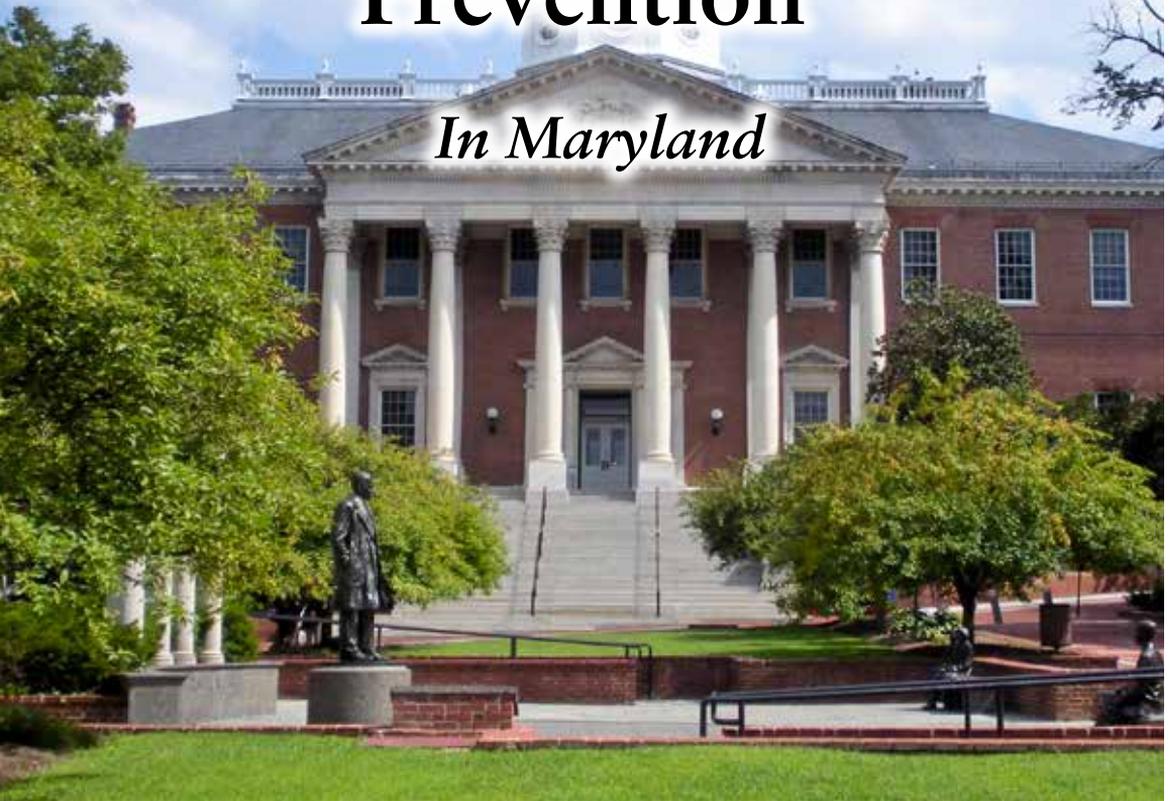


Violence & Injury Prevention

In Maryland



THE PURPOSE OF THIS RESOURCE GUIDE

This resource guide was developed to highlight the scope and cost of injury in Maryland and increase recognition of the role that public health can play in preventing injuries. There are 11 topics in this guide. Each topic in the guide has its own section that includes the following information:

- Data on how that injury issue affects the United States
- Data on how that injury issue affects Maryland
- Possible strategies on how to address that injury issue
- Maryland-based resources to highlight efforts to address the injury issue
- References on data sources cited in each section

INJURY AND VIOLENCE PREVENTION INITIATIVES IN MARYLAND

Injuries remain one of the most important causes of preventable morbidity and mortality in Maryland. The burden and costs of injuries on Maryland is substantial, accounting for more than \$1.13 billion in hospital and emergency department charges in 2013 alone. The Department of Health and Mental Hygiene's (DHMH) commitment to reducing the burden of injuries in Maryland is reflected in many of the priorities identified in the State Health Improvement Process (SHIP) and efforts to achieve healthy communities. The DHMH Center for Injury and Sexual Assault Prevention (CISAP) located within the Environmental Health Bureau houses several programs including the Sexual Assault Reimbursement Unit, Rape and Sexual Assault Prevention (RPE), Kids in Safety Seats, and the Core Violence and Injury Prevention Program (VIPP) funded by the Centers for Disease Control and Prevention (CDC).

This resource guide is developed by the Core VIPP to provide DHMH, State partners, Maryland citizens, community-based organizations and decision-makers with valuable data and resources to promote a safer Maryland for all of its citizens.

A special thanks to the following staff at the CISAP for their dedication and hard work in the development of this guide:

Joyce Dantzler
Jade Leung
Chiso Oboite
Genevieve Polk

ALCOHOL AND INJURY

ALCOHOL AND INJURY



Alcohol and Injury

HOW DOES THIS AFFECT THE UNITED STATES?

- From 2006-2010, an average of 87,798 people died each year as a result of excessive alcohol use, more than half of those deaths (56%) were from injuries.¹
- On average, 4,358 children and youth under the age of 21 died each year from 2006-2010 as a result of excessive alcohol use. Nearly all of those deaths (96%) were from injury.¹
- In 2014, 9,967 people died in alcohol-related motor vehicle crashes.²
- In 2010, the cost of alcohol consumption to society was estimated to be \$249 billion, or approximately \$2.05 per drink.³ This includes direct costs such as medical care and the costs of the judicial and penal systems, as well as indirect costs such as lost wages, and pain and suffering.⁴

HOW DOES THIS AFFECT MARYLAND?

- From 2006-2010, an average of 1,318 Marylanders died each year as a result of excessive alcohol use, more than half were from injuries.¹
- In 2013, 143 Marylanders died in alcohol-related motor vehicle crashes.⁵
- Estimated total, governmental, and binge drinking costs of excessive alcohol consumption in Maryland was \$4.96 billion in 2010, or \$860 per capita.⁶

HOW DO WE ADDRESS THIS PROBLEM?

- Increasing the price of alcohol is associated with reduced drinking among adults and adolescents,⁷ as well as fewer youth traffic fatalities,^{8,9} suicides,¹⁰ and homicides.^{10, 11, 12} Effective July 1, 2011 Maryland Senate Bill 994 increased the sales tax on alcohol to 9 percent.
- In addition to raising alcohol taxes, the Community Preventive Services Task Force recommends limiting the hours and days when alcohol can be purchased, strengthening commercial host liability laws, and increasing enforcement of minimum legal drinking age laws to curb underage drinking.¹³
- The Institute of Medicine recommends reducing adolescent exposure to alcohol advertising.¹⁴ At the local or state level, this can be done by restricting outdoor advertising, retail signage and alcohol sponsorships or promotions on public property and in places frequented by youth.¹⁵
- Ignition interlock devices prevent drivers who have measurable alcohol (set to a predetermined level) in their system from driving an interlock-equipped car. They reduce repeat drunk driving offenses by an average of 64 percent as long as the device remains on the vehicle.¹⁶ Other alcohol-sensing technologies show promise for the future.¹⁷
- Another effective measure includes requiring mandatory substance abuse assessment and treatment, if needed, for Driving While Impaired offenders.¹⁸

Alcohol and Injury

ADDITIONAL RESOURCES

- Center for Substance Abuse Research: www.cesar.umd.edu
- Center on Alcohol Marketing and Youth: www.camya.org
- Johns Hopkins Center for Injury Research and Policy: www.jhsph.edu/InjuryCenter
- Maryland Motor Vehicle Administration:
<http://www.mva.maryland.gov/safety/mhso/program-impaired-driving-prevention.htm>
- The Maryland Collaborative to Reduce College Drinking and Related Problems:
<http://marylandcollaborative.org/>
- National Center for Injury Prevention and Control, CDC: www.cdc.gov/injury

REFERENCES

1. Centers for Disease Control and Prevention. Alcohol-Related Disease Impact Software (ARDI). Retrieved July 12, 2016, from http://nccd.cdc.gov/DPH_ARDI/default/default.aspx
2. National Highway Traffic Safety Administration. (August, 2015) Traffic Safety Facts 2014. Alcohol-Impaired Driving. Retrieved on July 12, 2016, from <http://www-nrd.nhtsa.dot.gov/Pubs/812231.pdf>
3. Bouchery, E. E., Harwood, H. J., Sacks, J. J., Simon, C. J., & Brewer, R. D. (2011). Economic Costs of Excessive Alcohol Consumption in the U.S., 2006. *American Journal of Preventive Medicine*, 41(5), 516-524. doi:10.1016/j.amepre.2011.06.045
4. Harwood, H. J., Fountain, D., & Livermore, G. (1998). Economic Costs of Alcohol Abuse and Alcoholism. *Recent Developments in Alcoholism*, 307-330. doi:10.1007/0-306-47148-5_14. Retrieved July 12, 2016.
Note: 2009 estimate calculated based on the assumption that the cost increase remained stable at 3.8 percent per year since 1998.
5. Maryland Highway Safety Office Driver Involved Alcohol in Use Benchmark Report. Run October 16, 2014. Crash data are obtained from the State Highway Administration which maintains a database derived from crash reports submitted to, and processed and approved by, the Maryland State Police.
6. Sacks, J. et al. (2015). 2010 National and State Costs of Excessive Alcohol Consumption, *American Journal of Preventive Medicine*, Volume 49, Issue 5, 73-79. DOI:10.1016/j.amepre.2015.05.031
7. Wagenaar, AC Salois, MJ, Komro KA. (2009). Effects of beverage alcohol price and tax levels on drinking: A meta-analysis of 1003 estimates from 112 studies. *Addiction*. 104(2):179-190.
8. Ponicki WR, Gruenewald PJ, LaScala EA. (2007). Joint impacts of minimum legal drinking age and beer taxes on US youth traffic fatalities, 1975-2001. *Alcoholism: Clinical and Experimental Research*. 31(5):804-13.
9. Cook PJ. (2007). Paying the Tab: The costs and benefits of alcohol control. *Princeton University Press*.
10. Ruhm CJ. (1994). Alcohol policies and highway vehicle fatalities. *Journal of Health Economics*; 15:435-454.
11. Sen B. (n.d.). The relationship between beer taxes, other alcohol policies, and child homicide deaths. *Topics in Economic Analysis and Policy*.2006. 6(1), Article 15. Retrieved July 12, 2016, from DOI: 10.2202/1538-0653.1571.
12. Sloan FA, Reilly BA, Schenzler C. (1994). Effects of prices, civil and criminal sanctions, and law enforcement on alcohol-related mortality. *Journal of Studies on Alcohol*. 55:454-465.
13. National Center for Health Marketing (NCHM), Centers for Disease Control and Prevention. (n.d.) Guide to Community Preventive Services. Evidence-Based Strategies to Prevent Excessive Alcohol Consumption and Related Harms. Retrieved July 15 2016, from <http://www.thecommunityguide.org/alcohol/SummaryCGRecommendations.pdf>
14. National Research Council and Institute of Medicine. (2004). Reducing Underage Drinking: A Collective Responsibility. *National Academies Press*.
15. Center on Alcohol Marketing and Youth. State Alcohol Marketing Laws: Current Status and Model Policies. Baltimore, MD: Center on Alcohol Marketing and Youth, 2011.
16. Willis C, Lybrand S, Bellamy N. (2004). Alcohol ignition interlock programs for reducing drink driving recidivism. *Cochrane Database of Systematic Reviews*. Issue 4. Art. No.: CD004168. DOI: 10.1002/14651858.CD004168.pub2.
17. Pollard JK, Nadler ED, Stearns MD. (n.d.) Review of Technology to Prevent Alcohol-Impaired Crashes.
18. Wells-Parker, E., Bangert-Drowns, R., McMillen, R., et al. "Final Results From a meta-analysis of remedial interventions with drink/drive offenders: *Addiction*." (1995) 90: 907-926. Retrieved July 15 2016.

A child wearing a bright orange and black helmet and a dark jacket is riding a black and green ATV in a field. The ATV has large, muddy tires and a front headlight. The background is a blurred landscape under a clear sky.

All-Terrain Vehicle (ATV) Safety

ALL-TERRAIN
VEHICLE SAFETY

ATV Safety

HOW DOES THIS AFFECT THE UNITED STATES?

