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# Filling the Gaps: Strategic Directions for a Safe California, 2010 - 2014

*A Final Report to the Centers for Disease Control and  
Prevention*

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## Safe and Active Communities Branch (SACB) California Department of Public Health

The Safe and Active Communities Branch (SACB) works to ensure that all Californians have safe places to live, work, play, and fully participate in community life without worry about violence or accidental injury. The Branch is the focal point for the California Department of Public Health's injury and violence prevention efforts, as well as physical activity promotion. Functions include epidemiological surveillance, program planning and consensus building, interventions, policy development, professional education and training, and public information.

The Branch focuses on primary prevention—instituting policies and interventions designed to prevent harmful events from occurring in the first place. SACB works to shift social norms in all relevant domains—from setting expectations that all neighborhoods should be safe and walkable to zero tolerance for intimate partner violence.

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# Chapter One: Background

## Purpose

Over the last twenty years, California has built a strong and vibrant injury and violence prevention program, guided by strategic thinking in partnership with many experts, decision makers, and stakeholders across the state. The CDC-funded *Safe California* capacity-building project has provided a unique opportunity to assess current efforts and determine where the gaps are in data, policy, and practice. As a result, the recommendations set for in “Filling the Gaps: Strategic Directions for a Safer California, 2010-2014” are not all inclusive—they represent a strategic “to do” list designed to strengthen efforts in areas that need more focused attention and serve as a catalyst for new and evolving areas of injury prevention. Significantly, the *Safe California* project has been designed to complement the following seminal documents that currently help drive injury and violence prevention across California:

- Building State and Local Capacity to End Sexual Violence, [www.cdph.ca.gov/programs/EPIC/Pages/default.aspx](http://www.cdph.ca.gov/programs/EPIC/Pages/default.aspx).
- California Strategic Highway Safety Plan (2006), [www.dot.ca.gov/SHSP](http://www.dot.ca.gov/SHSP)
- California Statewide Policy Recommendations for the Prevention of Violence Against Women (2006), [www.cdph.ca.gov/programs/EPIC/Pages/default.aspx](http://www.cdph.ca.gov/programs/EPIC/Pages/default.aspx).
- Universal Livability: A Dream for Tomorrow, A Plan for Today, California 2005-2010 Strategic Plan (2005), [www.cdph.ca.gov/programs/EPIC/Pages/default.aspx](http://www.cdph.ca.gov/programs/EPIC/Pages/default.aspx).
- Preventing Falls in Older Californians: State of the Art, Archstone Foundation (2003), [www.archstone.org](http://www.archstone.org)
- Traffic Safety Among Older Adults: Recommendations for California (2002), [www.eldersafety.org](http://www.eldersafety.org)

## Next Steps: The State Role in Implementation

The Safe and Active Communities Branch will collaborate with colleagues across the state to ensure that the “Filling the Gaps” recommendations result in tangible actions that reduce injuries in California. As such, the Branch will monitor and facilitate implementation by providing strategic guidance, best practice tools, and data, as well as working with partners to coordinate and convene stakeholders, provide venues to foster community support, pursue funding, and connect with efforts in other states. It is hoped that public health stakeholders in California will use the recommendations as a catalyst for new grants, to build support for an expanded public health role in these issues, and for policy and program development.

And finally, given the ever-evolving landscape of injuries and injury prevention in California, the recommendations will be reviewed and updated annually.

## Injuries in California: A Public Health Priority

### *What is Injury?*

Injuries are unintentional or intentional damage to the body resulting from acute exposure to mechanical, thermal, electrical, or chemical energy or from the absence of such essentials as heat or oxygen. The term "injury" has been adopted by the public health community to replace the word "accident" when describing the events that result in bodily harm. This change has been a deliberate one to draw attention to the fact that injuries are not chance occurrences—unpredictable and uncontrollable. Recent history proves that intelligent policies and practices can reduce the risk of injuries and result in lower injury rates.

### *Magnitude of the Problem: Across the Nation*

Injuries rank as one of our most pressing health problems, yet they are probably the most under-recognized. They are the leading cause of death for persons from the first year of life to middle age and the fourth leading cause of death among persons of all ages.<sup>i</sup> However deaths are only a small part of the picture. In fact, injuries cause many more hospitalizations, emergency department visits, and doctor's office visits than deaths. Injuries and their consequences account for more than 10 percent of annual medical spending, approximately \$260 billion each year. At least half of these costs are borne by the public.<sup>ii,iii</sup>

In addition to health care costs, fatal and non-fatal injuries exact a terrible personal and societal toll. They are a tremendous drain on society in terms of lost productivity and other societal impacts. In addition to the economic costs to the individual affected, this loss extends to the injured person's family, friends, and coworkers. Permanent disability resulting from an injury can affect all aspects of a survivor's existence and can disrupt, change, and dominate his or her family life forever. Even those without physical scars may be forever haunted by post-traumatic stress resulting from the injury event.

### *Magnitude of the Problem: California*

Each year in California, injuries cause more than 17,000 deaths, over 75,000 people to be permanently disabled, over 250,000 nonfatal hospitalizations, and more than 2,000,000 emergency department visits.<sup>iv,v,vi</sup> The death toll from injuries among Californians is greater than that produced if a fully loaded jumbo-jet were to crash every ten days.

# Chapter One: Background

## *Prevention is Better than Cure*

Historically, the most successful public health injury and violence prevention programs combine three types of intervention strategies. These are categorized as:

- Engineering/technological interventions - changes in the design of products or of the physical environment;
- Education/behavior change interventions - the education as well as the social and environmental changes that foster behavior change of the population-at-large or of targeted groups or efforts to alter specific injury-related behaviors and efforts to change norms; and
- Legislative/enforcement interventions - the passage and enforcement of new laws or the increased enforcement of existing ones.

Child safety seats provide an excellent example of how these three strategies can be interwoven. In 1983, legislation was passed that required all children under four years old riding in motor vehicles be restrained in a child safety seat; it has changed over the years to reflect new knowledge about the risks to older children. The design of the seats was an engineering/technological advance known to be extremely effective when used properly. Education was an important factor in passing the legislation and remains important in encouraging parents to obtain and use seats correctly, and in reinforcing a community norm of universal car seat use for children.

Another example is the "Vision Zero" traffic safety goal in Sweden and several other nations.<sup>vii,viii</sup> The goal is to have no deaths or serious disabling injuries that result from motor vehicle trauma. This goal does not involve the elimination of all vehicle crashes or minor traffic-related injuries. It seeks only to prevent the serious injuries. The process toward this goal includes improvements to the design of automobiles, roadways, and pedestrian crossings. It also involves improvements to the efficiency of road and other transportation systems, creation of new legislation and enforcing existing laws, incentives to the public and to businesses to change needed travel patterns, and an extensive education campaign to inform the public about the goal and the reasons for the changes. The integrated process seems to be working. Although the number of minor crashes has remained about the same, serious injuries are declining. This level of success is definitely an incentive for replication elsewhere.

Effective injury prevention requires the combined efforts of experts and professionals in more than 30 distinct professional disciplines, including health, education, transportation, law, engineering, architecture, and safety sciences.<sup>ix</sup> Such collaboration is needed to affect legislation, regulations, and public attitudes towards injury prevention. This multi-disciplinary approach is the premise upon which each of the "Filling the Gaps" recommendations has been developed.

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## Plan Development

In 2005, the Safe and Active Communities Branch received a State Injury Surveillance and Program Development Core Capacity Building grant from the Centers for Disease Control and Prevention (CDC). This *Safe California* grant was to support the development and implementation of recommendations to enhance injury control capacity and strengthen program infrastructure. With its last strategic plan adopted in 1998, the Safe and Active Communities Branch was very pleased to receive funding for a new planning process to update and guide further expansion of California's injury and violence prevention efforts. Due to the small scale of the grant but also the maturity of injury prevention efforts in California, the Safe and Active Communities Branch determined that the best strategy would be to focus on broad infrastructure needs and on injuries that merit more attention (i.e., filling in the gaps).

In Spring 2006, the Branch convened the first of two Injury Prevention Planning Groups (IPPG) tasked with developing the recommendations. This IPPG-1, used a more global lens concentrating on how to strengthen existing infrastructure, and consisted of 29 influential stakeholders from both within and outside the traditional injury prevention community. To launch their deliberations, IPPG-1 members reviewed the infrastructure recommendations from the November 2005 State Technical Assessment Team (STAT) visit conducted by the State and Territorial Injury Prevention Directors Association (STIPDA). STIPDA's expert team concluded that staff and funding resources for injury prevention within CDPH were not commensurate with California's injury burden or sufficient to support state-level injury prevention activities.

In Fall 2006, the Branch convened IPPG-2, a second group of 23 state and local injury prevention experts, to determine which specific injury areas merited attention. Since this process sought to "fill gaps" in California's injury and violence prevention efforts, an injury area had to be deemed as "under worked" to be included in the Plan. For example, violence against women was not addressed because SACB had already facilitated significant statewide strategic planning in that arena. Decisions were informed by California data and a web-based survey of more than 120 stakeholders and colleagues who were members of the statewide California Injury Prevention Network. Eight potential topics were selected for IPPG-2 to consider for inclusion: child maltreatment, unintentional poisoning, youth violence, motorcycle injuries, youth motor vehicle occupant injuries (ages 8 to 20), senior falls, pedestrian injuries, and suicide. SACB staff prepared a topical background scan for each of these injuries to assist IPPG-2 in its deliberations. The scans included promising interventions, funding, disparities, constituency, and data (an analysis of Healthy People 2010 Objectives; as well as deaths and hospitalizations). As a result, IPPG-2 selected the following five topic areas as priorities: older adult falls; older adult poisonings due to medication errors; motor vehicle drive and occupant injuries (ages 14-20); pedestrian safety, walkability, and universal livability; and child maltreatment.

Following the selection of the five injury focus areas, 39 additional members with technical expertise were brought in to participate on five IPPG-2 workgroups. These workgroups developed their

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recommendations through a process that included reviewing data, existing reports and programs, gaps, and promising practices. The workgroups emphasized the development of culturally competent recommendations that considered the unique and diverse populations in our state. In addition, to be included in the Plan, recommendations had to be:

- supported by the literature's best practices and by California data;
- achievable within the four-year timeframe of the report;
- an appropriate and critical role for public health at the state level;
- achievable with existing resources or resources that are readily available within the plan's duration;
- supportable by issue stakeholders.

Recommendations were then vetted with the CIPN and other key stakeholders. This outside review provided broad feedback from California's large and diverse injury prevention community. Finally, the IPPG-2 workgroups developed a detailed Action Plan for each of their recommendations (found in a supplementary document on SACB's website). For a complete list of IPPG-1 and IPPG-2 Members, please see Appendix C. For more information on the California Injury Prevention Network, please visit the website at: [www.injurypreventionnetwork.org](http://www.injurypreventionnetwork.org).

