-building in leadership, coalition building, communications, evaluation, or policy.

To help organize and prioritize the many types of expertise required for IVP, the National Training Initiative (NTI) for Injury and Violence Prevention developed a set of core competencies for injury and violence prevention professionals in 2005. Although most (87%) of states that responded to the 2011 SOTS survey were aware of the NTI Core Competencies, only six states (13%) reported that they always or frequently conducted trainings that incorporated each of the core competencies.

Figure 12: National Training Initiative (NTI) Core Competencies

More information about the Core Competencies can be found at www.safestates.org/NTICoreCompetencies

- Ability to describe and explain injury and/or violence as a major social and health problem
- Ability to access, interpret, use and present injury and/or violence data
- Ability to design and implement injury and/or violence prevent activities
- Ability to evaluate injury and/or violence prevention activities
- Ability to build and manage an injury and /or violence prevention program
- Ability to disseminate information related to injury and/or violence prevention to the community, other professionals, key policy makers and leaders through diverse communications networks
- Ability to stimulate change related to injury and/or violence prevention through policy, enforcement, advocacy and education
- Ability to maintain and further develop competency as an injury and/or violence prevention professional
- Demonstrate the knowledge, skills and best practices necessary to address at least one specific injury and/or violence topic and be able to serve as a resource regarding that area

Whether a state program addresses core competencies specifically or explores training and technical assistance opportunities more broadly, a thorough needs assessment is a recommended starting point. Both individual and organizational self-assessments organized around the NTI Core Competencies are available through the Safe States website (www.safestates.org/NTICoreCompetencies). Safe States also hosts a Training Center (www.safestates.org/trainingcenter), which offers links to archived webinars and other training resources on a variety of topics.

ASSESSING TRAINING NEEDS IN HAWAII - IS THE NEEDS ASSESSMENT TOOL POSTED IN THE EXCHANGE? IF NOT, CAN IT BE AND CAN WE REFERENCE THAT?

In Hawai'i, a training partnership called the Hawai'i Public Health Training Hui (meaning "collaborative") has been developed between the Hawai'i State Department of Health and the University of Hawai'i-based Public Health Training Center. Through this collaboration, the two organizations implemented a thorough needs assessment survey based on workforce core competencies. The survey was widely distributed through listservs of both organizations, and responses came from 300 public health stakeholders, academic partners, and non-profits across the islands.

The needs assessment sought information on specific topics, the levels of expertise and knowledge required for specific tasks, and the preferred modalities for training. The top three preferences – health communications and informatics, data organization and statistical skills, and qualitative and quantitative data collection tools – also reflected strong preferences for intermediate training, where content moves from general principles and content to more applied tools and methods.

In addition to the general core competency areas, the survey explored needs and interests in specific topics. Trends in health communication using social media topped the list, followed by determining appropriate statistical tests, generating relevant inferences from data, and needs assessment methods. To help meet these needs, a combination of webinars and face-to-face trainings are planned on each of the top priority topics, while saving room for emerging topics and issues.

Safe States members offer these ideas about opportunities to both receive and provide training and technical assistance, integrating training with partnership and collaboration:

- **Extend training and technical assistance to partners — especially those outside of public health.** Often, partners in related but separate fields welcome an orientation to the public health approach and the emphasis on prevention – particularly if it was not part of their own professional training. For example, in 2005, NHTSA provided funding to Safe States to fund health departments and hospitals to train EMS providers in injury and violence prevention.

THE NORTH CAROLINA PREVENTION ACADEMY: A TRAINING PARTNERSHIP

What do Safe Kids coordinators, trauma center staff, and domestic violence prevention practitioners need to know to be more effective in preventing injuries?

To find out, the University of North Carolina Injury Prevention Research Center teamed up with the North Carolina Injury and Violence Prevention Branch to conduct a statewide needs assessment of these practitioners. The results of the assessment showed that while they were well-educated and experienced, they had received relatively little formal training in injury and violence prevention. Luckily, however, they were interested in obtaining more training.

In response, the two organizations crafted the North Carolina Prevention Academy. The Academy combines an annual statewide Injury Prevention Summit with in-person trainings, six months of coaching and technical assistance, and regional training and networking opportunities. The overall goal is to demystify primary prevention, share the evidence base on specific topics, and help translate science into practice through the use of data and evidence-based practice.

The first cohort of three community teams was recruited in 2012; they will apply what they learn to specific projects in their home communities. Next up? More teams will be recruited from across the state – and more trainings will be planned that are based on the core competencies of injury and violence prevention.