- From 1982-2014, 13,617 people died as a result of ATV-related injuries. Of these deaths, 3,098 (23%) were children younger than 16 years of age.¹
- In 2014, an estimated 93,700 people were treated in United States Emergency Departments (EDs) for ATV-related injuries. About 26 percent of those treated for injuries were children younger than 16 years of age.¹
- Eighty-one percent of ATV riders who were fatally injured in 2014 were not wearing helmets.²
- From 1982-2014, deaths of ATV riders on public roadways have increased more than nine fold; from 35 deaths in 1982 to 323 deaths in 2014.²
- In 2014, 85 percent of the 323 ATV riders killed were on rural roads.²
- From 2001-2010, the number of ATVs in use in the United States doubled; from 4.9 million in 2001 to 10.6 million in 2010.³

HOW DOES THIS AFFECT MARYLAND?

- From 1982-2011, ATV-related crashes accounted for 91 deaths in Maryland.¹
- From 2001-2006, more than 9,000 individuals were injured in off-road vehicle incidents (including ATVs) and required treatment in Maryland EDs; about one-third of those treated in EDs were younger than 15 years.⁴
- Among all ATV-related trauma patients for whom helmet use was known, approximately two-thirds were not wearing a helmet when the crash occurred.⁴

HOW DO WE ADDRESS THIS PROBLEM?

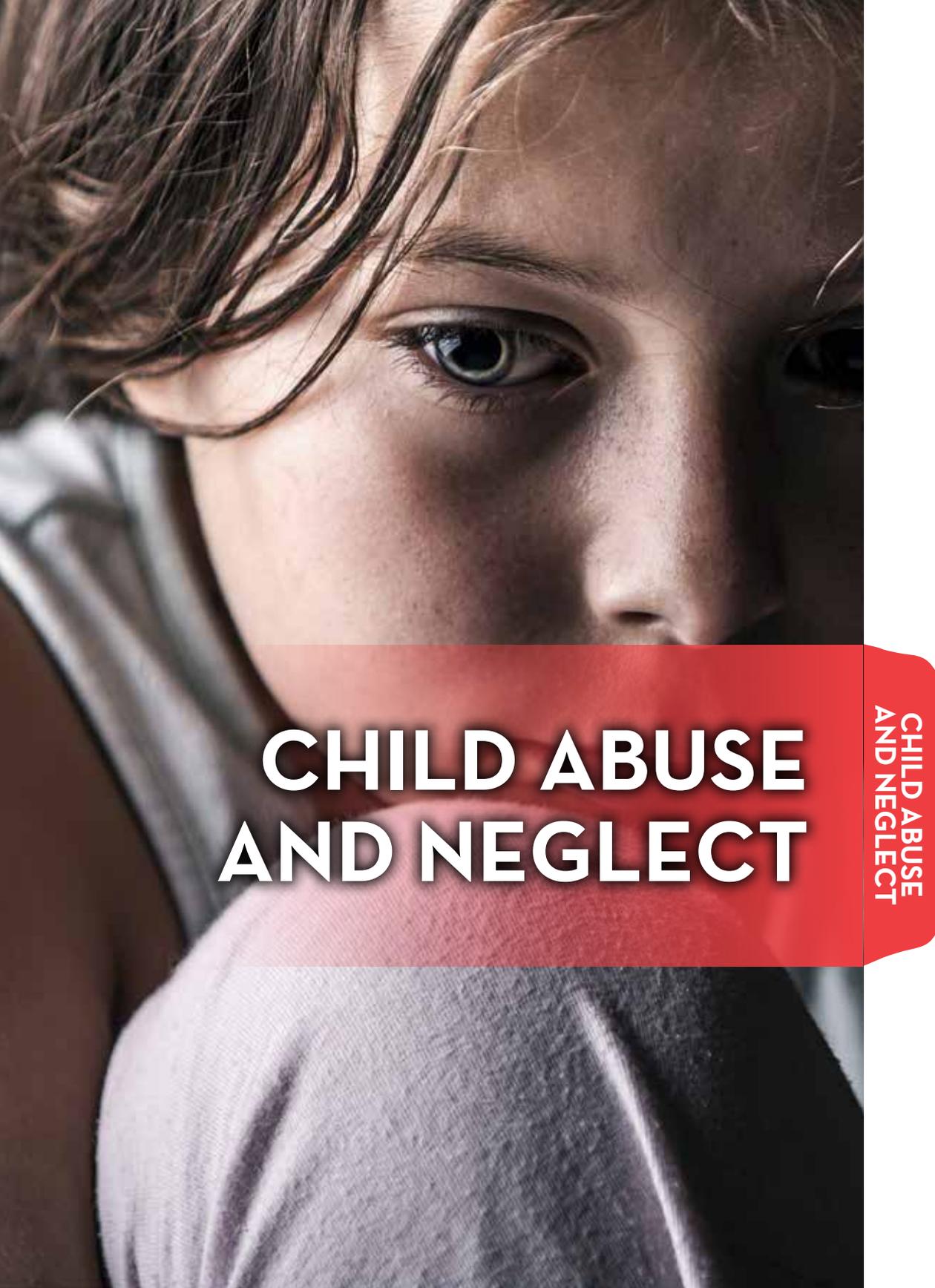
- Helmet use reduces the risk of fatal head injury by 42 percent and the risk of non-fatal head injury by 64 percent.⁵
- In the event of a crash, un-helmeted ATV riders are much more likely to suffer a serious traumatic brain injury and much more likely to suffer significant injuries to the face and neck compared to helmeted riders.⁶
- A Maryland ATV Safety Task Force (2008; SB 28 and HB 114) recommended several safety strategies, including prohibiting use by those under 6 years, requiring use of approved helmet and eye protection, prohibiting passengers unless the ATV was designed for passenger use, requiring safety training for all youth riders, and improving data collection of ATV-related injuries.^{7,8}
- The American Academy of Pediatrics (AAP) recommends that children younger than 16 years of age not be allowed to operate ATVs.⁹
- Crashes involving children often occur when riding adult-sized ATVs; ATV dealers continue to sell adult-sized ATVs for use by children. A GAO report recommends strategies to effectively enforce the age recommendations set forth by the Consumer Product Safety Commission.¹⁰

ADDITIONAL RESOURCES

- Consumer Product Safety Commission, ATV Safety: www.atvsafety.gov
- Johns Hopkins Center for Injury Research and Policy: www.jhsph.edu/InjuryCenter
- National Center for Injury Prevention and Control, CDC: www.cdc.gov/injury
- National Safety Council: www.nsc.org

REFERENCES

1. The Consumer Products Safety Commission. (2015). 2014 Annual Report of ATV-Related Deaths and Injuries. Retrieved July 12, 2016, from <http://www.cpsc.gov/Global/Research-and-Statistics/Injury-Statistics/Sports-and-Recreation/ATVs/2014atvannualreport.pdf>
2. Insurance Institute for Highway Safety, Highway Loss Data Institute. (2014). Motorcycles and ATVs. Retrieved July 12, 2016, from <http://www.iihs.org/iihs/topics/t/motorcycles/fatalityfacts/motorcycles#ATVs>
3. The Consumer Products Safety Commission. (2014). 2012 Annual Report of ATV-Related Deaths and Injuries. Retrieved July 12, 2016, from <http://www.cpsc.gov/Global/Research-and-Statistics/Injury-Statistics/Sports-and-Recreation/ATVs/2012atvannual.pdf>
4. Bass RR, Gainer PS. (n.d.). Report on Off-Road Vehicle Incidents Including All-Terrain Vehicles In The State of Maryland. *The Maryland Institute for Emergency Medical Services Systems (MIEMSS)*. Retrieved on July 12, 2016, from <http://cdm16064.contentdm.oclc.org/cdm/singleitem/collection/p266901coll7/id/5/rec/4>
5. Rodgers GB. (1990). The effectiveness of helmets in reducing all-terrain vehicle injuries and death. *Accident Analysis and Prevention*; 22:47-58.
6. Bowman SM, Aitken ME, Helmkamp JC, Maham SA, Graham CJ. (2009). Impact of helmets on injuries to riders of all-terrain vehicles. *Injury Prevention*; 15(1):3-7.
7. Pollack KM, Frattaroli S, Morhaim D. Working in the legislature: perspectives on injury prevention in the United States. (2009). *Injury Prevention*; 15(3):208-211.
8. Report of the All-Terrain Vehicle Safety Task Force. (December, 2008). Interim and Final Reports, Required by SB 28 and HB 114. *Report to the Budget Committees Required by the Joint Chairmen's Report – Operating Budget, April 2008*.
9. American Academy of Pediatrics. Committee on Injury and Poison Prevention. (2000). All-Terrain Vehicle Injury Prevention: Two, Three, and Four-Wheeled Unlicensed Motor Vehicles. *Pediatrics*; 105(6):1352-1354.
10. U.S. Government Accountability Office, Report to Congressional Committees. (April 2010) All-Terrain Vehicles: How they are used, crashes, and sales of adult-sized vehicles for use by children; GAO-10-418. Retrieved on July 12, 2016, from <http://www.gao.gov/new.items/d10418.pdf>



CHILD ABUSE AND NEGLECT

CHILD ABUSE
AND NEGLECT

Child Abuse and Neglect

Child abuse and neglect (CAN) is any act of commission or omission by a parent or other caregiver (e.g., clergy, coach, or teacher) that results in harm, potential for harm, or threat of harm to a child. Acts of omission (child neglect) is the failure to provide for a child's basic physical, emotional, or educational needs or to protect a child from harm or potential harm.¹

HOW DOES THIS AFFECT THE UNITED STATES?

- In 2014, 1,546 children ages 0-17 years died in the United States as a result of CAN; 79 percent were killed by one or both of their parents. Most (71%) of these victims were less than 3 years old.²
- In 2014, there were an estimated 3.2 million referrals screened in for investigation for CAN to Child Protective Service (CPS) agencies across the United States.²
- In 2014, 702,000 children were identified to be victims of CAN. Seventy-five percent of these children suffered from neglect; 17 percent were victims of physical abuse, and 8 percent were sexual abuse victims.²
- The lifetime estimated cost of new fatal and non-fatal CAN cases in 2008 was \$124 billion. In 2010 dollars, the estimated average lifetime cost of CAN was \$210,012 per non-fatal victim; this includes \$32,648 in childhood health care costs; \$10,530 in adult medical costs; \$144,360 in productivity losses; \$7,728 in child welfare costs; \$6,747 in criminal justice costs; and \$7,999 in special education costs. The estimated average lifetime cost per death is \$1.3 million including \$14,100 in medical costs and \$1,258,800 in productivity losses.³

HOW DOES THIS AFFECT MARYLAND?

- In 2014, there were an estimated 31,469 referrals screened in for investigation for CAN to CPS in Maryland.²
- Of the reports that were screened in, there were an estimated 15,762 substantiated or indicated victims of CAN in Maryland, a rate of 11.7 per 1,000 children (0-17 year olds).²
- In that same year, 11 children died in Maryland as a result of CAN.²
- According to the Maryland State Council on Child Abuse & Neglect (SCCAN) 2013 Annual Report, CAN in Maryland is conservatively estimated to cost over \$1.5 billion each year.⁴

HOW DO WE ADDRESS THIS PROBLEM?

- In 2016, The Centers for Disease Control and Prevention (CDC) released, "Preventing Child Abuse & Neglect: A Technical Package for Policy, Norm, and Programmatic Activities." A technical package is a collection of strategies that represent the best available evidence to prevent or reduce public health problems like violence. The package supports CDC's Essentials for Childhood framework and highlights strategies to prevent child abuse and neglect.⁵
- The United States Department of Health and Human Services Children's Bureau provides funding to states and tribes to help them strengthen families and prevent CAN.⁶
- The California Evidence-Based Clearinghouse for Child Welfare provides online access to information about evidence-based child welfare practices. The effectiveness of these practices is supported by empirical research.⁷
- The Child Welfare Information Gateway connects child welfare and related professionals to comprehensive information and resources to help protect children and strengthen families.⁸

Child Abuse and Neglect

Table 1: Summary of Strategies and Approaches to Prevent Child Abuse and Neglect

Approach/Program, Practice or Policy	CAN Perpetration	CAN Victimization	Risk Factor for CAN
STRATEGY: Strengthen economic supports to families			
Strengthening household financial security			
<i>Child Support Payments</i>		✓	✓
<i>Tax Credits</i>			✓
<i>State nutrition assistance programs</i>		✓	✓
<i>Assisted housing mobility</i>			✓
<i>Subsidized child care</i>		✓	✓
LEAD SECTORS¹: Business/Labor • Government (local, state, Federal)			
Family-friendly work policies			
<i>Livable wages</i>			✓
<i>Paid leave</i>		✓	✓
<i>Flexible and consistent schedules</i>			✓
LEAD SECTORS¹: Business/Labor • Government (local, state, Federal)			
STRATEGY: Change social norms to support parents and positive parenting			
Public engagement and education campaigns			
<i>Breaking the Cycle</i>			✓
LEAD SECTORS¹: Public Health			
Legislative approaches to reduce corporal punishment			
<i>Bans pertaining to home, school, other settings</i>			✓
LEAD SECTORS¹: Government (local, state, Federal)			
STRATEGY: Provide quality care and education early in life			
Preschool enrichment with family engagement			
<i>Child Parent Centers</i>		✓	✓
<i>Early Head Start</i>		✓	✓
LEAD SECTORS¹: Social Services • Public Health			
Improved quality of child care through licensing and accreditation			
<i>Licensing and accreditation</i>			✓
LEAD SECTORS¹: Business/Labor • Government (local, state, Federal)			

¹ This column refers to the lead sectors well positioned to bring leadership and resources to implementation efforts. For each strategy, there are many other sectors such as non-governmental organizations that are instrumental to prevention planning and implementing the specific programmatic activities.