# Chapter Two: Infrastructure Recommendations

## Injury Prevention and Control Infrastructure Recommendations

The recommendations in this section address injury prevention and control infrastructure needs both statewide and within the California Department of Public Health (CDPH). The goal of these broad recommendations is to improve the safety and health of all Californians by establishing sustainable funding and resources for comprehensive statewide injury and violence prevention activities.

### *Statewide Recommendations*

**A. *Support and strengthen the public voices advocating for injury and violence prevention as a critical, funded public health function at the state and local levels.***

A-1. Increase recognition that injuries are pervasive in the lives of all Californians and preventable, and that there is a need for wide-ranging prevention efforts.

A-2. Build and strengthen constituencies and foster leadership in diverse communities throughout California to advocate for sustainable funding and resources for injury and violence prevention activities at local and state levels.

A-3. Focus public demand for safer, healthier communities on increasing injury and violence prevention efforts that are commensurate with the emotional, physical, and economic burden of injuries and violence, as well as California's rapidly shifting demographics.

**B. *Strengthen alliances to ensure that injury and violence prevention are integrated as key components in other efforts to address major public health and safety issues.***

B-1. Connect injury control and violence with other health, social, environmental, and economic issues, such as physical activity and obesity prevention, aging, disability, poverty, and emergency preparedness.

B-2. Promote integration of injury and violence prevention efforts into broader public health programs and initiatives.

B-3. Create and support opportunities for connecting injury and violence prevention advocates with other public health advocates such as those who champion chronic disease prevention.

## Chapter Two: Infrastructure Recommendations

### *State Level Recommendations (within CDPH)*

**C. *Position injury and violence prevention as a prominent and necessary public health function within the CDPH.***

C-1. Convey that injury and violence prevention plays a critical role in achieving the CDPH's health and safety goals.

C-2. Pursue statutory language for the Department to have injury and violence prevention as a core function.

C-3. Work to infuse injury and violence prevention into existing and emerging CDPH program areas, such as the "universal livability" and tobacco tax initiatives.

**D. *Facilitate capacity building for injury and violence prevention programming and research efforts at the local and state levels.***

D-1. Provide the opportunity for learning and collaboration among advocates in the injury and violence prevention field through statewide conferences, teleconferences, and professional development opportunities.

D-2. Foster relationships among existing and emerging injury and violence prevention efforts such as pedestrian safety and senior fall prevention.

D-3. Expand the major sources of data on injury and violence, their risks and protective factors, and increase access to, and usefulness of these data.

D-4. Seek resources to strengthen local health department infrastructure and the capacity to focus on injury and violence prevention programming and applied research efforts.

# Chapter Three: Injury Priority Areas

## Injury Priority Areas

“Filling the Gaps” seeks to strengthen existing efforts that require additional focus, as well as, to expand into emerging injury prevention issues. To fulfill this goal, five emergent and underserved injury areas have been selected: older adult falls; older adult poisoning due to medication errors; motor vehicle occupant injuries (ages 14 to 20); pedestrian safety, walkability, and universal livability; and child maltreatment.

### *Older Adult Falls*

Goal: Build state and local capacity to reduce fall-related injuries and deaths among older adults.

Safe California 2010 Objective: Reduce fatal fall injury rate for adults 65 years and over to 32.9 per 100,000 population.

Safe California 2010 Objective: Reduce nonfatal hip fracture (ICD-9 CM 820) rate for male adults 65 years and over to 296.3 per 100,000 population.

Safe California 2010 Objective: Reduce nonfatal hip fracture (ICD-9 CM 820) rate for female adults 65 years and over to 578.9 per 100,000 population.

Falls among older adults are a major cause of injury in California, leading to lengthy hospital stays, long-term care admission, and, all too frequently, to a spiral of events that ends in death.<sup>x</sup> Falls are also a frequent cause of traumatic brain injury and hip fractures in seniors, both of which can lead to long-term disability. In 2007, over 1,400 Californians age 65 and older were killed as the result of a fall and there were almost 68,000 nonfatal hospitalizations due to falls in this age group.<sup>xi,xii</sup> These non-fatal fall injuries cost Californians approximately \$2.4 billion each year in direct medical costs.<sup>xiii</sup>



## Chapter Three: Injury Priority Areas

The following recommendations were developed with consideration for the Archstone Foundation's *Preventing Falls Among Older Californians: State of the Art* (2003) and the Fall Prevention of Excellence's *Statewide Strategy for Action* (2007). More information on these reports can be found at: [www.stopfalls.org](http://www.stopfalls.org).

### Recommendations

- E. SACB should work with the Office of Statewide Health Planning and Development (OSHPD) to establish state capacity to track older adult falls by capturing more data on fall risks and improving the quality and connection between discrete sources of information, including emergency medical services, emergency departments, acute care hospitals, rehabilitation, and long-term care.
- F. SACB, in conjunction with other governmental and professional associations, should explore the potential for health care provider reimbursement for fall prevention activities via the promotion and use of the ICD-9 code for "history of falls or risk of falls" (V15.88).
- G. SACB should establish, in conjunction with its state partners, an executive-level state task force or coalition to provide leadership and coordination of older adult fall prevention and implement statewide policy initiatives.
- H. SACB, in collaboration with the Fall Prevention Center of Excellence (FPCE) and the StopFalls Network, should build the capacity of local public health departments to support partnerships and sustainable fall prevention programs.
- I. SACB should work with state and county health care associations and the FPCE to improve the ability of health care providers to conduct fall risk assessment and prevention.
- J. SACB should increase older adults' ability to age in place by working with state partners to integrate fall prevention (including environmental strategies like universal design) into state and local public health, aging programs, and caregiver training programs.
- K. SACB should work with the California Council on Gerontology and Geriatrics (CCGG) to incorporate order adult fall prevention curricula into academic programs in institutions of higher education.

### Recommended Key Partners

California Department of Aging; California Council on Gerontology and Geriatrics; Caregiver Resource Centers; Emergency Medical Services Authority; Fall Prevention Center of Excellence; Office of Statewide Health Planning and Development; StopFalls Network.

## Chapter Three: Injury Priority Areas

### *Older Adult Poisoning Due to Medication Errors*



Goal: Reduce medication errors and misuse among older adults.

Safe California 2010 Objective: Reduce nonfatal accidental poisoning due to medication errors (ICD-9-CM E850.x – E858.x) rate for adults 65 and over to 18.3 per 100,000 population.

Safe California 2010 Objective: Reduce fatal accidental poisoning due to medication errors (ICD-10 X40-X44) rate for adults 65 and over to 2.7 per 100,000 population.

Older adult poisoning due to medication errors is a rapidly emerging public health problem. Such poisoning injuries result when one or more medications are prescribed or used inappropriately. This is also frequently called a

“medication error.” Medication errors include “any preventable event occurring in the medication-use process, including prescribing, transcribing, dispensing, using, and monitoring, that results in inappropriate medication use or patient harm.”<sup>xiv</sup> Unfortunately, most injury surveillance systems cannot completely differentiate medication errors from abuse, but research on poisoning surveillance is underway.

According to the California Medication Errors Panel, medication errors “cause harm” to 150,000 Californians annually and cost an estimated \$17.7 billion.<sup>xv</sup> In 2007, there were almost 3,100 hospitalizations and 43 persons died due to medication errors among Californians age 65 or older.<sup>xvi,xvii</sup>

#### Recommendations

- L. SACB should work with the California Poison Control System (CPCS) and OSHPD to enhance understanding of older adult poisoning due to medication errors by linking, analyzing, and disseminating data from hospitals, emergency departments, community clinics, vital statistics, and the CPCS.

## Chapter Three: Injury Priority Areas

- M. SACB should, in collaboration with state agencies and associations, support the establishment of older adult poisoning due to medication errors as a major public health problem and work to integrate solutions into state and local public health departments.
- N. SACB should collaborate with professional health care associations and other partners to improve health care provider capacity to prevent older adult poisoning due to medical errors.
- O. SACB should collaborate with CPCS to increase older adult and caregiver awareness of older adult poisoning due to medication errors by developing culturally sensitive, consumer-focused educational campaigns.

### Recommended Key Partners

California Department of Aging; California health care associations; California Poison Control System; California Public Health Association – North; California Public Health Nurses Association; Office of Statewide Health Planning and Development; Southern California Public Health Association; California Department of Alcohol and Drug Programs.

## Chapter Three: Injury Priority Areas

### *Motor Vehicle Occupant Injuries, Ages 14 to 20 (Youth)*

**Goal:** To enhance systems that support safe decision making by teen and young adult drivers and motor vehicle occupants.

**Safe California 2010 Objective:** Reduce motor vehicle occupants killed for ages 14-20 to 5.7 per 100,000 population.

Motor vehicle crashes are the leading cause of death and nonfatal injury hospitalizations among California youth ages 14 through 20.<sup>xviii,xix</sup> In 2007, 447 California youth were killed, and there were almost 3,500 nonfatal injuries among motor vehicle occupants in this age group.<sup>xx,xxi</sup> All too often, these injuries and deaths are caused by immaturity and limited driving experience that lead to risky behaviors such as speeding or drinking and driving.<sup>xxii</sup> In fact, nationally in 2004, driver error accounted for 78 percent of fatal crashes among 16-year-olds.<sup>xxiii</sup>

Many state and local partners (e.g., the California Department of Alcohol and Drug Programs, the California Highway Patrol, and the Office of Traffic Safety) have ongoing initiatives to address drinking and driving among youth. This is not the case for Graduated Driver Licensing (GDL). GDL laws have been shown to be one of the most effective ways to reduce motor vehicle crashes, injuries, and deaths to teens. A 2006 national evaluation of GDL programs and crashes found that comprehensive GDL programs reduce 16-year-old drivers' fatal crash involvement rates by approximately 20%.<sup>xxiv</sup> While California has one of the strongest GDL laws in the nation, significant enhancements need to be made to its regulations and enforcement, as well as education for parents, in order to increase its effectiveness and further reduce needless crash deaths among California youth.

The following recommendations focus on GDL as a "gap filler". Where possible, the recommendations support the public health role in implementing actions set forth in the California Department of Transportation's Strategic Highway Safety Implementation Plan (SHSIP), Challenge Area 6, "Reduce Young Driver Crashes." More information on the SHSIP is available at: [www.dot.ca.gov/hq/traffops/survey/SHSP/](http://www.dot.ca.gov/hq/traffops/survey/SHSP/).

#### Recommendations

- P. SACB should establish a system that allows for comprehensive analysis of teen and young adult crash data and make such data accessible to injury prevention researchers.
- Q. SACB should work with stakeholders to enhance the effectiveness and enforcement of graduated drivers licensing (GDL) laws in reducing teen and



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young adult motor vehicle occupant injuries.

- R. SACB should promote the effective integration of developmentally appropriate driver and motor vehicle occupant risk reduction strategies into high school curricula and school policies.
- S. SACB, in partnership with state and local agencies, should research and develop a two-part social norm campaign, one part for parents and another for teens and young adults, to enhance adherence to GDL laws and improve teen and young adult driving and vehicle occupant safety behaviors.
- T. SACB, in conjunction with its partners, should promote implementation and evaluation of promising parent education and involvement programs such as Start Smart that encourage parents to adopt and maintain restrictions on teen and young adult driving post-GDL, especially during the first year of licensure.