- **Adapt and adopt related trainings from others — within and outside of public health.** Other public health programs (such as chronic disease programs) may feature similar approaches to evaluation, policy assessment, and coalition-building. Similarly, organizations outside of the traditional realm of public health can provide useful skills for IVP professionals. For example, the American Planning Association provides trainings on how to design communities to be safer for pedestrians and cyclists. These trainings provide opportunities to cross-train IVP staff and identify joint projects and initiatives.
- **Leverage existing training and technical assistance resources.** Safe States members are always on the look-out for new opportunities, but also reiterated many that “oldies but goodies” are stored in webinar archives of Safe States and other organizations (See the “IVP Training and Technical Assistance Resources” box for some suggestions). Partners at the local, state, and national levels can be both providers and recipients of targeted technical assistance to support shared goals and objectives.
- **Provide opportunities for others to experience the injury and violence prevention field first-hand.** By engaging entry-level public health professionals – either through CDC’s Public Health Associates Program (PHAP) and Public Health Prevention Service (PHPS) or through other internships and fellowships for undergraduate, MPH, or doctoral students – state IVP programs can expand their capacity to accomplish their work while drawing more talented people into the field.
- **Use trainings to create a “deep bench” of cross-trained staff within the state IVP program.** Several state IVP program directors noted how much they invest in making sure that all of their staff gain new skills and experiences. To this end, they send staff to national meetings and conferences, encourage staff to participate in short-course injury training programs, and organize staff and local or regional partners to participate in webinars together and discuss them as a team or coalition.
- **Partner with Injury Control Research Centers (ICRCs) and other research institutions to host trainings, obtain topic-specific expertise, and collaborate in ways that will better infuse research into practice (and vice versa).**

IVP TRAINING AND TECHNICAL ASSISTANCE RESOURCES

Safe States Alliance Training Center www.safestates.org/trainingcenter

CDC Learning Connection and TRAIN (TrainingFinder Real-time Affiliate Integrated Network)
www.cdc.gov/stltpublichealth/WorkforceTraining/index.html

TEACH-VIP E-Learning Program: Lessons in Violence and Injury Prevention [//teach-vip.edc.org/](http://teach-vip.edc.org/)

SAVIR Advocacy Training and Archived Webinars www.savirweb.org/content/index.php?pid=124

Children’s Safety Network National Injury and Violence Prevention Resource Center
www.edc.org/projects/childrens_safety_network_national_injury_and_violence_prevention_resource_center

Injury Control Research Centers (ICRCs) www.cdc.gov/injury/erpo/icrc/

Indian Health Service (IHS) Fellowship Program www.ihs.gov/injuryprevention/

Core Violence and Injury Prevention Program (Core VIPP) Regional Networks www.cdc.gov/injury/stateprograms/



Conclusion

Over time, another update of the core components will be imminent. At that time, we can anticipate some changes in the current landscape, as well as some continuity. While elements of these core components may be more evenly distributed across state programs, some variation will persist. More state and local health departments will have completed accreditation processes that aim to improve quality and performance based on national standards. More reorganizations will have moved IVP departments yet again – some to a stronger perch, and others less so.

Major trends in health policy – full implementation of health care reform, the move away from fee-for-service, a stronger focus on accountable care, and the increasing automation of health records – will expedite some data exchanges and perhaps entangle others. Just as prescription drug overdoses are overtaking motor vehicle injuries as a leading cause of injury, some other shifts may unfold.

Outside of health policy and health departments, the pressures of state and federal budget climates will continue to dictate the fate of funding streams on which programs and partners rely, but it is impossible to predict exactly how.

What we do expect is that the core components described in this edition of *Building Safer States* will continue to be relevant. Building and sustaining the next generation of state programs will require attention to the many challenges that programs and their partners face, but it also presents opportunities for creativity and innovation, and for bringing new partners into the injury and violence prevention fold.

It is our hope that this document will have acknowledged the very real challenges programs continue to face and will likely face in the future, while also generating renewed energy and enthusiasm for building an even stronger base from which future injury and violence prevention successes will flow.

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Appendix B: Acronyms

BRFSS – Behavioral Risk Factor Surveillance System

CDC – Centers for Disease Control and Prevention

CDR – Child Death Review

EMS – Emergency Medical Services

FARS – Fatality Analysis Reporting System

HDD – Hospital Discharge Data

ISW – Injury Surveillance Workgroup

ICRC – Injury Control Research Center

IVP – Injury and violence prevention

NCIPC – National Center for Injury Prevention and Control

NOPUS – National Occupant Protection Use Survey

NVDRS – National Violent Death Reporting System

SOTS – State of the States

STIPDA – State and Territorial Injury Prevention Directors Association

YRBSS – Youth Risk Behavioral Surveillance System



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Notes



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