* Table 1 is from the CDC's "Preventing Child Abuse & Neglect: A Technical Package for Policy, Norm, and Programmatic Activities."

Child Abuse and Neglect

Table 1: Summary of Strategies and Approaches to Prevent Child Abuse and Neglect, *Continued*

Approach/Program, Practice or Policy	CAN Perpetration	CAN Victimization	Risk Factor for CAN
STRATEGY: Enhance parenting skills to promote healthy child development			
Early childhood home visitation			
<i>Nurse Family Partnership</i>	✓		✓
<i>Durham Connects</i>			✓
LEAD SECTORS: Public Health • Health Care			
Parenting skill and family relationship approaches			
<i>Adults and Children Together Against Violence: Parents Raising Safe Kids (ACT)</i>	✓		✓
<i>Incredible Years</i>			✓
<i>Safe Care</i>			✓
LEAD SECTORS: Public Health • Social Services			
STRATEGY: Intervene to lessen harms and prevent future risk			
Enhanced primary care			
<i>Safe Environment for Every Kid (SEEK)</i>	✓		✓
LEAD SECTORS: Public Health • Health Care			
Behavioral parent training programs			
<i>Parent-Child Interaction Therapy (PCIT)</i>	✓		✓
<i>Safe Care</i>	✓		✓
<i>Incredible Years</i>			✓
LEAD SECTORS: Public Health • Social Services			
Treatment to lessen harms of abuse and neglect exposure			
<i>Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)</i>	N/A ²	N/A ²	✓
LEAD SECTORS: Public Health • Social Services • Justice			
Treatment to prevent problem behavior and later involvement in violence			
<i>Children with Problematic Cognitive-Behavioral Treatment Program: School-age Program</i>			✓
<i>Multi-systemic Therapy (MST)</i>	✓		✓
LEAD SECTORS: Public Health • Social Services • Justice			

¹ This column refers to the lead sectors well positioned to bring leadership and resources to implementation efforts. For each strategy, there are many other sectors such as non-governmental organizations that are instrumental to prevention planning and implementing the specific programmatic activities.

² Program was designed to address the harms of abuse and neglect (e.g., PTSD, depression)

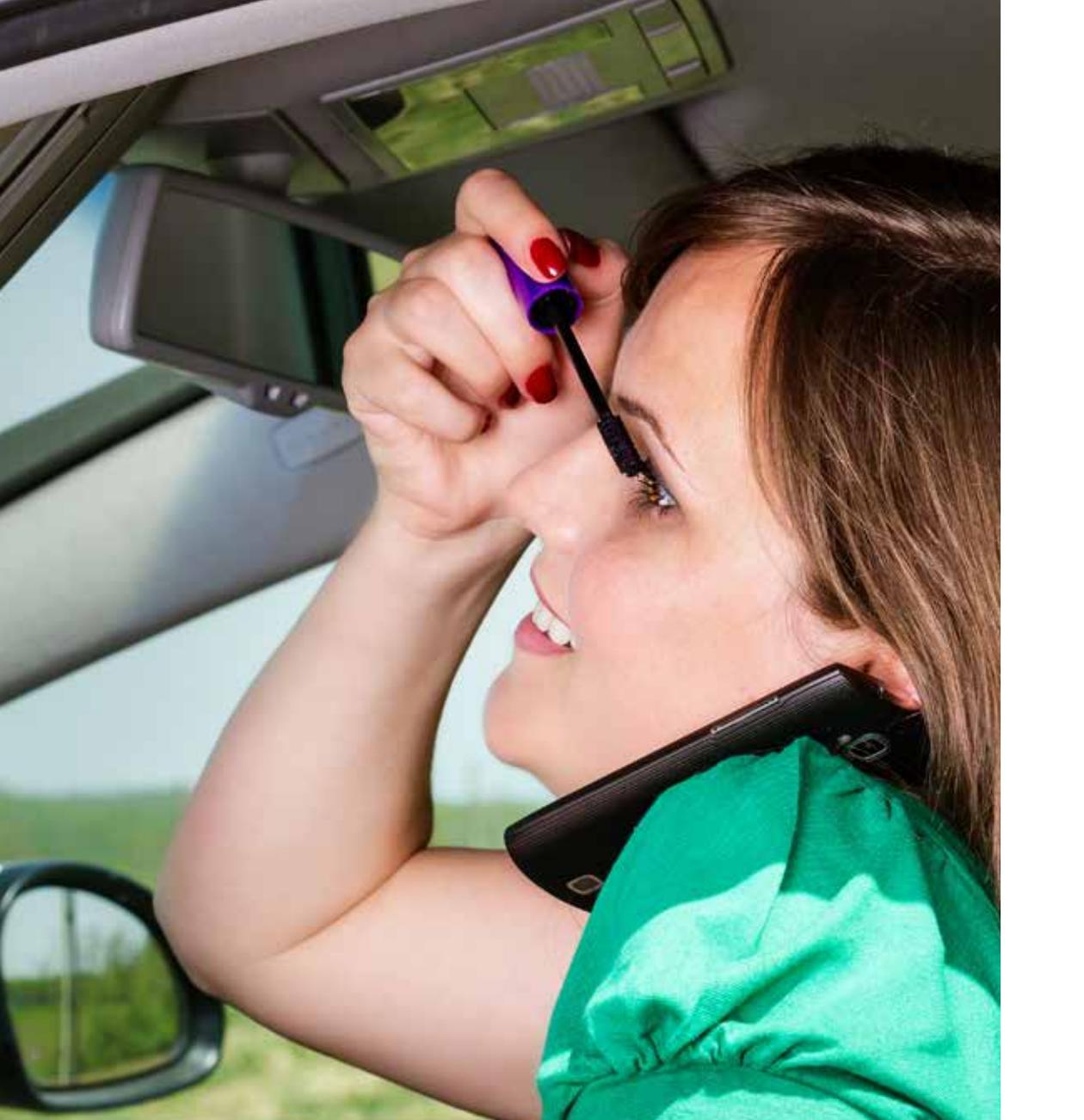
Child Abuse and Neglect

ADDITIONAL RESOURCES

- The Child Abuse Medical Provider (CHAMP) Program network is a group of medical professionals (physicians and nurses), specially trained in the area of CAN. They provide training and support to medical professionals, consultation to CPS, law enforcement, state's attorney's offices, pediatricians and other professionals, and develop policies and practice guidelines to improve the systems' response to children and families with concerns of possible abuse or neglect. <http://phpa.dhbmh.maryland.gov/mch/Pages/MDChamp.aspx>
- Child Protective Services (CPS) is a specific social service provided by the Department of Human Resources (DHR) to assist children believed to be neglected or abused by parents or other adults having permanent or temporary care or custody, or parental responsibility. <http://dhr.maryland.gov/child-protective-services/reporting-suspected-child-abuse-or-neglect/local-offices/>
- Maryland's Resource for Mandated Reporters is a website with valuable information about mandatory reporting laws and how to make a report if CAN is suspected. The website also offers online mandatory reporter training. <https://www.reportabusemd.com>
- The Maryland Courts webpage provides information about how the state may intervene in the parent child relationship for the purpose of protecting the child. This does not include information on potential criminal consequences for acts of CAN. <http://www.courts.state.md.us/legalhelp/childabuseneglect.html>
- Maryland Community Services Locator (MDCSL) CESAR at the University of Maryland, College Park invites you to find approximately 9,000 health, social service and criminal justice resource programs in Maryland. The Maryland Community Services Locator can provide you with service information, maps, and driving directions to programs. <http://www.mdcsll.org/search.html>
- The 2016 Prevention Resource Guide: Building Community, Building Hope was created primarily to support community-based child abuse prevention professionals who work to prevent CAN and promote well-being. <https://www.childwelfare.gov/pubPDFs/guide.pdf>
- The Choosing Healthy Options In Caring for Everyone Safely (C.H.O.I.C.E.S.) Poster Campaign. C.H.O.I.C.E.S.' mission is to acknowledge the joys of caring for others and address the stressors that can accompany the role of caregiver. The poster campaign has been designed to identify, educate, support, and refer those in challenging relationships, especially in the role of caregiver for a family member. <http://www.nasw-md.org/?page=100&terms=%22child+and+abuse%22>
- Children's Safety Network is dedicated to working with state, territorial and community Maternal & Child Health and Injury & Violence prevention programs to create an environment where all children and youth are safe and healthy. We work with states and territories to infuse knowledge, expertise, and leadership to reduce injury, hospitalization, disability and death for all children and youth. Our goal is to equip states to strengthen their capacity, utilize data and implement effective strategies to create injury and violence free environments. <https://www.childrensafetynetwork.org/injury-topics/child-maltreatment>

REFERENCES

1. Child Maltreatment: Definitions. (2015, March 16). Retrieved July 15, 2016, from <http://www.cdc.gov/violenceprevention/childmaltreatment/definitions.html>
2. United States Department of Health & Human Services. Administration for Children & Families. Child maltreatment 2013. Retrieved July 15, 2016 from <http://www.acf.hhs.gov/sites/default/files/cb/cm2014.pdf>
3. Fang, X., Brown, D., Florence, C., & Mercy, J. (n.d.). The economic burden of child maltreatment in the United States and implications for prevention. 156-165. Retrieved July 15, 2016 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3776454/pdf/nihms508485.pdf>
4. Maryland State Council on Child Abuse & Neglect Annual Report (January 1, 2013 – December 31, 2013) <http://www.bcaci.org/wp-content/uploads/2015/03/2013-State-Council-for-Child-Abuse-Annual-Report.pdf>
5. Fortson, B. L., Klevens, J., Merrick, M. T., Gilbert, L. K., & Alexander, S. P. (2016). Preventing child abuse and neglect: A technical package for policy, norm, and programmatic activities. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
6. Focus Areas. (n.d.). Retrieved July 15, 2016, from <http://www.acf.hhs.gov/programs/cb/focus-areas>
7. The California Evidence-Based Clearinghouse for Child Welfare Information and Resources for Child Welfare Professionals. (n.d.). Retrieved July 15, 2016, from <http://www.cebc4cw.org>
8. Evidence-Based Practice. (n.d.). Retrieved July 15, 2016, from <https://www.childwelfare.gov/topics/preventing/evidence/?hasBeenRedirected=1>



DISTRACTED DRIVING

**DISTRACTED
DRIVING**

Distracted Driving

Distracted driving includes any activity that diverts a driver's attention from driving, such as texting, eating, applying makeup or reading billboards on the side of the road, etc.

HOW DOES IT AFFECT THE UNITED STATES?

- In 2014, 3,179 people were killed and 431,000 people were injured in crashes where the driver was distracted.¹
- In 2014, law enforcement reported distracted driving as a factor in 16 percent of all motor vehicle crashes, 18 percent of crashes resulting in injury, and 10 percent of crashes resulting in death.¹
- Distraction is more likely to be a factor in fatal crashes among teen drivers than any other age group. Ten percent of all teen drivers involved in fatal crashes were distracted at the time of the crash.¹
- Almost one third (31%) of drivers between the ages of 18 and 64 years old reported texting or emailing at least once while driving in the last 30 days.²
- In 2010, distracted driving cost the nation \$46 billion, an average of \$148 for every person in the United States.³

HOW DOES IT AFFECT MARYLAND?

- From 2009-2013, on average 232 people were killed and 2,348 people were injured each year in crashes involving a distracted driver.⁴
- Distracted driving in Maryland in 2013 led to 182 deaths and 26,995 injuries.⁵

HOW DO WE ADDRESS THIS PROBLEM?