### Recommended Key Partners

California Highway Patrol, California Office of Traffic Safety; California Department of Motor Vehicles; Automobile Club of Southern California; California State Automobile Association; Center for Youth Development, University of California, Davis; California Parent Teacher Association; Personal Insurance Federation; School Health Connections and Healthy Start, California Department of Education; Safe Transportation Research and Education Center, University of California, Berkeley.

## Chapter Three: Injury Priority Areas

### *Pedestrian Safety, Walkability, and Universal Livability*

Goal: To create pedestrian friendly environments for all Californians.

Safe California 2010 Objective: Reduce pedestrian deaths rate to 1.7 per 100,000 population.

Safe California 2010 Objective: Reduce pedestrian injury rate to 8.5 per 100,000 population.

Motivating Californians to walk (and ride bicycles) for transportation and recreation is challenging if they do not feel safe. In 2007, over 830 pedestrians were killed in California and in 2006 more than 4,300 were hospitalized with nonfatal injuries.<sup>xxv,xxvi</sup> Treat and release emergency department visits in California exceed 18,000 persons.<sup>xxvii</sup> These totals hint at the great societal costs associated with severe pedestrian injuries. For example, the lifetime costs paid by the public sector for aftercare for a child who suffers permanent brain damage as a result of an automobile collision can total \$4.5 million. Factors contributing to high pedestrian morbidity include inattentive driver behavior and lack of awareness as to what pedestrian rights include, unsafe structures that make up the built environment (e.g., wide, fast, multi-lane roadways), and dangerous pedestrian behavior (e.g., children darting out into the street and pedestrian intoxication).

Pedestrian injuries and other health risks, such as obesity, violence, and unhealthy air pollution, can be reduced for the long-term by creating walkable communities and built environments that provide safe, universal pedestrian access. “Walkable” communities are those in which pedestrian travel is readily available as a safe, connected, accessible, and pleasant mode of transport.<sup>xxviii</sup> Likewise, communities that are universally livable allow every individual to function within their community by providing adequate and appropriate access to transportation, safe and walkable areas, safe biking routes, and access to healthy and nutritious foods.

The following recommendations were developed with consideration for the California Department of Transportation’s Safe Routes to School program, Completes Streets Implementation Plan, and the Strategic Highway Safety Plan (SHSP). Where possible, the recommendations support the recommendations in SHSP’s Challenge Area 8, “Make Walking and Street Crossing Safer.” More information on the SHSP is available at: [www.dot.ca.gov/hq/traffops/survey/SHSP/](http://www.dot.ca.gov/hq/traffops/survey/SHSP/). \*

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\* Note that these recommendations align with and help communities/regions achieve reductions in vehicle miles traveled (auto and light truck trips) and, as a result, reduce greenhouse gas emissions and climate change impacts.

## Chapter Three: Injury Priority Areas

### Recommendations

- U. SACB should work with its federal, state, and local partners to strengthen capacity to collect state, county, and local level pedestrian data (e.g., number of pedestrians or “counts”) to better inform pedestrian safety policies and programs.
- V. SACB should compile, synthesize, and disseminate data and research on pedestrian safety and the built environment to promote improvements and policy development at the local level.
- W. SACB, in conjunction with its partners, should build organizational capacity of local public health departments to engage in land use and transportation planning and pedestrian safety programs by identifying funding streams, as well as the provision of training and technical assistance on safe built environments for pedestrians.
- X. SACB should facilitate policies that promote pedestrian safety and modifications to the built environment for safe, universal pedestrian access.

### Recommended Key Partners

California Conference of Local Health Officers; California Department of Transportation; State Office of Traffic Safety; as well as other CDPH nutrition/physical activity programs; Center for Civic Partnerships; Local Government Commission; Prevention Institute; Health In All Policies Task Force of the Strategic Growth Council.

## Chapter Three: Injury Priority Areas

### *Child Maltreatment*

**Goal:** To enhance statewide capacity to reduce child maltreatment and neglect.

**Safe California 2010 Objective:** Reduce the rate of child maltreatment deaths to 1.7 per 100,000 population.

Child maltreatment refers to any act or failure to act on the part of a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child. It includes physical, sexual, and emotional abuse, neglect, and endangerment.<sup>xxix</sup>

Child maltreatment is a significant public health problem in terms of its magnitude, severity, and societal costs. In 2008, almost 500,000 children were referred to Child Protective Services.<sup>xxx</sup> Of those, over 97,100 children have substantiated claims of child maltreatment, including almost 66,000 children age 10 and younger. These official numbers represent only the tip of the iceberg of parenting problems and child adversity.

Exposure to any form of child maltreatment is defined as an Adverse Childhood Experience (ACE). These ACEs often lead to both immediate and enduring negative consequences. In addition to serious physical injury or death, maltreated children may face emotional difficulties, social maladjustment, and school underperformance. Consequences in adolescence include delinquency, substance abuse, suicide risk, and school failure.<sup>xxxi</sup> Longer term effects of childhood maltreatment include increased risks for mental illness (e.g., depression), obesity, criminal behavior, and parenting difficulties. As the number of adverse childhood experiences accumulates for a person, their negative physical and mental impacts expand exponentially, including increasing risks for chronic heart, lung and cancer diseases.<sup>xxxii</sup> These long-term impacts make preventing child maltreatment even more critical to the public's health and well-being.



## Chapter Three: Injury Priority Areas

### Recommendations

- Y. SACB should work with state and local Child Death Review Teams (CDRTs) and other key partners to develop and promote the use of standardized public health surveillance definitions for child abuse and neglect for CDRTs.
- Z. SACB should compile and disseminate information and research on the overlapping relationships among unintentional injuries, child maltreatment, substance abuse, and adverse childhood experiences to strengthen collaborations among prevention stakeholders at the state and local level.
- AA. SACB should facilitate the implementation of policies and protocols to increase the quality and availability of training for mandated reporters, including awareness of local resources for training.
- BB. SACB should work with state partners and professional associations to reduce risk factors for child maltreatment by increasing universal screening for perinatal substance use, providing education and practice to build parenting skills, and encouraging more father involvement.
- CC. SACB should work with state and local partners to create unified, consistent, and evidence-based primary prevention child maltreatment messages for use in state and local media and social marketing campaigns.
- DD. SACB should promote, in collaboration with its partners, the statewide implementation of evidence-based family strengthening programs (e.g., home visitation, family resource centers, and effective parenting curriculum).

### Recommended Key Partners

American Academy of Pediatrics; American College of Obstetrics and Gynecology; California Department of Alcohol and Drug Programs; California Department of Education; California Department of Social Services; Center for Injury Prevention Policy and Practice, Kids' Plates Program, San Diego State University; Child Abuse Prevention Councils (CAPCs); Contra Costa Child Abuse Prevention Council; County Alcohol and Other Drug Administrators; County Child Death Review Teams (CDRT); CDRT and CAPC Regional Coordinators; First Five State and County Commissions; Maternal, Child and Adolescent Health Branch, California Department of Public Health; Prevent Child Abuse California; State Child Death Review Council.

# Appendices

## Appendix A: Glossary

Adverse drug event – Any injury due to medication.<sup>xxxiii</sup>

Adverse childhood experience—Exposure to physical, sexual and emotional abuse, neglect, and other household dysfunctions (e.g., parental substance abuse, mental illness, intimate partner violence) before age 18.

Built environment – The totality of all buildings, spaces, and products that are created, or modified, by people. It includes homes, schools, workplaces, parks/recreation areas, greenways, business areas, and transportation systems. It includes land-use planning and policies that impact our communities in urban, rural and suburban areas.<sup>xxxiv</sup>

Child maltreatment – Any act or series of acts of commission or omission by a parent or other caregiver that result in harm, potential for harm, or threat of harm to a child. Includes physical and sexual abuse, neglect, and endangerment.<sup>xxxv</sup>

Complete Streets— Streets designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.<sup>xxxvi</sup>

Medication error – Any preventable event occurring in the medication-use process, including prescribing, transcribing, dispensing, using, and monitoring, that results in inappropriate medication use or patient harm.<sup>xxxvii</sup>

Medication reconciliation – Comparison of the medications a person is taking in one care setting with those being provided in another setting.

Pedestrian – Any person on foot or who is using means of conveyance propelled by human power (e.g. wheelchair, mobility aid), other than bicycle.<sup>xxxviii</sup>

Universal livability – A vision that allows every individual to function as a full citizen within their community by providing adequate and appropriate access to transportation, safe and walkable areas, safe biking routes, and access to healthy and nutritious foods.

Walkability – The extent to which walking is readily available as a safe, connected, accessible, and pleasant mode of transport.

# Appendices

## Appendix B: California Injury Prevention Planning Groups

We greatly appreciate the individual and collective contributions to this report by our Planning Group Members, Consultants, and staff.

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## Endnotes

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This is a supplementary document to *Filling the Gaps: Strategic Directions for a Safe California*. These action plans complement the recommendations found in that report. This document prints on legal sized paper.

**Older Adult Falls ..... 2**  
**Older Adult Poisoning Due to Medication Errors ..... 6**  
**Motor Vehicle Occupant Injuries, Ages 14 to 20 ..... 9**  
**Pedestrian Safety, Walkability and Universal Livability ..... 12**  
**Child Maltreatment..... 16**