- Many states are enacting laws—such as banning texting while driving, or using graduated driver licensing systems for teen drivers—to help raise awareness about the dangers of distracted driving and to keep it from occurring. However, the effectiveness of cell phone and texting laws on decreasing distracted driving related crashes requires further study.²
- Currently, 46 states, DC, Puerto Rico, Guam, and the United States Virgin Islands ban text messaging for all drivers. All but 5 have primary enforcement.⁶ See Table 1 for laws restricting cellphone use and texting (as of April 2016).⁶
- Maryland has a primary ban on text messaging and a primary ban on using a handheld cell phone while driving (effective October 2013).⁶ These types of bans, if rigorously enforced, may be effective in reducing cell phone use while driving;⁷ however, it is too soon to assess the impact of well-enforced cell phone laws on crashes.⁸
- Highway engineering to make roadways safer for distracted drivers is a promising strategy. Specific strategies include providing safe stopping and resting areas and installing rumble strips.⁸
- Changing social norms to make distracted driving less socially acceptable is a promising strategy⁸ as is technology that prevents drivers from using a cell phone while the vehicle is in motion.
- High Visibility Model (HVE) enforcement programs in Connecticut and New York have been shown to reduce hand-held cell phone talking and texting while driving. HVE combines law enforcement during specified periods and paid/earned media that addresses high enforcement methods.⁹

Distracted Driving

ADDITIONAL RESOURCES

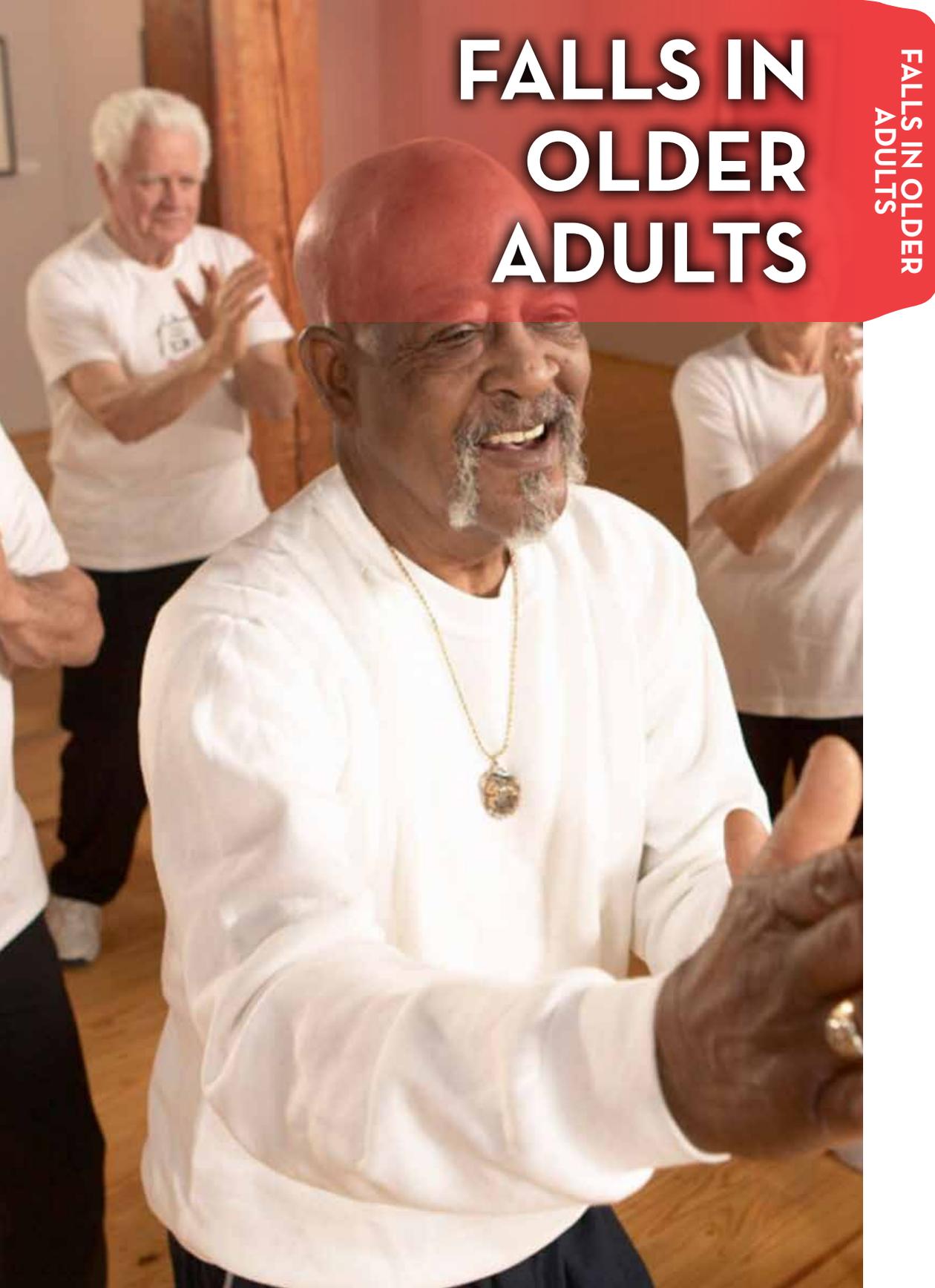
- Governor’s Highway Safety Association: <http://www.ghsa.org/html/stateinfo/bystate/md.html>
- Johns Hopkins Center for Injury Research and Policy: www.jhsph.edu/InjuryCenter
- National Center for Injury Prevention and Control, CDC: www.cdc.gov/injury
- Maryland Department of Transportation Motor Vehicle Administration: www.mdot.state.md.us
- Maryland Motor Vehicle Administration: <http://www.mva.maryland.gov/safety/distracteddriving.htm>
- National Highway Traffic Safety Administration (NHTSA): www.nhtsa.dot.gov
- University of Maryland School of Medicine National Study Center for Trauma and Emergency Medical Systems (NSC): http://medschool.umaryland.edu/NSC_Trauma.asp

REFERENCES

1. U.S. Department of Transportation, National Highway Traffic Safety Administration. (2016, April). Distracted Driving 2014. Retrieved May 6, 2016, from <http://www-nrd.nhtsa.dot.gov/Pubs/812132.pdf>
2. U.S. Department of Transportation, National Highway Traffic Safety Administration. Distracted Driving. (2015, August 13). Retrieved July 2016, from http://www.cdc.gov/motorvehiclesafety/distracted_driving
3. Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A. (2015, May). The economic and societal impact of motor vehicle crashes, 2010. (Revised) (Report No. DOT HS 812 013). Washington, DC: National Highway Traffic Safety Administration.
4. Maryland Motor Vehicle Administration (2015). Maryland Strategic Highway Safety Plan 2016-2020. Retrieved July 2016, from http://www.mva.maryland.gov/resources/docs/MarylandSHSP_2016-2020-Final.pdf
5. National Study Center for Trauma & EMS, Maryland Center for Traffic Safety Analysis (MCTSA) and Maryland Highway Safety Office. Retrieved July 2016 (6)
6. Cellular Phone Use and Texting While Driving Laws. (n.d.). Retrieved July 2016, from <http://www.ncsl.org/research/transportation/cellular-phone-use-and-texting-while-driving-laws.aspx>
7. McCartt AT, Geary LL. Longer-term effects of New York State’s law on drivers’ handheld cell phone use. *Injury Prevention*. 2004;10:11-15.
8. U.S. Department of Transportation, National Highway Traffic Safety Administration. Driver Distraction: A Review of the Current State-of-Knowledge. (2008, April 1). Retrieved July 2016.
9. U.S. Department of Transportation, National Highway Traffic Safety Administration. High Visibility Enforcement Demonstration Programs in Connecticut and New York Reduce Hand-Held Phone Use. (2010, September 1). Retrieved July 2016, from <http://www.distraction.gov/downloads/pdfs/traffic-safety-facts-09-2010.pdf>

FALLS IN OLDER ADULTS

FALLS IN OLDER
ADULTS



Falls In Older Adults

For the purpose of this section, an “older adult” is defined as an individual aged 65 years and older, unless otherwise specified.

HOW DOES THIS AFFECT THE UNITED STATES?

- From 1999-2014, the rate of deaths due to falls among older adults in the United States increased by 100 percent, from 29 deaths per 100,000 to 58 deaths per 100,000. The number of deaths increased from 10,097 to 27,044.¹
- In 2013, falls among older adults accounted for nearly 2.5 million ED visits, resulting in over 1.7 million treat and release visits and 657,843 hospitalizations.¹
- By 2030, more than 20 percent of U.S. residents are projected to be aged 65 and over, due to the baby boom cohort, compared with 13 percent in 2010 and 9.8 percent in 1970. ‘Baby Boomers’ or those born between mid-1946 and mid-1964 represent a unique increase in birth rate due to the size of this cohort as well as the length of time for which these higher levels of fertility were sustained.²
- In 2013, falls among older adults cost the U. S. an estimated \$34 billion in direct medical costs.³

HOW DOES THIS AFFECT MARYLAND?

- From 2000-2014, the rate of deaths due to falls among older adults in Maryland increased by over 164 percent from 22 fatal falls per 100,000 to 58 fatal falls per 100,000. The number of deaths increased from 133 to 476.¹
- In 2014, the 476 deaths in older adults represent 83 percent of the total fatal falls among persons of all ages.¹
- In 2014, there were 22,212 hospitalizations for fall injuries among all ages in Maryland. Of those, 15,549 were among older adults, representing 70 percent of the total.⁴
- In 2014, there were 132,106 ED visits for fall injuries among all ages in Maryland. Of those, 32,886 were among older adults representing close to 25 percent of the total.⁴
- In 2014, older adults generated over \$253 million in fall-related hospitalizations cost.⁴
- In 2014, among older adults, fall-related ED visit charges were over \$20 million.⁴

HOW DO WE ADDRESS THIS PROBLEM?

- The CDC provides resources about effective strategies in primary care settings including their STEADI toolkit, that:
 - Assess and address known risk factors, such as severely low blood pressure and visual and/or foot problems;
 - Discuss effective medication management, home hazard modification, and exercise programs that address strength, gait, and balance;
 - Assess calcium and Vitamin D consumption (via food and/or supplements) and screen older adults for osteoporosis.⁵

Falls In Older Adults

- The Federal Affordable Care Act includes fall risk screening during free annual wellness visits. The ability of health care providers to screen for fall risk will be important for providing this service.⁶
- As of 2014, thirteen states had enacted laws to address falls in older adults: CA, CT, FL, HI, IL, MA, ME, MN, NJ, NM, OR, TX, and WA. These laws establish commissions, coalitions, and/or programs to identify and/or implement fall prevention strategies.⁷
- The Maryland Department of Health and Mental Hygiene (DHMH) annually participates with other states to promote National Falls Prevention Awareness Day, and has implemented Tai Ji Quan: Moving for Better Balance and Stepping On Programs throughout the state.
- The MD DHMH has obtained the governor's proclamation for Falls Prevention Awareness Week (FPAW) yearly since 2010. These activities have raised awareness about falls prevention, reaching an average of 1,000 Marylanders during the FPAW, every year since 2010.⁸

ADDITIONAL RESOURCES

- Fall Prevention Center of Excellence: <http://stopfalls.org/>
- Johns Hopkins Center for Injury Research and Policy: www.jhsph.edu/InjuryCenter
- Maryland Department of Health and Mental Hygiene: http://phpa.dhmh.maryland.gov/ohpetup/Pages/eip_falls.aspx
- Department of Aging MAP (Maryland Access Point): <https://www.marylandaccesspoint.info/consumer/index.php?mobile=false>
- National Center for Injury Prevention and Control, CDC: <http://www.cdc.gov/homeandrecreationalafety/falls/index.html>
- National Council on Aging: <https://www.ncoa.org/healthy-aging/falls-prevention/>
- National Safety Council: <http://www.nsc.org/learn/safety-knowledge/Pages/safety-at-home-falls.aspx>
- Partnership for a Safer Maryland: www.safermaryland.org
- Evidence-based Fall Prevention Programs:
 - o A Matter of Balance: <http://www.mainehealth.org/mob>
 - o Stepping On: <http://www.steppingon.com>
 - o Tai Ji Quan: Moving for Better Balance: <http://www.tjqmbb.org>

REFERENCES

1. The Centers for Disease Control and Prevention (CDC) Web-based Inquiry Statistics Query and Reporting System (WISQARS™) Retrieved July 5, 2016 from <http://www.cdc.gov/injury/wisqars/>
2. Colby, S.A., & Ortman, J.A. (2014). The Baby Boom Cohort in the United States: 2012 to 2060: Population Estimates and Projections. Retrieved July 5, 2016, from <http://www.census.gov/prod/2014pubs/p25-1141.pdf>
3. Costs of Falls Among Older Adults. (2015, June 30). Retrieved July 5, 2016, from <http://www.cdc.gov/HomeandRecreationalSafety/Falls/fallcost.html>
4. Unpublished data retrieved by the Maryland Core VIPP Program from the Health Services Cost Review Commission (HSCRC) datasets, July 2014
5. About CDC's STEADI (Stopping Elderly Accidents, Deaths, & Injuries) Tool Kit. (2015, July 1). Retrieved July 5, 2016, from <http://www.cdc.gov/steady/about.html>
6. United States Department of Health and Human Services (n.d.). About the Law. Retrieved July 5, 2016, from <http://www.hhs.gov/healthcare/rights/index.html>
7. Elderly Falls Prevention Legislation and Statutes. (2015, March 3). Retrieved July 5, 2016, from <http://www.ncsl.org/research/health/elderly-falls-prevention-legislation-and-statutes.aspx>
8. Falls Prevention Awareness Day. (n.d.). Retrieved July 5, 2016, from <https://www.ncoa.org/healthy-aging/falls-prevention/falls-prevention-awareness-day/>

A photograph of two firefighters in full gear, including helmets and oxygen tanks, using a red hose to spray water onto a house. The house has grey siding and a window. A large red banner is overlaid on the right side of the image, containing the text 'HOME FIRES'.

HOME FIRES

HOME FIRES

Table 1: Fire deaths, 2010-2014⁴

The 5 counties with the highest rates of fire deaths per 100,000 are highlighted below.

County	Number of Fire Deaths	Rate per 100,000
MARYLAND	333	1.1
Allegany	10	3.5
Anne Arundel	19	0.7
Baltimore City	96	2.8
Baltimore County	45	0.9
Calvert	4	1.1
Caroline	0	0.0
Carroll	4	0.8
Cecil	11	2.4
Charles	5	0.4
Dorchester	3	1.8
Frederick	11	0.6
Garrett	2	1.3
Harford	9	0.7
Howard	6	0.6
Kent	3	4.0
Montgomery	16	0.4
Prince George's	59	1.2
Queen Anne's	3	1.7
St. Mary's	5	0.8
Somerset	2	2.3
Talbot	3	1.1
Washington	11	1.1
Wicomico	2	1.4
Worcester	4	1.6

Home Fires

HOW DOES IT AFFECT THE UNITED STATES?

- In 2014, 3,339 people in the U.S. died in fires (including 64 firefighters)¹; 15,775 additional civilians were injured by fire and survived, translating into one injury every 30 minutes.²
- In 2014, about 84 percent of all fire deaths occurred in the home.²
- Young children and older adults are at highest risk of dying in a fire.³
- Residential fires caused an estimated \$11.6 billion in home property losses in 2014.²

HOW DOES IT AFFECT MARYLAND?

- From 2010-2014, 324 people died in residential fires in Maryland.⁴
- Table 1 displays fire deaths and death rate from 2010-2014 for each Maryland county.⁴
- Marylanders over 65 years old are at highest risk of dying in a residential fire.²
- In 2014, estimated property loss due to fires was \$129,743,640, loss of contents was \$36,529,195 for a total of fire-related loss of \$166,272,835 in Maryland.⁵

HOW DO WE ADDRESS THIS PROBLEM?

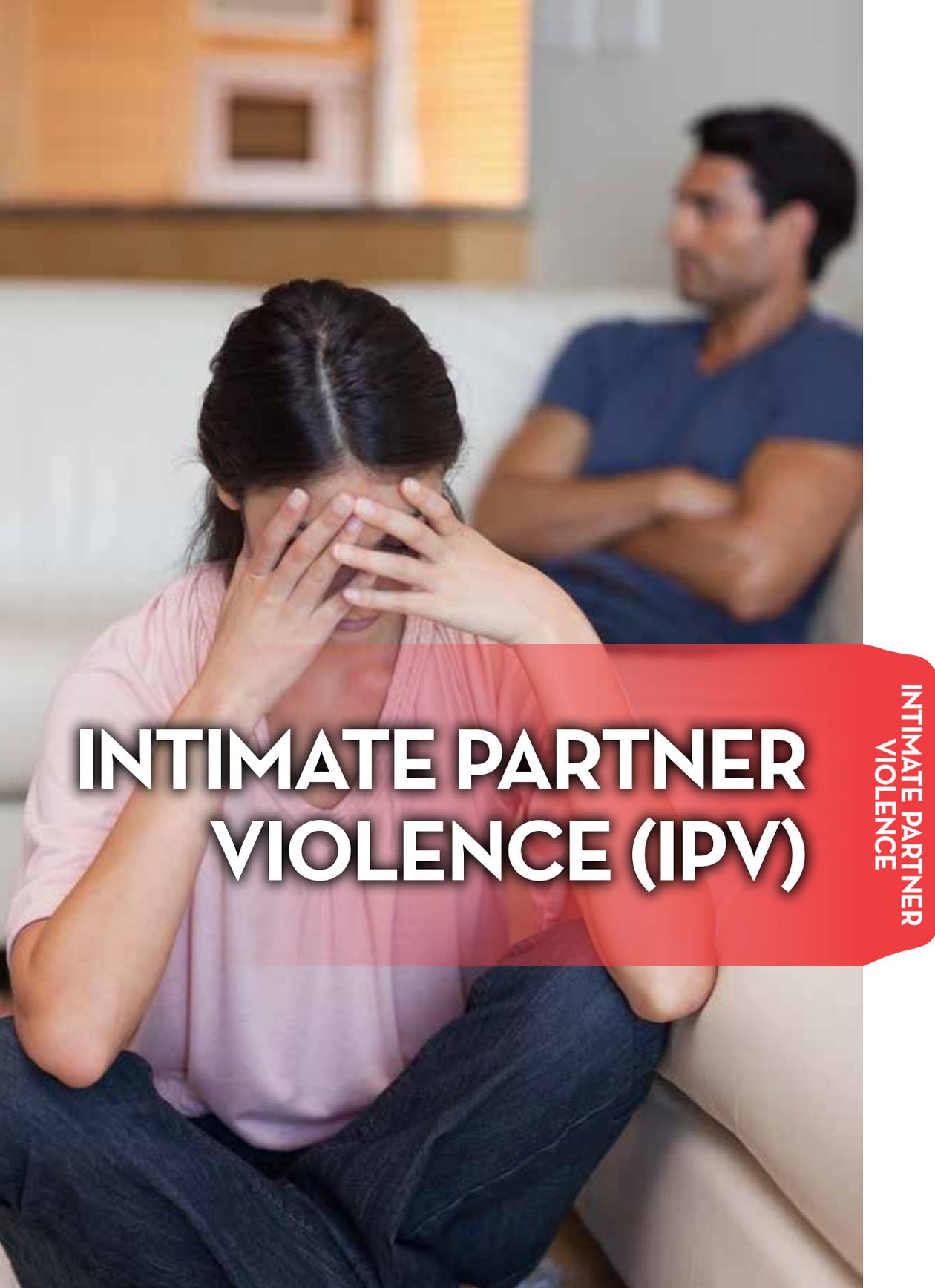
- Working smoke alarms reduce the risk of dying in a home fire by at least half.⁶
- Maryland Senate Bill 969, effective July 1, 2013, requires homes to be equipped with a working lithium battery smoke alarm.
- Among homes with smoke alarms, most have too few alarms, incorrectly placed alarms, or non-working alarms.^{7,8} Support for efforts to assure smoke alarms are properly installed and maintained are needed.
- Fires that occur in homes with sprinklers cause less damage. Since 1992, Prince George's County has required sprinkler systems to be installed in all newly constructed homes. A 2009 study concluded there had been no reported fire deaths in a sprinkler-equipped home in Prince George's County from 1992-2007.⁹
- Several Maryland localities require sprinkler systems be installed in all new residential buildings; however, retrofitting older buildings with sprinkler systems as part of substantial renovations is not required by most localities.¹⁰
- The 2015 edition of the International Residential Code requires that all new 1- and 2-family homes be equipped with a home fire sprinkler system.¹¹ Maryland adopted the code and it became effective on January 1, 2011. Maryland law prohibits local jurisdictions from opting out of this state requirement or adopting weaker sprinkler requirements.

ADDITIONAL RESOURCES

- Johns Hopkins Center for Injury Research and Policy: www.jhsph.edu/InjuryCenter
- National Center for Injury Prevention and Control, CDC: <http://www.cdc.gov/homeandrecreationsafety/fire-prevention/index.html>
- National Fire Protection Agency: www.nfpa.org
- National Safety Council: <http://www.nsc.org/learn/safety-knowledge/Pages/safety-at-home-fires-burns.aspx>
- Office of the State Fire Marshal in Maryland: www.mdsp.maryland.gov/firemarshal/

REFERENCES

1. National Fire Protection Association (Ed.). The Fire Service. *Reports and Statistics: National Fire Protection Service*. Retrieved July 14, 2016, from <http://www.nfpa.org/research/reports-and-statistics/the-fire-service>
2. National Fire Protection Association (Ed.). (2015, September 1). Fire loss in the United States. *Reports and Statistics: National Fire Protection Association Survey 2014*. Retrieved July 5, 2016, from <http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics>
3. Centers for Disease Control and Prevention. (1998). Deaths resulting from residential fires and the prevalence of smoke alarms-United States 1991-1995. *Morbidity and Mortality Weekly Report*. 1998;47(38):803-806.
4. Office of the State Fire Marshal. (2014). Fire Deaths in Maryland January – December 2014. Retrieved July 14, 2016, from <http://mdsp.maryland.gov/Document%20Downloads/Fire%20Deaths%20-%202014.pdf>.
5. Unpublished Data from the National Fire Incident Reporting System compiled by the Maryland Office of the State fire Marshal, September 2, 2016.
6. Ahrens M. Smoke Alarms in U.S. Home Fires. Quincy: National Fire Protection Association; 2015. Retrieved July 14, 2016 from <http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics/fire-safety-equipment/smoke-alarms-in-us-home-fires>
7. Peek-Asa C, Allareddy V, Yang J, et al. When one is not enough: prevalence and characteristics of homes not adequately protected by smoke alarms. *Injury Prevention*. 2005;11(6):364-8.
8. Sidman EA, Grossman DC, Mueller BA. Comprehensive smoke alarm coverage in lower economic status homes: alarm presence, functionality, and placement. *Journal of Community Health*. 2011;36(4):525-33.
9. Weatherby S. Benefits of Residential Fire Sprinklers: Prince George's County 15-Year History with its Single-Family Residential Dwelling Fire Sprinkler Ordinance. Retrieved July 14, 2016 from <http://www.homefiresprinkler.org/wp-content/uploads/2016/05/Prince-Georges-County-Report.pdf>
10. Maryland State Fire Marshal. Residential Sprinkler Ordinances in Maryland (Single-Family Homes and Duplexes as of 03/02/2010) Retrieved July 14, 2016 from <http://dhcd.maryland.gov/Codes/Pages/FireCodes.aspx>
11. Sprinkler requirements by state - Fire Sprinkler Initiative. (n.d.). Retrieved July 14, 2016, from <http://www.firesprinklerinitiative.org/legislation/sprinkler-requirements-by-state.aspx>

A woman with dark hair, wearing a pink shirt, is sitting on a couch with her hands covering her face, appearing distressed or crying. In the background, a man in a blue shirt is sitting on the same couch, looking away from her. The scene is set in a living room with a window and framed pictures on the wall.

INTIMATE PARTNER VIOLENCE (IPV)

INTIMATE PARTNER
VIOLENCE

Intimate Partner Violence

Intimate Partner Violence (IPV) refers to behavior by a current or former intimate partner that causes physical, sexual or psychological harm, including physical aggression, sexual coercion, and psychological abuse and controlling behaviors. This type of violence can occur among heterosexual or same-sex couples and does not require sexual intimacy.^{1,2}

HOW DOES IT AFFECT THE UNITED STATES?