Older Adult Falls		
<p><b>E. EPIC should work with the Office of Statewide Health Planning and Development (OSHPD) to establish state capacity to track older adult falls by capturing more data on fall risks and improving the quality and connection between discrete sources of information, including emergency medical services, emergency departments, acute care hospitals, rehabilitation, and long-term care.</b></p> <p><u>Rationale:</u> The wealth of data that have been collected on older adult falls in California generally lacks details on risks, specific circumstances, and treatment paths surrounding the multiple falls experienced by many older persons. Their “patient paths” may take them through a variety of contacts with EMS, emergency departments, acute care hospitals, and post-acute facilities including rehabilitation and various nursing care settings. Administrative data collected in these settings are neither coordinated nor designed to describe falls specifically. Patient data generated by providers needs to be improved to capture complex fall risks and protective factors. Data from the various settings also needs to be linked so they can be analyzed to describe a process rather than a series of discrete encounters. This would allow an understanding of all phases of care and all opportunities for prevention to guide policy and programs. In addition, it would provide a clearer understanding of the true cost of falls in California.</p>		
Timeframe	Initial Strategies	Initial Milestones
Years 2 – 3	<p>E-1. Establish advisory committee of key stakeholders to explore ways to link information from California’s disparate data collection systems.</p> <p>E-2. Develop standard definitions and a set of reporting methods from all relevant state and local data sources.</p> <p>E-3. Disseminate data to injury prevention researchers via EPICenter on-line data query system.</p>	<ol style="list-style-type: none"> <li>1. Funding secured to establish comprehensive data system.</li> <li>2. Advisory Committee of key stakeholders convened.</li> <li>3. Development of standardized definitions and data linkage methodology.</li> <li>4. Placement of comprehensive falls dataset on EPICenter for analysis.</li> </ol>
<p><b>F. EPIC, in conjunction with other governmental and professional associations, should explore the potential for health care provider reimbursement for fall prevention activities via the promotion and use of the ICD-9 code for “history of falls or risk of falls” (V15.88).</b></p> <p><u>Rationale:</u> Health care providers frequently see older adults at high-risk for falls, providing a critical, and often unfunded, link in the chain of fall prevention services. The new V-code for history of falls (V15.88), which describes a person’s status and not a specific condition, could provide a means to justify evaluation and management of fall risk factors, such as rehabilitation or medication review.<sup>i</sup> Utilizing this code could also help identify seniors at risk of falling and provide justification for fall prevention services by health care providers.<sup>ii</sup> Adding this code to medical review policies as well as reporting forms, such as OSHPD’s Annual Utilization Report of Home Health Agencies and Hospices, would demonstrate the great need for fall risk assessment and medical management to reduce falls and prevent injuries.</p>		
Timeframe	Initial Strategies	Initial Milestones
Year 2	<p>F-1. Research the potential of V15.88 to facilitate reimbursement of fall risk assessment and prevention among community dwelling older adults.</p> <p>F-2. Establish a partnership to review feasibility of the use of V15.88.</p> <p>F-3. Publish research on feasibility and benefits of V15.88 and disseminate to key stakeholders.</p>	<ol style="list-style-type: none"> <li>1. Partnership established to review and research feasibility of use of V15.88.</li> <li>2. Research about V15.88 published on EPIC website and disseminated to StopFalls Network.</li> </ol>

<p><b>G. In conjunction with its state partners, EPIC should establish an executive-level state task force or coalition to provide leadership and coordination of older adult fall prevention and implement statewide policy initiatives.</b></p> <p><u>Rationale:</u> Falls are a complex problem and require a comprehensive, multidisciplinary solution. Currently, state-level approaches to fall prevention are uncoordinated and fragmented. A state-level task force will be instrumental in facilitating coordination and information sharing between state level agencies and organizations, leading to more effective and efficient fall prevention efforts. Other potential roles for the task force include: building support for state-level fall prevention initiatives; tracking relevant legislation; coordinating fall prevention activities across agencies; and promoting the expansion of fall prevention within member organizations. Because many older adults who are hospitalized with hip fractures never return home or live independently again,<sup>iii</sup> efforts to address the consequences of falls and potential loss of independence should consider partnering with the Olmstead Advisory Committee.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 2 – 3	<p>G-1. Establish CDPH and Agency leadership support for a task force or coalition.</p> <p>G-2. Convene a fall prevention roundtable of state agencies.</p> <p>G-3. Establish and convene meetings of state-level Task Force.</p> <p>G-4. Identify statewide policy and coordination priorities and establish implementation plan.</p>	<ol style="list-style-type: none"> <li>1. CDPH and Agency support secured.</li> <li>2. Fall prevention roundtable held.</li> <li>3. Support established among key state-level agency and organizational stakeholders.</li> <li>4. Stakeholders for Task Force identified and recruited.</li> <li>5. Task force or coalition established.</li> <li>6. Mission, vision, and goals for task force or coalition developed.</li> <li>7. Priorities established and implementation plan developed.</li> </ol>
<p><b>H. EPIC, in collaboration with the Fall Prevention Center of Excellence (FPCE) and the StopFalls Network, should build the capacity of local public health departments to support local partnerships and sustainable fall prevention programs.</b></p> <p><u>Rationale:</u> Falls among older adults are a major cause of injury in California, leading to lengthy hospital stays and long-term disabilities. But despite its significance as a public health problem, falls among older adults have not yet become a public health priority in California. Only two California county public health departments have staff designated for fall prevention programs. Local fall prevention coalitions are typically led by Area Agencies on Aging, with only two having co-chairs from their local public health department. Local public health departments are in desperate need of financial and technical assistance to build their capacity to reduce falls. To facilitate these efforts and reduce the burden falls place on local health care and social service systems, a sustainable funding stream that is commensurate with the burden is needed.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 3	<p>H-1. Establish a partnership between state and local public health and health care stakeholders.</p> <p>H-2. Provide data to local health departments and encourage counties to highlight falls and fall injury data in state-of-the-county reports.</p> <p>H-3. Facilitate local strategic planning and program development to increase the availability of evidence-based fall prevention programs and services.</p> <p>H-4. Provide resources for staff positions and programs at the local level.</p>	<ol style="list-style-type: none"> <li>1. Partnerships established between state and local stakeholders and technical assistance and resource needs identified.</li> <li>2. Local data needs identified and data made available to local health departments.</li> <li>3. An increase in counties highlighting falls in state-of-the-county reports.</li> <li>4. An increase in resources for falls staff and programs is provided to local health departments.</li> <li>5. 50% increase in the number of counties with a point-person on fall prevention.</li> <li>6. County-specific inventories of local fall prevention programs and resources developed.</li> </ol>

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	<p>H-5. Encourage all local public health departments to assign a staff person to serve as the point-person for senior injury prevention efforts and coordinate county-level fall prevention activities.</p> <p>H-6. Facilitate the development of an inventory of local fall prevention programs and resources as a foundation for information and referral networks.</p>	
<p><b>I. EPIC should work with state and county health care associations and the FPCE to improve the ability of health care providers to conduct fall risk assessment and prevention.</b></p> <p><u>Rationale:</u> Senior falls continue to a major source of hospital admissions in California. Falls can result in hip fractures, traumatic brain injury, and other serious injuries that require lengthy and intensive health care. Due in large part to these serious injuries, direct medical costs for non-fatal senior fall injuries total approximately \$2.4 billion each year in California.<sup>iv</sup> Preventing falls by institutionalizing regular fall risk assessment and remediation within the health care system will reduce the number of fall injuries and the overall toll falls have on seniors, their families, and the health care system itself. However, this will require new tools and training to assist health care providers in identifying and screening for fall risk and to provide information on fall referral options in their community.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1– 3	<p>I-1. Collaborate with state and county medical societies to identify and reduce barriers to medical risk management, risk assessment, and rehabilitation.</p> <p>I-2. Promote education of physicians, nurse practitioners, physician assistants, physical and occupational therapists, and others on evidence-based practice guidelines for fall risk assessment and management to ensure their incorporation into all primary care settings serving older adults.</p> <p>I-3. Collaborate with the FPCE to develop and disseminate a fall-risk assessment pocket guide to assist health care providers in easily identifying and referring older adults at high risk for falls.</p>	<ol style="list-style-type: none"> <li>1. Partnerships established with state and county medical societies and resource/ educational needs of providers identified.</li> <li>2. EPIC worked with partners to promote evidence-based educational programs for health care providers, including providing information, tools, and technical assistance as appropriate.</li> <li>8. In collaboration with the FPCE, a pocket fall risk assessment guide developed and made available to stakeholders.</li> </ol>
<p><b>J. EPIC should increase older adult access to fall prevention services by working with state partners to integrate fall prevention into state and local public health, aging programs, and caregiver training programs.</b></p> <p><u>Rationale:</u> Despite the prevalence and devastating consequences of fall injuries to older adults, few state and local fall prevention programs exist in California. This leaves many at-risk older adults and their caregivers without access to critical prevention services. While a growing body of fall prevention research exists, much work remains to be done to translate this research into effective evidence-based practices and programs that can be implemented at the local level. However, research has already shown that programs should be comprehensive and include medical risk assessment, medication management, behavior modification, physical activity, and home modification. In addition, innovative partnerships and funding streams are needed to increase the feasibility of implementing sustainable local programs.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1– 3	<p>J-1. Conduct review of fall prevention gaps in key programs and agencies.</p> <p>J-2. Increase awareness of evidence-based fall prevention practices and programs among public health and aging programs, and caregivers..</p> <p>J-3. Develop and implement a plan to integrate evidence-based fall prevention activities into existing</p>	<ol style="list-style-type: none"> <li>1. Programs, agencies, and organizations are identified and surveyed on fall prevention gaps.</li> <li>2. Partnerships established with public health, aging, and caregiver training programs and gaps in knowledge and tools identified.</li> <li>3. Plan developed to increase awareness of evidence-based fall prevention practices among key stakeholders.</li> </ol>

	<p>programs and services to the extent feasible (e.g. within senior center or out-patient arthritis clinics).</p> <p>J-4. Promote the development of mandated training standards and programs for informal and professional caregivers.</p> <p>J-6. Data and programmatic support provided to state and local aging service organizations to encourage incorporation of fall prevention into needs assessments and state and local area plans.</p>	<ol style="list-style-type: none"> <li>4. In collaboration with stakeholders, methods of developing training standards and programs are developed and promoted within key agencies and organizations.</li> <li>5. Participation in key meetings and events to promote evidence-based fall prevention to educational institutions and caregiver training programs.</li> <li>9. Identify data and programmatic support needs for state and local aging service organizations.</li> </ol>
<p><b>K. EPIC should work with the California Council on Gerontology and Geriatrics (CCGG) to incorporate order adult fall prevention curricula into academic programs in institutions of higher education.</b></p> <p><u>Rationale:</u> There is a pressing need for well-educated and trained personnel to address needs of the aging population. Gerontology is a multidisciplinary study with courses taught in a variety of different departments. Faculty disciplines can range from sociology to nursing specialists, with few textbooks, except those in the health care disciplines, covering fall incidence, prevention, and treatment. By creating and infusing curriculum into academic programs, the next cohort of gerontologists and geriatricians will be informed about issues surrounding falls and will further develop their knowledge and apply it in their work settings. In addition, added knowledge about fall prevention will help create a marketable and diversified workforce. Forums and conferences are also a key venue for introducing faculty to tools and methods to infuse fall prevention into their curriculum.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1– 2	<p>K-1. Conduct review of fall prevention gaps in key programs and institutions.</p> <p>K-2. Assist partners in developing and conducting trainings to increase awareness of evidence-based fall prevention practices and programs among p individuals being trained to work in gerontology and geriatrics.</p> <p>K-3. Work with partners to disseminate information and tools to faculty and students within gerontology and geriatrics programs.</p> <p>K-4. Work with partners to encourage educational institutions and caregiver training programs to incorporate evidence-based fall prevention for older adults into their curriculum.</p>	<ol style="list-style-type: none"> <li>1. Programs and institutions are identified and surveyed on fall prevention gaps.</li> <li>2. EPIC provided technical assistance and resources to partners to assist in the development of training programs, information, and tools for geriatric and gerontology programs.</li> <li>3. EPIC promoted incorporation of evidence-based fall prevention curriculum into educational programs and institutions.</li> </ol>

Older Adult Poisoning Due to Medication Errors

**L. EPIC should work with the California Poison Control System (CPCS) and OSHPD to enhance understanding of older adult poisoning due to medication errors by linking, analyzing, and disseminating data from hospital emergency departments, community clinics, vital statistics, and the CPCS.**

Rationale: Although not typically described as "poisoning" in medical literature, more recognizable terms such as "medication errors" and "adverse drug events" use poisoning injury codes, along with descriptors of intentional and unintentional injury, to describe the poisoning problem. Each distinct system that collects this diverse poisoning data offers only limited insight into the issue and the lack of connection between this data prevents a clear understanding of the problem's scope. Linking discrete data sets will provide a clearer and more comprehensive picture of the problem. Once linked data is attained, it should be reconciled, analyzed, and disseminated to state and local agencies in order to better inform policy and programs. Efforts should also consider how future sources of data, such as upcoming hospital reporting of medication errors that result in death or serious injury, could be incorporated into this system (Health and Safety Code, Section 1279.1 4(A)).