- In 2013, 992 women and 245 men were killed by their intimate partner (current spouse, ex-spouse, or dating partner).³ These murders represent 37 percent of all female homicide victims and 3 percent of all male homicide victims.
- In 2010, 1 in 3 women (36%) and 1 in 4 men (29%) reported being the victim of IPV in their lifetime.⁴
- Eighty-one percent of women and 35 percent of men who were victims of rape, stalking, or physical violence by an intimate partner reported at least one negative impact on their daily activities as a result of this violence.⁴
- Strangulation is one of the most lethal forms of violence in IPV and sexual assault cases. Studies show that anywhere from 43 to 53 percent of domestic homicide victims had experienced at least one incident of attempted strangulation prior to a lethal event.⁵
- In 2008, 53 percent of women murdered by an intimate partner were killed with a gun.⁶
- Forty-two percent of victims of non-fatal IPV reported that perpetrators were under the influence of alcohol or illicit drugs at the time of the attack.⁷
- In 2003, the estimated cost of IPV against women exceeded \$8.3 billion, including \$6.2 billion associated with physical assault, \$1.2 billion in the value of lost lives, \$461 million associated with stalking, and \$460 million associated with rape.⁸

HOW DOES IT AFFECT MARYLAND?

- In 2010, 4.23 million (42%) of women in Maryland reported being victims of rape, physical violence, and/or stalking by an intimate partner in their lifetime. Maryland has a higher percentage of females with a history of IPV compared to other states in the region. Nationally, Maryland reported the 6th highest lifetime rate of IPV among females.⁴
- In 2010, 2.97 million (27%) of men in Maryland reported being victims of rape, physical violence, and/or stalking by an intimate partner in their lifetime.⁴
- In 2010, 18 women and 3 men in Maryland were murdered as a result of IPV.⁹
- There were 15,055 crimes involving IPV reported to law enforcement agencies in Maryland in 2014. Twenty percent of these incidents involved assaults with dangerous weapons or resulted in a serious injury.⁹
- Homicide is a leading cause of death during pregnancy or within the first postpartum year in Maryland. The majority of these homicides were perpetrated by an intimate partner.^{10, 11}

Intimate Partner Violence

Table 1: Maryland IPV Laws from 2016

Legislative Session	Bill Number(s)	Title of Bill	Description
2016	SB 578/HB 167	Domestic Violence - Person Eligible for Relief	Summary: Expands eligibility for a domestic violence protective order by altering the definition of a “person eligible for relief” to include a person related to the person eligible for relief by blood, marriage, or adoption. The bill also repeals a provision that restricted eligibility for a parent, stepparent, child, or stepchild of the person eligible for relief to those individuals who reside or have resided with the respondent or person eligible for relief for at least 90 days within one year prior to the filing of the petition
2016	SB 960/HB1396	Family Law - Domestic Violence - Definition of Abuse	Summary: Alters the definition of “abuse” for purposes of specified provisions of law relating to domestic violence to include harassment and malicious destruction of property. Also, defining harassment and malicious destruction of property
2016	SB 1047	Task Force to Study Recording Deeds for Victims of Domestic Violence	Summary: Establishing the Task Force to Study Recording Deeds for Victims of Domestic Violence; requiring the Task Force to study and make recommendations regarding how to protect the identity and address of a participant in the Address Confidentiality Program for victims of domestic violence in the Office of the Secretary of State when recording a deed transferring real property to or from a Program participant; requiring the Task Force to report its findings to the Governor and General Assembly on or before December 1, 2017; etc.
2016	SB 1143	Prince George’s County - Neshante and Chloe Davis Domestic Violence Prevention	Summary: Establishes the Neshante and Chloe Davis Domestic Violence Prevention Task Force. Requires the Task Force to study and make recommendations to the Governor and the General Assembly regarding domestic violence prevention strategies and policies on or before December 1, 2016.
2016	HB 819	Domestic Violence - Permanent Protective Orders - Probation and Suspended Sentence	Summary: Specifying that, for purposes of provisions of law requiring a court to issue a permanent final protective order under specified circumstances against an individual who was convicted and sentenced to serve a specified term of imprisonment for specified crimes, a term of imprisonment includes any period of probation or portion of the sentence suspended.

Data in this table compiled by University of Maryland School of Law. Information on these IPV laws can be found here: <http://mgaleg.maryland.gov/webmga/frmLegislation.aspx?pid=legisnpage&tab=subject3>

Intimate Partner Violence

Table 1: Maryland IPV Laws from 2016, *Continued*

Legislative Session	Bill Number(s)	Title of Bill	Description
2016	SB 31/HB 7	Family Law - Child Abuse and Neglect - Expungement of Reports and Records - Time Period	Summary: Alters the time period after which a local department of social services is required to expunge specified reports and records of suspected child abuse and neglect. Local departments must maintain report of suspected abuse or neglect and investigative findings for at least five (5) years after the date of referral if the report is unsubstantiated or ruled out and no further reports of abuse or neglect are received during the five years. The report and investigative findings must be expunged after the expiration of this time period.
2016	SB 69/HB 1215	Civil Actions - Child Sexual Abuse - Statute of Limitations	Summary: Extends the statute of limitations in specified civil action relating to child sexual abuse from 7 years to 20 years.
2016	SB 310/HB 245	Child Abuse and Neglect - Failure to Report	Summary: Requires an agency that is participating in a child abuse or neglect investigation and that has substantial grounds to believe that a person has knowingly failed to report child abuse as required under a specified provision of law to file a specified complaint with a specified board, agency, institution, or facility.
2016	SB 577/HB 825	Child Protection - Reporting - Threat of Harm	Summary: Authorizes an individual to notify the local department of social services or the appropriate law enforcement agency if the individual has reason to believe that a verbal threat of imminent severe bodily harm or death to a child has been made by a specified individual and that the child is at substantial risk of child abuse. Also, the bill specifies the procedures and requirements for a report concerning a verbal threat of harm to a child
2016	SB 1096	Child Abuse and Neglect - Information Regarding Parents Responsible for Child Abuse or Neglect	Summary: Alters the circumstances under which the Executive Director of the Social Services Administration is required to provide to the Secretary of Health and Mental Hygiene information relating to individuals who have had their parental rights terminated without consent or who have been identified as responsible for child abuse or neglect that resulted in a criminal conviction. Also, removes a 5-year time limitation on a specified requirement that the Secretary provide specified birth record information to the Executive Director.

Intimate Partner Violence

HOW DO WE ADDRESS THIS PROBLEM?

- In April 2016, the Centers for Disease Control and Prevention (CDC) released STOP SV: A Technical Package to Prevent Sexual Violence to help states and communities prioritize efforts to prevent sexual violence. This technical package is a collection of strategies that represent the best available evidence to prevent or reduce public health problems like violence. They help improve the health and well-being of communities.¹²
- The CDC supports programs and interventions that prevent violence before it occurs.¹³ Evidence-based programs that encourage healthy and safe relationships in teens can reduce dating violence, and can reduce the risk of future IPV. Incorporating these programs into school curricula would expand their reach and impact.¹⁴
- Current Maryland Laws include arrests, protective, and peace orders related to domestic violence. See Table 1 for laws from 2016.
- Risk of IPV is lower when victims can obtain protective orders from courts. Judges in Maryland can now grant protective orders to individuals in an abusive relationship who do not live together but had a sexual relationship within the past year. Previously only peace orders, which are not as restrictive to the perpetrator, could be granted to dating couples who were not living together. Peace orders can only be extended to six months while protective orders can be extended to two years. Allowing peace orders the same duration as protective orders will likely offer greater protection to victims of IPV that are not married to, or cohabiting with the perpetrator.^{15,16,17}
- Substance abuse and mental illness are common among perpetrators of IPV.¹⁸ Policies which require screening¹⁹ and treatment for offenders with these conditions reduce IPV.²⁰

Intimate Partner Violence

ADDITIONAL RESOURCES

- House of Ruth: www.hruth.org
- Criminal Defense Lawyer: <http://www.criminaldefenselawyer.com/resources/criminal-defense/domestic-violence/maryland-domestic-violence-laws-charges-penalt>
- The People's Law Library of Maryland: <http://www.peoples-law.org/dvshelters>
- Maryland Courts: <http://www.courts.state.md.us/legalhelp/domesticviolence.html>
- DHMH Maternal and Child Health Bureau: <http://phpa.dhmh.maryland.gov/mch/Pages/ipv.aspx>
- Children's Safety Network: <https://www.childrensafetynetwork.org/injury-topics/familyintimate-partner-violence>

REFERENCES

1. Centers for Disease Control and Prevention. (2015, May 28). Intimate Partner Violence. Retrieved July 15 2016, from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/>
2. World Health Organization. (n.d.). Violence against women. Retrieved July 15 2016, from <http://www.who.int/mediacentre/factsheets/fs239/en/>
3. Federal Bureau of Investigation. (2013). Crime in the United States. United States Department of Justice. Retrieved July 15 2016, from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/offenses-known-to-law-enforcement/expanded-homicide/expanded_homicide_data_table_10_murder_circumstances_by_relationship_2013.xls.
4. Black, M.C., Basile, K.C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., Chen, J., & Stevens, M.R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved July 15 2016, from http://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf
5. Block, C. R., Devitt, C. O., Fonda, D., Fugate, M., Martin, C., McFarlane, J., et al. (2000). The Chicago Women's Health Study: Risk of serious injury or death in intimate violence: A collaborative research project.
6. Bureau of Justice Statistics. (2011). Homicide Trends in the United States, 1980-2008. Annual Rates for 2009 and 2010. Retrieved July 15 2016, from <http://www.bjs.gov/content/pub/pdf/htus8008.pdf>
7. Calatano S. (December, 2007). Intimate Partner Violence in the United States. US Department of Justice. <http://bjs.ojp.usdoj.gov/content/pub/pdf/ipvus.pdf>.
8. Max, W., Rice, D. R., Finkelstein, E., Bardwell, R. A., & Leadbetter, S. (2004). The economic toll of intimate partner violence against women in the United States. *Violence and victims*. 19(3), 259-272. <http://dx.doi.org/10.1891/vivi.19.3.259.65767> Retrieved July 15 2016.
9. Maryland State Police. (November, 2015). Crime in Maryland: 2014 Uniform Crime Report. Pages 54-55.
10. Horon IL, Cheng D. Enhanced Surveillance for Pregnancy-Associated Mortality—Maryland, 1993-1998. *JAMA*. 2001;285(11):1455-1459. doi:10.1001/jama.285.11.1455.
11. Cheng, D., & Horon, I. L. (2010). Intimate-Partner Homicide Among Pregnant and Postpartum Women. *Obstetrics & Gynecology*, 115(6), 1181-1186.
12. Centers for Disease Control and Prevention. (2016). Technical Packages for Violence Prevention: Using Evidence-based Strategies in Your Violence Prevention Efforts. Retrieved July 15 2016 from <http://www.cdc.gov/violenceprevention/pub/technical-packages.html> .
13. Centers for Disease Control and Prevention. (2011). Preventing intimate partner and sexual violence: program activities guide. Retrieved July 15 2016, from http://www.cdc.gov/violenceprevention/pdf/IPV-SV_Program_Activities_Guide-a.pdf
14. Wolfe DA, Crooks C, Jaffe P, Chiodo D, Hughes R, Ellis W, Stitt L, Donner A. (2009). A school-based program to prevent adolescent dating violence. *Archives of Pediatric and Adolescent Medicine*. 163(8):692-699.
15. Holt VL, Kernick MA, Wolf ME, Rivara FP. Do protection orders affect the likelihood of future partner violence and injury? *American Journal of Preventive Medicine*. 2003; 24:16-21.

Intimate Partner Violence

16. Campbell JC, O'Sullivan C, Roehl J, et al. (July, 2005). What battered women know and do to protect themselves from abuse: Results and methodological challenges from the domestic violence risk assessment validation experiment. Presented at the 9th International Family Violence Research Conference.
17. Logan TK. (2010). Civil protective order effectiveness: justice or just a piece of paper? *Violence and Victims*. 25(3):332-348.
18. Moracco KE, Andersen K, Buchanan RM, Espersen C, Bowling M, Duffy C. (2010). Who are the defendants in domestic violence protection order cases? *Violence Against Women*. 16:1201-1223.
19. Brackley MH, Williams GB, Wei CC. (2010). Substance abuse interface with intimate partner violence: what treatment programs need to know. *Nursing Clinics of North America*. 45:581-589.
20. Gover AR, MacDonald JM, Alpert GP. (2003). Combating domestic violence: Findings from an evaluation of a local domestic violence court. *Criminology & Public Policy*. 3:109-132.



MOTORCYCLES

MOTORCYCLES

Motorcycles

HOW DOES THIS AFFECT THE UNITED STATES?

- In 2014, there were over 4,500 motorcycle-related fatalities in the U.S.¹
- In 2014, there were over 92,000 motorcycle crashes that resulted in non-fatal injury in the U.S.¹
- Per vehicle mile traveled, motorcyclist fatalities occurred 27 times more frequently than passenger car occupant fatalities in traffic crashes.¹
- The National Highway Traffic Safety Administration (NHTSA) estimates that helmets saved 1,669 motorcyclists' lives in 2014, and that 660 more could have been saved if all motorcyclists had worn helmets.¹
- In states without universal helmet laws, 58 percent of motorcyclists killed in 2013 were not wearing helmets, as compared to 8 percent in states with universal helmet laws.¹

HOW DOES THIS AFFECT MARYLAND?

- In 2014, there were 69 motorcycle rider deaths¹ representing a rate of over 55 deaths per 100,000 registered motorcycle riders.²
- Despite repeated attempts at repeal, Maryland has maintained its all-rider motorcycle helmet law since its enactment in 1992.³ This law does not apply to riders of motor scooters or mopeds.
- In 2013, helmeted motorcycle crash victims saved Maryland taxpayers almost \$69 million in uncompensated care, and if every motorcycle rider used a helmet, that amount would increase by \$3.7 million.⁴

HOW DO WE ADDRESS THIS PROBLEM?

- Maintain and enforce all-rider helmet laws. Helmets reduce the risk of head injury by approximately 69 percent, death by 42 percent, and are associated with reductions in overall injury severity and likelihood of hospitalization.^{3,5}
- Repealing helmet laws is associated with increased deaths. In Texas, a repeal of its all-rider helmet law in 1997 led to a 37 percent increase in fatalities. Similar outcomes have been observed in Kentucky (58% increase) and Louisiana (108% increase).^{4,5}
- Support the installation of safety technology. Motorcycles with antilock braking systems (ABS) had 20 to 30 percent fewer fatalities per registered vehicle year compared to identical models not equipped with ABS.⁶
- Other solutions to prevent motorcycle fatalities and injuries include ensuring helmets meet federal standards, wearing protective clothing, providing education and training, and requiring motorcycle operator licensure.⁵ Highway engineering can also prevent motorcycle crashes. Examples include making roads resistant to skidding and providing advance-warning signs to alert motorcyclists.⁷

ADDITIONAL RESOURCES

- Johns Hopkins Center for Injury Research and Policy: www.jhsph.edu/InjuryCenter
- Maryland Department of Transportation Motor Vehicle Administration: www.mdot.state.md.us
- National Center for Injury Prevention and Control, CDC: www.cdc.gov/injury
- National Highway Traffic Safety Administration (NHTSA): www.nhtsa.dot.gov

REFERENCES

1. Traffic Safety Facts 2014 Data. National Highway Traffic Safety Administration (NHTSA). (2014). Motorcycles. Retrieved July 19th, 2016, from <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812292>
2. United States Department of Transportation, National Highway Traffic Safety Administration National Highway Traffic Safety Administration (NHTSA). (2015). Fatality Analysis Reporting System (FARS) Encyclopedia. Retrieved July 19th, 2016, from http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/STSI/24_MD/2014/24_MD_2014.htm
3. Motorcycles. (n.d.). Retrieved July 21, 2016, from <http://www.iihs.org/iihs/topics/laws/helmetuse?topicName=Motorcycles#tableData>
4. United States Department of Transportation, National Highway Traffic Safety Administration (NHTSA). (2015). Determining Estimates of Lives and Costs Saved by Motorcycle Helmets. DOT HS 811 433. Retrieved July 19th, 2016, from <http://www-nrd.nhtsa.dot.gov/Pubs/811433.pdf>
5. Liu BC, Ivers R, Norton R, Boufous S, Blows S, Lo SK. (2008). Helmets for preventing injury in motorcycle riders. Cochrane Database of Systematic Reviews 2008, Issue 1. Art. No.: CD004333. DOI: 10.1002/14651858.CD004333.pub3.
6. Insurance Special Report: (2009). Motorcycle Antilock Braking System (ABS). A-81. Retrieved from http://www.iihs.org/laws/petitions/pdf/petition_2010-04-30.pdf
7. National Highway Traffic Safety Administration (NHTSA). (2006). Uniform Guidelines for State Highway Safety Programs: Motorcycle Safety. Retrieved July 19th, 2016, from <http://www.nhtsa.gov/nhtsa/whatsup/tea21/tea21programs/pages/MotorcycleSafety.htm>

PRESCRIPTION DRUG OVERDOSE



Prescription Drug Overdose

Prescription drug abuse is the use of a medication without a prescription, in a way other than as prescribed, or for the experience or feelings elicited, (i.e., taking medication to “get high”).¹

Prescription drug misuse may involve not following medical instructions, but the person taking the drug is not looking to “get high.”²

Non-medical use of prescription drugs is use without a prescription or use for the feeling or experience the drug causes.³

HOW DOES IT AFFECT THE UNITED STATES?

- In 2014 there were almost 19,000 deaths involving prescription opioids, equivalent to about 52 deaths per day.⁴
- During 2014, 47,055 drug overdose deaths occurred in the United States. From 2000-2014 nearly half a million persons in the United States died from drug overdoses.⁵
- In 2013, an estimated 6.5 million individuals (or 2.5% of Americans) age 12 or older were non-medical users of all prescription drugs; most within this group (4.5 million) were using prescription pain relievers.³
- Most non-medical users of prescription drugs obtain their supply from friends and family. In a 2011 survey, 54 percent of non-medical prescription drug users obtained the drugs for free from a friend or relative, 21 percent obtained the drugs from a doctor, and 15 percent bought or took the drug from a friend or relative.³
- In a 2013 survey, 23 percent of teens reported having abused or misused all prescription drugs in their lifetime.⁶
- From 2004-2011, the number of emergency department (ED) visits involving the misuse or abuse of all prescription drugs in the U.S. increased more than 125 percent from 626,000 visits in 2004 to 1.4 million visits in 2011.⁷
- In 2007, prescription opioid misuse and abuse cost the U.S. an estimated \$56 billion in workplace, healthcare, and criminal justice costs.⁸

HOW DOES IT AFFECT MARYLAND?

- From 2007-2015, there were 2,059 prescription opioid-related deaths (excluding fentanyl-related deaths) in Maryland. This represents a 23 percent increase from 214 deaths in 2007 to 263 in 2014.⁹
- From 2008-2014, there were 6,120 prescription opioid-related ED visits in Maryland.¹⁰
- From 2008-2014, the age-adjusted rate for prescription opioid-related ED visits in Maryland increased by 115 percent from 9.0 to 18.2.¹⁰
- Figure 1 displays age-adjusted prescription opioid overdose death rates in Maryland from 1999-2014.¹¹
- In 2014, the total charges for prescription opioid-related ED visits cost Maryland \$1.5 million dollars.¹⁰
- In 2014, there were 1,033 prescription opioid-related hospitalizations in Maryland. The total charges for the hospitalization was over \$14 million dollars.¹²

Prescription Drug Overdose

HOW DO WE ADDRESS THIS PROBLEM?

- The Centers for Disease Control and Prevention has developed evidence-based guidelines for prescription opioid prescribing.¹³
- Maryland has a prescription drug monitoring program (PDMP) that collects data about all opioids (and other drugs) prescribed. These data are available to identify potential cases of misuse and abuse. The PDMP assists agencies responsible for ensuring public health and safety through the investigation of illegal or inappropriate prescribing, dispensing or use of prescription drugs.¹⁴
- Assuring communities within states provide mechanisms for people to safely dispose of their prescription medications has the potential to reduce the availability of these drugs. Safe disposal sites and take back programs have been led by law enforcement, pharmacies, and other community partners.
- Naloxone is an overdose-reversing drug that some states make available to first responders, and friends and family of people at risk of overdose. Assuring naloxone is available and affordable is an opportunity for stakeholders and decision-makers to reduce overdose deaths. Effective March 2014, Maryland has implemented the Maryland Overdose Response Program (§§13-3101-09) which includes training and certifying qualified individuals to obtain and fill a prescription for Naloxone.
- Given the large number of people addicted to prescription pain relievers, evidence-based treatment is critical. Effective treatment options exist, but many with addiction issues do not have access to effective, affordable care.

Figure 1:

Deaths were classified using the International Classification of Disease, 10th Revision (ICD-10). Drug-poisoning deaths were defined as having an ICD-10 underlying cause-of-death code of X40-X44 (unintentional) or Y10-Y14 (undetermined intent). Drug-poisoning deaths involving opioid analgesics include those with a multiple cause-of-death code of T40.2, T40.3, or T40.4. Rates were age-adjusted to the 2000 United States Census population.

Prescription Drug Overdose

ADDITIONAL RESOURCES

- Maryland's state agencies have engaged in comprehensive, cross-agency efforts to reduce opioid overdose deaths. These efforts include educating the public and implementing new medical practices. http://bha.dhmh.maryland.gov/OVERDOSE_PREVENTION/Pages/Index.aspx
- The Prescription Drug Monitoring Program (PDMP) has been established by the Maryland Department of Health and Mental Hygiene (DHMH), Behavioral Health Administration (BHA) to support healthcare providers and their patients in the safe and effective use of prescription drugs. <http://bha.dhmh.maryland.gov/pdmp/Pages/Home.aspx>
- The Maryland Poison Center is certified by the American Association of Poison Control Centers as a regional poison center. It has provided poisoning treatment advice, education, and prevention services to Marylanders since 1972. <http://www.mdpoison.com/>
- Maryland Health Connection is our state's health insurance marketplace, where Marylanders can shop, compare and enroll in quality health coverage. Choosing the best plan for special health needs can be difficult. Here are some helpful hints: https://www.marylandhealthconnection.gov/assets/downloads/MHC_SubstanceUseDisorder.pdf Visit <https://www.marylandhealthconnection.gov/> to find out more about enrolling in free or low-cost health coverage. In-person help is available throughout the state, and you may be eligible for financial assistance to make health coverage more affordable.
- Governor Larry Hogan's Inter-Agency Heroin and Opioid Coordinating Council: http://bha.dhmh.maryland.gov/OVERDOSE_PREVENTION/Pages/interagency-heroin-council.aspx
- Children's Safety Network. (n.d.). Retrieved May 23, 2016, from <https://www.childrensafetynetwork.org/resources/medication-abuse-prevention-2016-resource-guide>

REFERENCES

1. National Institute on Drug Abuse (2015). NIDAMED: Medical & Health Professionals. Retrieved July, 2015.
2. U.S. Food and Drug Administration. (2010, July 28). Consumer Update. <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm220112.htm> Retrieved July 15, 2016.
3. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2014, September 4). The NSDUH Report: Substance Use and Mental Health Estimates from the 2013 National Survey on Drug Use and Health: Overview of Findings. Retrieved July 15, 2016.
4. Opioid Data Analysis. (2016). Retrieved July 13, 2016, from <http://www.cdc.gov/drugoverdose/data/analysis.html>
5. Centers for Disease Control and Prevention (CDC). (2015, December 15). Increases in Drug and Opioid Overdose Deaths — United States, 2000–2014. MMWR. Morbidity and Mortality Weekly Reports. Retrieved July 15, 2016 from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm64e1218a1.htm?s_cid=mm64e1218a1_e
6. The Partnership Attitude Tracking Study. (2013). Retrieved July 13, 2016, from <http://www.drugfree.org/wp-content/uploads/2014/07/PATS-2013-FULL-REPORT.pdf>
7. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2011). The DAWN Report: Highlights of the 2011 Drug Abuse Warning Network (DAWN) Findings on Drug-Related Emergency Department Visits. Rockville, MD. Available from URL: <http://www.samhsa.gov/data/2k13/DAWN127/sr127-DAWN-highlights.htm>.
8. Birnbaum, H. G., White, A. G., Schiller, M., Waldman, T., Cleveland, J. M., & Roland, C. L. (2011). Societal Costs of Prescription Opioid Abuse, Dependence, and Misuse in the United States. *Pain Medicine*, 12(4), 657-667. doi:10.1111/j.1526-4637.2011.01075.x
9. Drug- and Alcohol Related Intoxication Deaths In Maryland (2016, June). Retrieved July 13, 2016, from <http://bit.ly/2960VaN>
10. Maryland Department of Health and Mental Hygiene. (2015). Drug and Alcohol-related Emergency Department visits in Maryland, 2007–2014. Data Report. Retrieved July 13, 2016, from http://bha.dhmh.maryland.gov/OVERDOSE_PREVENTION/Documents/Drug%20and%20Alcohol-related%20ED%20Visits_2008-2014.pdf

Prescription Drug Overdose

11. Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2014 on CDC WONDER Online Database, released 2015. Data are from the Multiple Cause of Death Files, 1999-2014, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/mcd-icd10.html> on Sep 2, 2016.
12. HSCRC receives a monthly feed of all discharges from Maryland's 48 hospitals. Two data separate data files are available: 1) the inpatient data file contains discharge medical record abstract and billing data on each of Maryland's approximately 600,000 – 700,000 inpatient hospitalizations annually and 2) the outpatient data file contains discharge medical record abstract and billing data on each of Maryland's approximately 2 million emergency department visits annually. The Virtual Data Unit maintains an MOU with HSCRC to obtain the raw data files for DHMH analysts.
13. CDC Guideline for Prescribing Opioids for Chronic Pain. (2016). Retrieved July 13, 2016, from <http://www.cdc.gov/drugoverdose/prescribing/guideline.html>
14. Maryland Prescription Drug Monitoring Program. (n.d.). Retrieved July 15, 2016, from <http://bha.dhmh.maryland.gov/pdmp/Pages/Home.aspx>



TEEN DRIVER SAFETY

TEEN DRIVER
SAFETY

Teen Driver Safety

For the purpose of this section, “teen” and “teenager” are defined as an individual between the ages of 16 to 19 years old, unless otherwise specified.