<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 3	<p>L-1. Review and analyze existing poisoning data sets to identify gaps and develop a plan for enhancing data that includes information such as: data and knowledge gaps, potential data sets to be linked, and needed reports.</p> <p>L-2. Collaborate with CPCS to publish and make available an annual online CPCS report with county-level older adult poisoning exposure data from California Poison Control Centers.</p> <p>L-3. Convene key partners to determine feasibility of methods for linking data sets and develop a plan for linkage.</p> <p>L-4. Link appropriate data sets identified in J-1.</p> <p>L-5. Analyze linked data, develop reports, and disseminate via EPICenter website and other appropriate avenues.</p> <p>L-6. Identify methods for gaining better understanding of the data, such as developing case studies.</p>	<ol style="list-style-type: none"> <li>1. Report of analysis of existing data published and data linkage plan established.</li> <li>2. 2007 Annual Report from CPCS online.</li> <li>3. Agencies and organizations that collect data on medication errors and misuse are identified.</li> <li>4. Collaborative partnerships are established with goal of determining feasibility of linking data sets.</li> <li>5. Plan established for linking, analyzing, and disseminating data.</li> <li>6. Data sets are linked.</li> <li>7. Reports of linked and existing data are developed and disseminated via EPICenter website and other appropriate avenues.</li> <li>8. EPIC has explored case study procedures and models with stakeholders such as the Fall Prevention Center of Excellence.</li> <li>9. 2008 Annual Report from CPCS online.</li> </ol>

**M. In collaboration with state agencies and associations, EPIC should support the establishment of older adult poisoning due to medication errors as a major public health problem and work to integrate solutions into state and local public health departments.**

Rationale: Older adult poisoning due to medication errors is a systemic, population-level public health problem. It is the consequence of a fragmented system that prescribes many dangerous, and often unnecessary and inappropriate, medications, and suffers from a systemic breakdown in communication between providers and patients. These factors enable, and in fact may encourage, medication-related poisoning injuries among older adults. In addition, polypharmacy (taking multiple drugs) is a risk factor for all older adult injuries including falls, pedestrian injuries, drowning, motor vehicle crashes, and suicide, and also increases costs to the health care system.<sup>v</sup> Integrating sustainable prevention programs and activities into state and local health departments can help address this important and pressing public health problem. San Francisco's SRx Program from the 1990's serves as a nationally recognized model for one type of program that could be promoted within state and local health departments. The California Department of Aging's evidence-based medication management program could also be utilized to help identify lessons learned in addressing medication issues in older adults.

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Timeframe	Initial Strategies	Initial Milestones
Years 1 – 3	<p>M-1. Research and support the development and implementation of promising local medication review and reconciliation policies and programs, such as San Francisco’s SRx Program and Lifetime Client Record program.</p> <p>M-2. Integrate sustainable prevention programs and activities into state and local health departments and Area Agencies on Aging.</p> <p>M-3. Encourage public health professional conferences to provide awareness, skill-building and education on older adult poisoning due to medication errors.</p> <p>M-4. Survey counties to identify additional data needs, identify ways to improve local data reports, and determine how state data can be improved to help counties establish this as a public health problem.</p> <p>M-5. Provide counties with data to encourage the inclusion of poisoning hospitalization data in annual county reports.</p>	<ol style="list-style-type: none"> <li>1. Report published of promising local medication review and reconciliation policies.</li> <li>2. Effective or promising prevention programs explored and identified through venues such as The Joint Commission.</li> <li>3. Connections established with local health departments with the goal of integrating sustainable older adult poisoning prevention programs and efforts.</li> <li>4. Outreach conducted with key stakeholders, such as the California Medication Errors Panel, to explore and coordinate with existing efforts.</li> <li>5. Workshops and awareness building incorporated into regional, state, and/or national public health conferences.</li> <li>6. Survey conducted with local public health departments and report developed on findings.</li> </ol>
<p><b>N. EPIC should collaborate with professional health care associations and other partners to improve health care provider capacity to prevent older adult poisoning due to medical errors.</b></p> <p><u>Rationale:</u> Each year, a typical Medicare recipient with a chronic condition will visit eight different physicians, each with the potential to prescribe medications.<sup>vi</sup> In fact, one study of over two million seniors found that 25% of those surveyed received prescriptions from five or more doctors and one-third filled their prescriptions at three or more pharmacies.<sup>vii,viii</sup> Unfortunately, communication between these multiple providers, pharmacists, and patients is often lacking, leading to confusion, health complications and increased cost to the health care system. This has led both the California Medication Errors Panel and the Institute of Medicine to call for better communication between prescribers, pharmacists, and patients to reduce therapeutic medication errors and misuse.<sup>ix,x</sup> Educational information and tools for providers should emphasize: 1) the scope of the problem; 2) methods to improve communication between providers, patients, and families; 3) promising practices for discharge planning by pharmacists and nurse discharge planners; 4) medication reconciliation practices; and 5) the provider role in preventing medication-related poisoning among seniors. In addition, efforts should promote existing national patient safety goal related to medication reconciliation from The Institute for Healthcare Improvement and The Joint Commission. Finally, while "poisoning" is a specific injury category and term used by public health and injury prevention professionals, health care providers frequently use terms like medication errors, therapeutic misadventures, and therapeutic medication errors rather than "poisoning" when describing errors in medication management and the resultant effects. It is suggested that the term "medication error that results in poisoning" be used when conducting provider awareness initiatives. At the same time, health professionals should be made more aware of "poisoning" as a specific injury category.</p>		
Timeframe	Initial Strategies	Initial Milestones
Years 2 – 3	<p>N-1. Establish partnerships with professional health care associations, hospitals, community clinics, and EMS agencies to: 1) identify gaps and needs of health care providers; 2) identify existing mandates/policies; and 3) develop recommendations on ways professional associations and other key stakeholders can reduce older adult poisoning due to medication errors.</p>	<ol style="list-style-type: none"> <li>1. Partnerships established with key partners in L- 1.</li> <li>2. Policy, education, and training gaps, including key providers to be trained, are identified and recommendations for moving forward are established.</li> <li>3. Existing health care provider training curricula identified and, if needed, funding and partnerships established to develop a curriculum.</li> </ol>

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	<p>N-2. Collaborate with professional associations to implement a training curriculum for health care providers that includes an emphasis on the use of “poisoning” to describe medication management errors.</p> <p>N-3. Collaborate with stakeholders to develop and promote model organizational policies and practices for health care agencies, associations, and organizations.</p> <p>N-4. Identify or develop information and tools to assist health care providers in decreasing older adult poisoning due to medication errors.</p>	<ol style="list-style-type: none"> <li>4. Content, including tools if needed, for training curriculum are developed.</li> <li>5. Curriculum is disseminated through professional association conferences, journals, and other appropriate venues.</li> <li>6. Model policies and practices in health care agencies, associations, and organizations are researched and identified.</li> <li>7. Model organizational policies and practices are integrated into at least one new health care agency, association, or organization.</li> <li>8. Tools to prevent medication errors are identified, or developed, and disseminated to key partners.</li> </ol>
<p><b>O. EPIC should collaborate with CPCS to increase older adult and caregiver awareness of older adult poisoning due to medication errors by developing culturally sensitive, consumer-focused marketing campaign.</b></p> <p><u>Rationale:</u> Many older adults are unaware of the risk of taking multiple medications, of the dangerous interactions of their medications with other drugs and alcohol, and of how to minimize these risks. Recently, the California Medical Errors Panel called for additional consumer awareness and education to improve medication safety and reduce medication errors.<sup>xi</sup> One key way to raise awareness is through a consumer-focused marketing campaign. Such a campaign could be instrumental in helping older adults understand and reduce the risks their medications can pose. Campaign messages should be consumer-focused and crafted using direct input from the target audience. In addition, they should describe the problem, provide clear and culturally sensitive solutions, plainly express the benefits to the consumer in a manner appropriate to common health literacy levels, and promote the CPCS as a primary resource for older adults with acute medication misuse concerns. Potential focuses for the messages include medication reconciliation and safe, convenient methods to dispose of old and unused drugs. All messages and materials should be developed with input from diverse cultural groups and families.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 - 3	<p>O-1. Collaborate with CPCS to conduct formative research to develop marketing messages and strategies.</p> <p>O-2. In collaboration with CPCS, support the development and testing of targeted, consumer-focused marketing campaign materials and messages.</p> <p>O-3. Disseminate marketing messages and campaign materials to local public health departments, Area Agencies on Aging (AAA), and pharmacies/pharmacy associations for use in local prevention campaigns.</p>	<ol style="list-style-type: none"> <li>1. Audit of existing materials from other industries, programs, and poison control centers.</li> <li>2. Support provided for CPCS consumer focus groups and other message testing.</li> <li>3. Partnerships established with CPCS and CDA for dissemination of messages.</li> <li>4. Surveys and survey outcomes are distributed to the AAA’s via the California Association of AAA’s conference or other appropriate venues.</li> <li>5. Marketing plan developed in collaboration with instrumental partners.</li> <li>6. In collaboration with CPCS, pilot testing of campaign materials is conducted.</li> <li>7. Support established for marketing materials among public health departments, AAA’s, and pharmacies/pharmacy associations.</li> </ol>

Motor Vehicle Driver and Occupant Injuries, Ages 14 to 20		
<p><b>P. EPIC should establish a system that allows for comprehensive analysis of teen and young adult crash data and make such data accessible to injury prevention researchers.</b></p> <p><u>Rationale:</u> Numerous gaps in crash data collection and analysis leave a fragmented and incomplete picture of true traffic safety risk to California teens and young adults. Such gaps include status and length of licensure of teen and young adult drivers involved in a crash, adherence to graduated drivers licensing (GDL) requirements at time of crash, the effects of GDL participation on post-GDL crash risk, citation/conviction history, and the relationship between crash risk and the types of driver education completed by teens and young adults. One way to address these data gaps and obtain a more complete picture of the problem is by linking police, health, and licensure data into a comprehensive system. Such linked data, if made accessible to injury prevention researchers, could be instrumental in improving policy and education programs for teens, young adults, and their parents.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Year 1	<p>P-1. Establish advisory committee of key stakeholders to explore ways to link California’s disparate data collection systems.</p> <p>P-2. Develop methodology to interpret and link data from disparate systems into easily accessible formats.</p> <p>P-3. Disseminate linked data to injury prevention researchers via EPICenter on-line data query system.</p>	<ol style="list-style-type: none"> <li>1. Funding secured to establish comprehensive data system.</li> <li>2. Participation in key meetings and collaboratives, such as TRCC, to build support for data linkage.</li> <li>3. Convene advisory committee of traffic injury data stakeholders.</li> <li>4. Development of data linkage methodology.</li> <li>5. Placement of linked crash and medical records dataset on EPICenter for analysis.</li> </ol>
<p><b>Q. EPIC should work with stakeholders to enhance the effectiveness and enforcement of graduated drivers licensing (GDL) laws in reducing teen and young adult motor vehicle occupant injuries.</b></p> <p><u>Rationale:</u> The effectiveness of GDL in reducing teen and young adult crashes has been clearly demonstrated with a steady drop in crashes and related injuries and deaths.<sup>xii,xiii</sup> However, limitations in existing enforcement of the GDL law cause many additional teens and young adults to die and become injured each year on our roadways. The \$35 to \$50 fines imposed for GDL violations have not shown to be an adequate deterrent to teens and young adults or their parents. Since judgment and decision-making skills may not be completely physiologically developed until the early twenties, additional policy measures to strengthen GDL could help further reduce crashes, injuries, and deaths among California teens and young adults. Thus, EPIC’s work should focus on strengthening existing laws, increasing penalties for GDL violation, and modifying the GDL fine distribution. Collaborations between local public health and law enforcement to increase enforcement and provide education to courts, teens, young adults, and their parents have shown promise as one way to reduce GDL violations.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 2	<p>Q-1. Convene stakeholders to explore effectiveness and potential enhancements to California’s GDL law. Potential enhancements could include: increasing consequences of violations during GDL and/or first year(s) of driver’s license; and investigating an increased GDL fine with a modified distribution that allocates portions to local health departments for education, to the courts to assist in processing violators, and law enforcement for increased GDL enforcement.</p> <p>Q-2. Utilize data on effectiveness of GDL, including cell phone restrictions if possible, to help inform</p>	<p><u>Year One</u></p> <ol style="list-style-type: none"> <li>1. Partnerships established with key stakeholders and task force formed to identify and implement priorities to strengthen GDL.</li> <li>2. Identification of model GDL programs and key national stakeholders.</li> </ol> <p><u>Year Two</u></p> <ol style="list-style-type: none"> <li>3. Stakeholder meeting(s) convened.</li> </ol>

	<p>policy and implementation strategies.</p> <p>Q-3. Based on findings from Q-1, work with stakeholders to promote implementation of GDL enhancements.</p>	<p>4. Report on the effectiveness of GDL enhancement methods produced and made available to stakeholders.</p> <p>5. Additional implementation partners for Q-3 identified and recruited.</p>
<p><b>R. EPIC should promote the effective integration of developmentally appropriate driver and motor vehicle occupant risk reduction elements into high school curriculum and school policies.</b></p> <p><u>Rationale:</u> Motor vehicle crashes are the leading cause of hospitalization and death among teens and young adults in California, making them a top public health priority. Current novice driver education is unregulated and unmandated in California and most focus heavily on rules of the road while neglecting important risk factors to unsafe driving such as the desire for peer acceptance, poor decision-making skills, and substance use. Given its prominence as a public health problem, infusing developmentally appropriate driver and motor vehicle occupant risk reduction into health education curriculum is critical to effective teen health education and will provide skills that can be applied to reduce other risky behaviors. One example of where motor vehicle occupant risk reduction could be integrated is in health education curriculum. Public health could work to ensure adequate coverage of Expectation 3 in the Expectations for High Schools, Health Framework for California Public Schools (<a href="http://www.cde.ca.gov/ci/he/cf/">www.cde.ca.gov/ci/he/cf/</a>). This expectation states that students will learn skills to reduce their risk of becoming involved in dangerous situations and facilitate appropriate reactions to dangerous situations. In addition to curriculum incorporation, strong and enforced school policies on driving to school and events can be effective in reducing teen injuries and deaths from motor vehicle crashes.<sup>xiv</sup></p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Year 1	<p>R-1. Explore data and effectiveness of school safety policies.</p> <p>R-2. Strengthen partnerships with state and local public health departments, schools and education organizations to encourage implementation of effective safety policies such as those addressing: school event times; transportation options to school events; seat belt, substance use, and closed campus policies; and parent education programs (see T-2).</p> <p>R-3. Work with CDE, California Teachers Association (CTA), and CDPH to explore opportunities for curriculum enhancement.</p>	<p>1. Collaborative partnerships established with the California State Parent Teachers Association (PTA), California State School Board Association, and other appropriate organizations.</p> <p>2. The public health applicability of SHSIP recommendations to school policy changes is identified and promoted.</p> <p>3. Partnerships are established with CDE, CTA, other CDPH departments and programs to explore curriculum changes.</p>
<p><b>S. EPIC, in partnership with state and local agencies, should research and develop a two-part social norm campaign, one part for parents and another for teens and young adults, to enhance adherence to GDL laws and improve teen and young adult driving and vehicle occupant safety behaviors.</b></p> <p><u>Rationale:</u> Social norm campaigns are designed to influence the perceived normal behavior of a target group. For such campaigns to influence teen and young adult behavior they should utilize adolescent behavior change and physiological development-based approaches that have been demonstrated effective in influencing teen and young adult decisions about personal risk and safety. One such type of social norm campaign, the “Most of Us” campaign, seeks to correct misperceptions about how their peers behave and to frame safety behaviors as a method of gaining peer acceptance. Peer-to-peer education has also shown to be effective in reducing risky behaviors. For maximum impact, these two types of campaigns can be coupled. Like peers, parents can have a strong influence on the safety behaviors of teens and young adults. Specifically, parents can be instrumental in monitoring adherence to graduated drivers licensing, seat belt, and underage drinking laws. Improving parental education about their teens and young adults actual crash risk and effective ways they can enhance the safety of their teens and young adults in vehicles would help reduce risky behaviors. Campaigns for parents should focus on: 1) increasing parental participation in education about GDL and risks immediately after licensure; 2) safety risks facing our young drivers and motor vehicle occupants; 3) vehicle types that may place teens and young adults at more risk; and 4) their role as parents in preventing crashes.</p>		

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<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 2	<p>S-1. Explore the availability of state and local level data appropriate for a social norm campaign, such as CDE and the WestEd California Healthy Kids survey.</p> <p>S-2. Collaborate with stakeholders to identify promising and effective components of state and local social norm campaigns.</p> <p>S-3. Promote effective components of parent involvement programs in a parent education campaign (see T-1).</p> <p>S-4. Disseminate social norm campaign research to stakeholders to encourage investment of resources into such campaigns.</p>	<p><u>Year One</u></p> <ol style="list-style-type: none"> <li>1. Funding is secured to research, develop, and implement a social norm and education campaign for parents and teens.</li> <li>2. Partnerships for campaign are established.</li> </ol> <p><u>Year Two</u></p> <ol style="list-style-type: none"> <li>3. Data sources for campaign are identified and analyzed.</li> <li>4. Evaluated parent involvement programs are explored and the most effective components are identified and disseminated (see T-1.).</li> </ol>
<p><b>T. EPIC, in conjunction with its partners, should promote implementation and evaluation of promising parent education and involvement programs that encourage parents to adopt and maintain restrictions on teen and young adult driving post-GDL, especially during the first year of licensure.</b></p> <p><u>Rationale:</u> Parental monitoring and expectations play a significant role in enforcing driving safety norms and reducing driving risks among their children. So it is not surprising that programs which encourage parents to adopt and maintain restrictions on driving during the first year of licensure have demonstrated statistically significant benefits in placing greater limits on high-risk driving situations, reducing risky driving behaviors, and reducing traffic violations.<sup>xv</sup> One such program, The Checkpoints Program, is designed to increase parental management of novice teen driving and reduce teen driving risks by providing parents with education on teen driving risks, normative expectations for parental restrictions, and the benefits of adopting a parent-teen driving agreement.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Year 3	<p>T-1. Explore evaluated parent involvement programs, such as The Checkpoints Program, to identify the most effective components.</p> <p>T-2. Promote effective components of parent involvement programs to statewide organizations that work with parents.</p>	<ol style="list-style-type: none"> <li>1. Evaluated parent involvement programs are explored and the most effective components are identified.</li> <li>2. Literature review of parent involvement programs is developed and disseminated to key partners.</li> <li>3. Key partnerships are established for implementation.</li> </ol>

Pedestrian Safety, Walkability, and Universal Livability

**U. EPIC should work with its federal, state, and local partners to strengthen capacity to collect state, county, and local level pedestrian data (e.g., number of pedestrians or “counts”) to better inform pedestrian safety policies and programs.**

Rationale: Currently, there is no reliable and consistently used methodology to determine how many pedestrians are using California’s walkways and roadways. This has made understanding true pedestrian risk and developing effective pedestrian safety programs, at times, confusing and challenging. Obtaining an accurate number or “count” of pedestrians using California roadways will reduce this confusion by providing denominator data for the calculation of injury rates. Such rates will enable the number of pedestrians who are injured to be adjusted for the total number of pedestrians and will impart a more accurate picture of injury risk than the raw number of injuries. For example, Berkeley has a high number of pedestrian injuries compared to other California cities. However, when adjusted for the number of pedestrian injuries per walker, Berkeley ranks as the safest large city in California for walking.<sup>xvi</sup> Collecting pedestrian count data will provide a foundation on which to base policy, program, and funding decisions in all sectors. In addition, it will enable more meaningful comparisons of pedestrian injury risk between geographic areas and between urban, suburban, and rural communities. Dissemination of this data in user-friendly formats is essential.

<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 3	<p>U-1. Research and collaborate with projects currently working to establish pedestrian count methodologies.</p> <p>U-2. Examine and analyze the utility of existing sources of pedestrian count data for informing pedestrian safety efforts. Potential data sources include: CDPH’s Walk Survey; the California module of the National Household Transportation Survey; US Census Journey to Work data; the California Health Interview Survey; and the Seamless Travel Project.</p> <p>U-3. Connect with CDPH’s Division of Environmental and Occupational Disease Control (DEODC) and others working on similar goals.</p>	<ol style="list-style-type: none"> <li>1. Relevant pedestrian count projects, such as those sponsored by Caltrans and OTS, are identified.</li> <li>2. In partnership with Caltrans, the California add-on of the National Household Transportation Travel Survey conducted.</li> <li>3. CDPH supports the completion of the Seamless Travel Project.</li> </ol>

**V. EPIC should compile, synthesize, and disseminate data, information, and research on pedestrian safety and the built environment to promote improvements and policy development at the local level.**

Rationale: Providing brief reports on pedestrian safety topics would help local public health departments and their partners support safe built environments for pedestrians. If such reports provide focused summaries of injury data and evidence-based best practices, they could be instrumental in increasing awareness of data-driven best practices and dispelling frequently cited barriers to improving the built environment for safe, universal pedestrian access. Possible topics for the reports to address are: 1) comparison of the health benefits and risks of being a pedestrian versus a motor vehicle occupant; 2) frequently cited barriers to implementing traffic calming for enhanced pedestrian safety, including emergency response concerns; 3) “Eyes on the Street” and how it relates to neighborhood violence; 4) economic and health cost-benefit comparisons of pedestrian safety improvements; 5) evaluation of the changes in injury and walking rates following pedestrian safety projects (e.g. chicanes, medians, etc.); and 6) evaluation of the changes in injury and walking rates following roadway projects to accommodate greater traffic volumes (e.g. roadway widening). In addition to building organizational capacity and providing a necessary resource, these reports will assist local agencies in developing and recommending policies to local government officials that will promote safe, accessible environments for all pedestrians.

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<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 3	<p>V-1. Develop and disseminate brief reports on pedestrian safety topics.</p> <p>V-2. Publish city-level comparisons in the California Highway Patrol’s Statewide Integrated Traffic Records System (SWITRS) reports, the EPICenter website, and other easily accessible locations.</p> <p>V-3. Identify potential models to quantitatively standardize the process health departments use when reviewing the safety and health impacts of development proposals (e.g. relationship between the design of the proposal and the safety of pedestrians; pedestrian impact measurements).</p> <p>V-4. Work with Caltrans and other partners to support the establishment of a Pedestrian Safety Data Think Tank.</p>	<ol style="list-style-type: none"> <li>1. Interface established with DEODC and others (e.g. local health depts.) who are disseminating related information.</li> <li>2. City-level comparisons published and accessible to injury prevention stakeholders.</li> <li>3. Models for quantitative review of health impacts of development proposals are identified and evaluated.</li> <li>4. CDPH supports the establishment of a Pedestrian Safety Data Think Tank.</li> </ol>
<p><b>W. EPIC, in conjunction with its partners, should build organizational capacity of state and local public health departments to implement pedestrian safety, safe built environment, and walkable community programs.</b></p> <p><u>Rationale:</u> The built environment significantly impacts our physical and environmental health, influencing community violence and pedestrian injuries among other health risks. In fact, a safe built environment increases opportunities for physical activity, reduces the risk of community violence, increases community social interactions, and, because it is safe to walk, decreases car trips that emit unhealthy air pollutants and greenhouse gases. Fortunately, implementing programs and policies to create “walkable” communities and built environments that provide safe, universal pedestrian access has the potential to increase healthy habits and environments. Despite being the root cause of numerous threats to public health, most local public health departments, as well as at CDPH, lack dedicated staff and resources to address the built environment. As such, it is critical that state and local public health departments take a leadership role to increase the health benefits of safe built environments by formally designating positions to work with traffic engineers, urban planners, community advocates, and others. State capacity can be built if local agencies increase their demand for resources, trainings, and tools to address this growing public health problem.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 - 3	<p>W-1. Partner with the CCLHO and health organizations, such as the American Heart Association, to build support for dedicated resources.</p> <p>W-2. Work with state agencies and local health departments to increase the priority of this issue as a public health problem.</p> <p>W-3. Explore strategies and approaches for new state and local revenue sources.</p> <p>W-4. Partner with Caltrans to develop a Pedestrian Safety Improvement Program similar to the existing Highway Safety Improvement Program.</p>	<ol style="list-style-type: none"> <li>1. CDPH, CCHLO, and other appropriate organizations support implementation.</li> <li>2. Partnerships are established with state agencies in U-2.</li> <li>3. Increase in capacity building grants to local health departments.</li> <li>4. Health messages are reframed to integrate injury prevention where relevant such as obesity prevention, asthma, physical activity, and disability and mobility.</li> <li>5. Existing funding at the local level is shifted to allow health departments to address pedestrian safety and safe built environments.</li> <li>6. Report developed on lessons learned in funding from other prevention programs (e.g. the tobacco prevention model).</li> <li>7. Successful models for increasing revenue for injury prevention programs to address pedestrian safety are explored.</li> <li>8. CDPH supports the development of a Pedestrian Safety Improvement Program.</li> </ol>

**X. EPIC should facilitate policies and legislation that promote pedestrian safety and modifications to the built environment for safe, universal pedestrian access.**

Rationale: Fortunately, there are numerous diverse stakeholders working to improve safe, universal pedestrian access through the adoption and implementation of policy and legislation. However, the diversity of stakeholder groups, from disability organizations to transportation reformers to environmental health advocates, often leave such worthy efforts fragmented and uncoordinated. A unified multi-level-policy platform is needed to foster a more cohesive and collaborative approach to pedestrian safety. State-level policy targets could include: 1) adoption of Complete Streets<sup>1</sup> policies that place a priority on safe universal access for all road users, including pedestrians; 2) strengthening and facilitating consistent implementation of Caltrans’ Deputy Directive 64; 3) reforming sections of the California Vehicle Code (e.g. Section 21950) to enhance pedestrian rights such as restoring motorist need for due care; 4) linking injury with other health initiatives that have complementary goals such as reducing global warming, preventing obesity through physical activity, improving senior mobility, and health promotion for people living with disabilities; and 5) implementing California’s Pedestrian Safety Action Plan. Local-level policy targets could include: 1) adoption of local pedestrian masterplans that would promote curb cuts, median refuge islands, pedestrian head counters; 2) strong integration of pedestrian mode in the regional transportation plan that would direct transportation planning dollars, evaluation and promotion efforts; 3) inclusion of pedestrian modes in any updated general plan language, specifically in the circulation and land use elements, but also the housing element and additional elements such as air quality; and 4) working with local school districts to provide feedback on the importance of proper school-siting (e.g. putting schools near families/students/transit/ sidewalks and bike paths, not just where the land is cheapest).

<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 3	<p>X-1. Strengthen partnerships to ensure that pedestrian safety and health principles are included in current and future state and regional policy agendas.</p> <p>X-2. Mobilize local injury prevention stakeholders to advocate for traffic engineering standards and practices that create safer streets and sidewalks by: 1) increasing awareness of recent engineering standards; and 2) by funding and engaging community efforts to support and encourage adoption of these standards.</p>	<ol style="list-style-type: none"> <li>1. Assessment of key pedestrian safety efforts conducted to determine which efforts EPIC should be actively engaged in. Such efforts may include implementation of: Caltrans Transportation Plan, the Strategic Highway Safety Implementation Plan, Prop 1BCDE bond, and the California Walk/Bike Conference.</li> <li>2. Participation in advisory and policy setting groups to develop and implement pedestrian safety policy agendas.</li> <li>3. CDPH participates in the development and implementation of a task for to assist in developing state and local Pedestrian Safety Action Plans.</li> <li>4. Partnerships are established to assist in mobilizing local stakeholders.</li> <li>5. Training, technical assistance, tools, and resources are provided to local public health colleagues and their local walkability stakeholders for the purpose of: assisting in advocating for safe, accessible, and pedestrian-friendly street design standards; and informing and engaging them in state-level policy activities.</li> <li>6. Forums and communication mechanisms (e.g. Internet sharing) are established where local stakeholders can network, share resources and effective advocacy strategies, and share information on pedestrian safety policies such as Complete Streets.</li> <li>7. Tools are developed to assess the pedestrian-friendliness of local policies and practices.</li> </ol>

<sup>1</sup> Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. ([www.completestreets.org](http://www.completestreets.org))

**Y. EPIC should promote local public health involvement in land use and transportation planning efforts by working with its state and local partners to provide training and technical assistance on safe built environments for pedestrians.**

Rationale: The public health department can provide critical expertise in guiding local community design decision-making on improvements in pedestrian safety and safe, accessible built environments. However, many local public health departments currently lack the training and tools to do this. The state public health department can promote local public health involvement in community design and land use planning by providing much needed training and technical assistance (TA). Such training and TA could address: 1) the public health risks of living in a community with elevated rates of violence and pedestrian injuries; 2) promising practices to overcome frequently cited barriers to safe pedestrian activity, including risk perception and stranger abduction/personal safety; 3) community design principles and the political environment that guides decision-making; 4) potential resources to support pedestrian safety activities by local public health departments; 5) information about the risks as they relate to special populations such as children, seniors, and people with disabilities; 6) promising community design practices to reduce non-traffic pedestrian injuries; and 7) assessment protocols, tools, and model community-level indicators to help determine the level of pedestrian friendliness in a community. All training and technical assistance should encourage a consistent message and promote multidisciplinary collaboration and communication.

<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 3	<p>Y-1. Conduct needs assessment to identify training and technical assistance needs of local public health departments.</p> <p>Y-2. Promote coordination and collaboration between agencies and organizations by collaborating with partners to establish a task force to provide training and technical assistance for public health agencies.</p> <p>Y-3. Provide forums and other communication avenues for local agencies and organizations to facilitate information sharing and mobilize stakeholders to implement policies, practices, and programs on safe and accessible built environments.</p> <p>Y-4. Conduct training and technical assistance and disseminate tools and resources to local public health departments.</p>	<ol style="list-style-type: none"> <li>1. In collaboration with partners, a task force is established to facilitate the delivery of pedestrian safety trainings.</li> <li>2. Training and technical assistance tools and resources are developed or adapted.</li> <li>3. Assessment of training and TA is conducted to identify: current efforts; gaps; and health departments in need of new or ongoing training.</li> <li>4. More interdisciplinary trainings and collaborations occur at the state and local level.</li> <li>5. Partnership established with the LGC to hold a statewide conference on building local public health capacity and cross-disciplinary collaboration or to expand the public health track at their existing conference.</li> <li>6. Additional venues are provided to share, showcase and utilize expertise (e.g. LGC conference, California public health associations, California Walk/Bike, etc).</li> <li>7. Gaps in web-based resources are identified and addressed, resulting in better utilization of web-based resources.</li> </ol>

Child Maltreatment		
<p><b>Z. EPIC should work with state and local Child Death Review Teams (CDRTs) and other key partners to develop and promote the use of standardized public health surveillance definitions for child abuse and neglect for CDRTs.</b></p> <p><u>Rationale:</u> It is well established that existing statewide data systems have significant limitations in capturing child maltreatment fatalities. Collaborative efforts to promote explicit definitions and their consistent use among all CDRTs will create an active statewide surveillance system and enable comparable data to be compiled and disseminated statewide. It will also help local CDRTs produce required reports and be more effective in promoting changes in policies, programs, and practices to reduce and prevent child maltreatment and other preventable child deaths. While improving the systematic collection of CDRT death data is an important first step, it will provide just one piece of the comprehensive picture of child maltreatment. In fact, most child maltreatment injuries do not result in fatalities seen by CDRTs. To better understand child maltreatment and help inform evidence-based interventions, more comprehensive and systematic data collection is needed for all sources of fatal and nonfatal child maltreatment data including child welfare case management system, hospitalization, and emergency department data.</p>		
Timeframe	Initial Strategies	Initial Milestones
Year 1	<p>Z-1. Support the EPIC’s FCANS Program efforts to test and implement a consistent classification system for use by CDRTs.</p> <p>Z-2. Work with CDRT Regional Coordinators, regional conferences, publications, and other venues to distribute results of test (X-1) and recruit county CDRTs to implement system.</p> <p>Z-3. Support continued and expanded funding for county CDRTs to collect and report standard data and findings using the online data system.</p> <p>Z-4. Support SCDRC and local CDRT efforts to produce annual county and state reports with increased input from county CDRTs using the online data system.</p> <p>Z-5. CDSS and CDPH collaborate to explore better use of data from CWS/CMS and vital statistics to better inform prevention efforts.</p>	<ol style="list-style-type: none"> <li>1. Testing and finalization of classification system.</li> <li>2. Implementation of classification system by a minimum of 20 County CDRTs.</li> <li>3. Distribution of testing results to key stakeholders</li> <li>4. CDRT local assistance funding maintained or expanded.</li> <li>5. 50% of County CDRTs submit data via the online system &amp; recommendations to SCDRC.</li> <li>6. CDSS and CDPH share current data efforts with SCDRC.</li> </ol>
<p><b>AA. EPIC should compile and disseminate information and research on the overlapping relationships among unintentional injuries, child maltreatment, substance abuse, and adverse childhood experiences to strengthen collaborations among prevention stakeholders at the state and local level.</b></p> <p><u>Rationale:</u> Documenting the overlap of causes, circumstances, and interventions among childhood unintentional injuries and maltreatment will set the stage for more collaborative action among the diverse child welfare, medical and public health fields addressing different aspects of injury and maltreatment. It should also provide clarification of “neglect” and how a variety of adverse childhood experiences, including child maltreatment and substance abuse, can increase risk of injury and negatively impact health. Better information will increase opportunities to collaborate. Partners with common overall agendas will be able to see the intersection of their complementary issues, which will encourage joint advocacy and complementary programs to address these related problems.</p>		

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<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Year 1	<p>AA-1. Participate in convening 2008 <i>Discover the Connections</i> conference.</p> <p>AA-2. Build on <i>Discover the Connections</i> conference by completing a literature review and proceedings (e.g., integrate into the speakers tasks) and make available online.</p> <p>AA-3. Develop a briefing paper making a case for the link between unintentional injury and child maltreatment and make available online.</p> <p>AA-4. Work with PCA-CA, Injury Prevention Network, and others to distribute data on the overlapping relationships between unintentional injury and child maltreatment that local CAPCs can use on websites.</p> <p>AA-5. Collaborate with partners to utilize websites more effectively to distribute information and improve communication on overlapping relationships.</p> <p>AA-6. Support funding to promote collaboration between child maltreatment and unintentional injury.</p>	<ol style="list-style-type: none"> <li>1. <i>Discover the Connections</i> conference is successful in establishing the link between unintentional injury and child maltreatment among conference participants.</li> <li>2. Compiled documents from conference are completed and available online.</li> <li>3. Conference briefing paper completed and disseminated to key stakeholders.</li> <li>4. Compiled needs assessment of existing websites, identify gaps, and development of plan to meet gaps.</li> </ol>
<p><b>BB. EPIC should facilitate the implementation of policies and protocols to increase the quality and availability of training for mandated reporters, including awareness of local resources for training.</b></p> <p><u>Rationale:</u> Mandated reporting is a critical, first line component in the comprehensive approach to the identification, intervention, and prevention of child maltreatment. However, there are often no systematic efforts at the local level to ensure all mandated reporters receive the necessary training and are held accountable for reporting. To ensure local providers are equipped to respond appropriately, all training should include comprehensive information about county-specific systems and resources for addressing all forms of child maltreatment. Training standards should address all mandatory reporters, including teachers, health care professionals, mental health providers, home-visitation professionals, family support services providers, and all licensed providers.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 1 – 2	<p>BB-1. Convene a task force or collaborate with existing efforts to assess current needs and available training resources, identify gaps, and develop a plan to address gaps.</p> <p>BB-2. Target medical and education groups and other key stakeholders to be trained and recruit appropriate partners to advocate for expanded trainings.</p> <p>BB-3. Explore the integration of child maltreatment and reporting into medical school curriculum.</p> <p>BB-4. Explore and support efforts to enhance legislation requiring effective training and resources for mandated reporters.</p> <p>BB-5. Explore support for SB50 (Harmon).</p> <p>BB-6. Support PCA-CA, CAPC, and other efforts to expand training and resources for mandated reporting.</p>	<ol style="list-style-type: none"> <li>1. Summary of training resources and training gaps developed and available, and a plan to address gaps is established.</li> <li>2. Partnerships are established with key medical and education groups with the goal of advocating for expanded trainings for mandated reporters.</li> <li>3. Summary developed of feasibility and methods for integrating child maltreatment and reporting into medical school curriculum.</li> <li>4. Data and other information to support efforts to enhance mandated reporter training is available to stakeholders.</li> </ol>

**CC. EPIC should work with state partners and professional associations to reduce fundamental risk factors for child maltreatment by increasing universal screening for perinatal substance use, parent education, and father involvement in order to reduce fundamental risk factors to child maltreatment.**

Rationale: Substance use, lack of parent education, and limited father involvement are key predictors of both child maltreatment and unintentional childhood injuries. However, there are many state and local organizational, agency, and professional barriers to implementing preventive policies and practices within prenatal, hospital, post-natal, home visiting, and parent education settings. Efforts are needed to identify and reduce these barriers at the policy, organizational, and practice levels.

<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 2 – 3	<p>CC-1. Convene stakeholders to identify barriers and potential policies and practices that would reduce these barriers.</p> <p>CC-2. Compile best practice models in universal screening, parent education, and father involvement.</p> <p>CC-3. Explore county and other state efforts to establish universal screening for perinatal substance use (e.g. Iowa, Arizona, Colorado).</p> <p>CC-4. Explore legislative and regulatory approaches to universal screening for perinatal substance use.</p>	<ol style="list-style-type: none"> <li>1. Report of best practice models and recommendations developed for use in stakeholders meeting.</li> <li>2. Report of best practices in legislative and regulatory approaches to universal screening and recommendations is developed.</li> <li>3. Stakeholders identified and recruited to participate in meetings (AA-1).</li> <li>4. Assessment of barriers and a plan to reduce barriers to developed and disseminated to key stakeholders.</li> </ol>

**DD. EPIC should work with state and local partners to create unified, consistent, and evidence-based primary prevention child maltreatment messages for use in state and local media and social marketing campaigns.**

Rationale: Recent research has documented the success of past efforts to increase awareness of child maltreatment, but also highlighted that the general public has a distorted view of the problem and solutions, and is ambivalent about what they can do.<sup>xvii</sup> As part of a comprehensive strategy, social marketing is a promising approach for changing social norms and the public and policy agenda (e.g., as in promoting tobacco control). This strategy, with an added emphasis on primary prevention, should be adapted for use in child maltreatment. Previous campaigns have found strength-based primary prevention messages to be effective in changing social norms. Therefore, campaign messages should emphasize individual and community strengths, such as acknowledging that parenting is hard and that requesting, offering, and accepting help is a common, socially-appropriate practice. Messages should also be linguistically and culturally appropriate for California’s diverse at-risk populations. To develop these primary prevention messages, public health should work with state and local partners to evaluate evidence-based communication and social marketing approaches. The federal Department of Health and Human Services resource, “Promoting Healthy Families in Your Community 2007 Resource Packet,” provides examples primary prevention messages that could be utilized. Conducting a statewide primary prevention campaign utilizing consistent, unified primary prevention messages would help create a statewide paradigm shift in how child maltreatment is viewed and should be a critical next step in ongoing efforts to reduce child maltreatment. Another benefit of a unified statewide media strategy is the creation of “brand” awareness that allows better program evaluation and helps build local capacity for using the media more effectively.

<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Year 1	<p>DD-1. Promote continued collaborative efforts by statewide and local agencies and organizations to enhance child maltreatment prevention messaging.</p> <p>DD-2. Research target populations and regional media markets and other communication outlets, and develop models to utilize in messaging.</p>	<ol style="list-style-type: none"> <li>1. Participation in collaborative efforts to develop messages and unified campaigns.</li> <li>2. Target audience and best practice research is conducted and analyzed. Feedback is received from local agencies and organizations.</li> <li>3. Campaign materials are developed and distributed.</li> <li>4. Technical assistance and training materials are developed and made available to</li> </ol>

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	<p>DD-3. Solicit feedback and buy-in from local agencies on unified, customizable messaging.</p> <p>DD-4. Research national, state and local data and best practices in communicating child maltreatment prevention messages.</p> <p>DD-5. Participate in collaborative efforts to develop and distribute unified and customizable campaign materials to local agencies and organizations.</p> <p>DD-6. Provide training and technical assistance to local agencies and organizations on expanding their capacity to conduct comprehensive prevention campaigns.</p>	<p>counties and organizations participating in campaigns.</p> <p>5. Increase in county capacity to implement comprehensive campaigns.</p> <p>6. Increase in the number of counties that participate in unified prevention campaigns for Child Abuse Prevention Month.</p>
<p><b>EE. In collaboration with its partners, EPIC should promote the statewide implementation of evidence-based family strengthening programs (e.g., home visitation, family resource centers, and effective parenting curriculum).</b></p> <p><u>Rationale:</u> Policy makers are increasingly focused on evidence and outcome-based decisions and federal and state funding requirements for such evidence and practices will likely continue. However, those responsible for programs do not always know how to translate knowledge into program practice. There are many small-scale programs, such as those that address home visitation and shaken baby syndrome, that are evidence-based and showing sign of effectiveness. But statewide outcomes will not be substantial until these programs are brought to scale with effective implementation to impact large numbers of families and children. When researching and implementing programs, special emphasis should be given to those that address young parents, father involvement, family strengthening, substance use and abuse, and family violence.</p>		
<i>Timeframe</i>	<i>Initial Strategies</i>	<i>Initial Milestones</i>
Years 2 – 3	<p>EE-1. Research and identify existing programs, promising program components, and organizational barriers that prevent these issues from being addressed in organizational protocols, practices, and programs.</p> <p>EE-2. Build capacity of program administrators to effectively implement evidence-based family strengthening programs by providing or supporting training, TA, and funding resources.</p> <p>EE-3. Explore and support efforts, including state and federal legislation, to increase resources, for statewide implementation of evidence-based family strengthening programs.</p>	<p>1. Report developed that: 1) identifies existing evidence-based programs and organizational barriers to implementation; and 2) includes a plan for reducing those barriers.</p> <p>2. Training and technical assistance materials are developed and provided to local program administrators.</p> <p>3. CDPH provides data and other information to support efforts to increase resources for statewide implementation of programs.</p> <p>4. Evidence-based family strengthening programs are implemented in new counties throughout the state.</p>

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