HOW DOES THIS AFFECT THE UNITED STATES?

- In 2014, motor vehicle crashes was the leading cause of injury deaths for teenagers nationwide, accounting for 35 percent of injury-related deaths in this age group.¹
- In 2014, 2,816 teen drivers were involved in fatal crashes in the United States. Drugs and alcohol were a factor in 18 percent of those crashes.²
- In 2014, 56 percent of teen passenger deaths in the United States occurred in motor vehicle crashes involving cars driven by a teen.³
- From 2008-2014, 1.9 million teenagers were injured in motor vehicle crashes in the United States. As a result of these injuries, 1.8 million of these teenagers were treated and released from emergency departments, while over 110,200 were hospitalized.¹
- In 2010, motor vehicle crashes involving teen drivers cost the United States more than \$22 billion in total lifetime costs (medical costs and work loss).¹

HOW DOES THIS AFFECT MARYLAND?

- From 2008-2014, motor vehicle crashes were the leading cause of injury death for teenagers, with 279 deaths, a rate of 13 deaths per 100,000.¹
- In 2014, 26 teen drivers were killed in Maryland. Drugs and alcohol were a factor in 3.8 percent of those crashes.²
- Table 1 displays trends of motor vehicle-related risk factors of Maryland youth from 2005-2014.⁴
- In 2013, motor vehicle crashes were the second leading cause of injury-related hospitalizations for people age 15-24, causing approximately 820 hospitalizations.⁵
- In 2013, motor vehicle crashes were the second leading cause of injury-related emergency room visits for people age 15-24, causing over 15,800 visits.⁵
- On average, motor vehicle crash-related deaths cost Maryland \$690 million total, 10 percent of which was attributed to teens 15-19 years of age (\$66 million).⁶

HOW DO WE ADDRESS THIS PROBLEM?

- Enforcement of underage purchase, possession, and provision laws for youth access to alcohol can reduce alcohol-related crash involvement.⁷
- Graduated Driver Licensing (GDL) has consistently been shown to substantially reduce crashes of 16- and 17-year-old drivers.⁸ Strengthening and enforcement of GDL systems that contain passenger limits, night restrictions, and other components are effective measures.^{7,9} The National Highway Traffic Safety Association (NHTSA) recommends 16 years as the age for receiving a learner’s permit; it is currently 15 years and 9 months in Maryland.⁷
- Enforcement of the primary seat belt law SB 87 in Maryland is important: primary seat belt laws are associated with increased seat belt utilization¹⁰ and a decreased risk of fatalities.¹¹
- Driver education on its own has not been demonstrated to reduce crashes among high school-aged drivers.¹²

Teen Driver Safety

ADDITIONAL RESOURCES

- International Institute for Highway Safety: <http://www.iihs.org/iihs/topics/t/teenagers/topicoverview>
- Johns Hopkins Center for Injury Research and Policy: www.jhsph.edu/injuryCenter
- Maryland Department of Transportation: www.mdot.state.md.us
- Maryland Motor Vehicle Administration:
<http://www.mva.maryland.gov/safety/mhso/benchmark-reports.htm>
- Meritus Health Trauma and Emergency Services in Hagerstown, MD is partnering with community organizations to raise awareness of the dangers of distracted driving in the public service campaign, “Stay Alive. Don’t Text and Drive.” <http://bit.ly/2a6u0oH>
- National Center for Injury Prevention and Control: CDC: www.cdc.gov/injury
- National Highway Traffic Safety Administration: www.nhtsa.dot.gov
- The Maryland Teen Safe Driving Coalition, in partnership with The Allstate Foundation and the National Safety Council, is working to help teens build skill and minimize risk through the proven principles of Graduated Driver Licensing (GDL).
<https://sites.google.com/site/mdteensafedrivingcoalition/>
- University of Maryland School of Medicine National Study Center for Trauma and Emergency Medical Systems: http://medschool.umaryland.edu/NSC_Trauma.asp

REFERENCES

1. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2014) [accessed July 12, 2016]. Available from URL: <http://www.cdc.gov/injury/wisqars/index.html>
2. National Highway Traffic Safety Administration (NHTSA). (2015). Fatality Analysis Reporting System (FARS) Encyclopedia. Retrieved July 15, 2016, from <http://www-fars.nhtsa.dot.gov/Main/index.aspx>
3. Insurance Institute of Highway Safety. Highway Loss Data Institute. (Teenagers 2014). – Analysis of data from the U.S. Department of Transportation’s Fatality Analysis Reporting System (FARS). Retrieved July 15, 2016 from <http://www.iihs.org/iihs/topics/t/teenagers/fatalityfacts/teenagers>
4. Department of Health and Mental Hygiene. 2014 Maryland Youth Risk Behavior Survey. Available at Accessed on July 15, 2016. <http://bit.ly/2cpoPCH>
5. Maryland Department of Health and Mental Hygiene. Prevention and Health Promotion Administration Environmental Health Bureau. Injuries in Maryland. 2013 Statistics on Injury-Related Emergency Department Visits, Hospitalizations and Deaths. Retrieved July 15, 2016 from http://phpa.dhmh.maryland.gov/ohpetup/Documents/Maryland%202013%20Injury%20Book_final.pdf
6. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention. State-Based Costs of Deaths from Crashes. CDC website. Cost per state: 2005 data accessed July 15, 2016 <http://www.cdc.gov/motorvehiclesafety/statecosts/index.html>
7. Highway safety topics. (n.d.). Retrieved July 15, 2016, from <http://www.iihs.org/iihs/topics>
8. McCartt, AT., Teoh, ER. “Strengthening driver licensing systems for teen-aged drivers.” *Journal of the American Medical Association.* (2011), 306(10): 1142-1143. Retrieved July 12, 2016.
9. Chen, LH., Baker, SP., Braver, ER., Li, G. “Carrying passengers as a risk factor for crashes fatal to 16- and 17-year old drivers.” *Journal of the American Medical Association.* (2000), 283: 1578-1582. Retrieved July 12, 2016.
10. Shults, RA., Elder RW., Sleet DA., Thompson RS., Nichols JL. “Primary enforcement seat belt laws are effective even in the face of rising belt use rates. *Accident Analysis and Prevention.* (2004) 36(3): 491-493. Retrieved July 12, 2016.
11. Rivera, FP., Thompson, DC., and Cummings, P. “Effectiveness of Primary and Secondary Enforced Seat Belt Laws.” *American Journal of Preventive Medicine* (1999), 16(1): 30-39. Retrieved July 12, 2016.
12. Vernick J., Li, G., Ogaitis, S., MacKenzie, E., Baker, S., & Gielen, A. “Effects of high school driver education on motor vehicle crashes, violations, and licensure.” *American Journal of Preventive Medicine.* (1999), 16: 40-46. Retrieved July 12, 2016.



TRAUMATIC BRAIN INJURY (TBI)

TRAUMATIC
BRAIN INJURY

Traumatic Brain Injury

A Traumatic Brain Injury (TBI) is caused by a bump, blow, or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Not all blows or jolts to the head result in a TBI. The severity of a TBI may range from “mild” (i.e., a brief change in mental status or consciousness) to “severe” (i.e., an extended period of unconsciousness or memory loss). Most TBIs are mild, and are commonly known as concussions.¹

HOW DOES THIS AFFECT THE UNITED STATES?

- Every year in the United States, approximately 53,000 people die and 284,000 people are hospitalized as a result of TBI.¹
- TBI accounts for approximately 2 million Emergency Department (ED) visits every year.¹
- Most TBI deaths result from car crashes (29%), suicide (29%) and falls (21%). Falls are the leading cause of TBI-related hospitalizations (40%) and ED visits (44%).²
- There is a long-term impact on individuals living with a TBI, including a reduced life expectancy of 9 years, compared to those who had not suffered from a TBI.³
- Multiple studies have documented the mental health impacts of TBI. In one study, among a cohort of patients hospitalized for TBI, 53 percent met criteria for Major Depressive Disorder (MDD) during the first year after TBI. Major depressive disorder was associated with history of TBI and was an independent predictor of poorer health-related quality of life.⁴
- A meta-analysis in 2010 revealed the prevalence of TBI among inmates in the criminal justice system. According to the study, the rate of TBI among inmates was 60 percent.⁵
- In 2010, TBI cost the United States \$142 billion in medical expenses and lost work. Of that amount, \$36 billion was related to TBI deaths.⁶

HOW DOES THIS AFFECT MARYLAND?

- In 2013, approximately 43,600 Marylanders suffered a TBI.⁷
- In Maryland, in 2013, firearm-related injuries was the leading cause of injury among those who died where TBI was reported as a cause of death on the death certificate alone or in combination with other injuries or conditions. Firearms were related with 40 percent of deaths, 2 percent of hospitalizations, and 0.01 percent of ED visits.⁷
- The most common causes of TBI-related hospitalizations in Maryland are falls and motor vehicle crashes.⁷
- In 2013, TBI-related ED visits were highest in people aged 15 to 24 and deaths due to TBI were the highest among those aged 85 and older.⁷
- In 2010, the estimated annual cost of deaths due to TBI in Maryland was \$525 million (medical expenses and work loss).⁶

HOW DO WE ADDRESS THIS PROBLEM

- From 2009-2014, all 50 states and DC passed laws to address TBI; most targeted youth sports-related concussions through Return to Play laws.⁸
- For TBI management, the American Academy of Neurology recommends immediate removal from play, an individual evaluation, and treatment tailored to the symptoms. Return to play is recommended only after a licensed health care professional with head injury experience clears the athlete.⁹

Traumatic Brain Injury

- Implementation and evaluation of Return to Play laws is important. Information about how states can improve implementation of Return to Play and Return to School (Learn) is available from CDC.^{10,11,12}
- TBI surveillance is needed. CDC recommends surveillance efforts including: out-patient clinics, urgent care facilities, and other non-hospital settings; and people living with a TBI-related disability.¹³
- Recognizing that motor vehicle crashes and falls are a major source of TBI, policies and programs to prevent them can also be effective in preventing TBI. Please see the sections of this guide related to those injury issues for additional information.

ADDITIONAL RESOURCES

- Maryland's Behavioral Hygiene Administration (BHA) within the Department of Health and Mental Hygiene (DHMH) has been identified as Maryland's lead agency for TBI. <http://bha.dhmh.maryland.gov/Pages/Traumatic-Brain-Injury.aspx>
- The Brain Injury Association of Maryland acts as the voice of those affected by brain injury through advocacy, education, and research. <http://www.biamd.org/>
- Aging and Disability Resource Centers (ADRC), known locally as Maryland Access Point (MAP), were established as the single entry point for individuals seeking long term support services. Maryland's 20 local MAP sites provide individual, person centered counseling to consumers seeking information, referral and program support for long term services. www.marylandaccesspoint.info
- Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention. <http://www.cdc.gov/traumaticbraininjury/>
- The National Institute of Neurological Disorders and Stroke (NINDS) supports TBI research through grants to major medical institutions across the country and conducts TBI research in its intramural laboratories and Clinical Center at the National Institutes of Health (NIH) in Bethesda, Maryland. <http://www.ninds.nih.gov/disorders/tbi/tbi.htm>

REFERENCES

1. Centers for Disease Control and Prevention. (2015, March 27). Retrieved July 15 2016, from http://www.cdc.gov/traumaticbraininjury/get_the_facts.html
2. Centers for Disease Control and Prevention. (n.d.). Retrieved June 3, 2016, from <http://www.cdc.gov/traumaticbraininjury/data/index.html>
3. Harrison-Felix, C., Pretz, C., Hammond, F. M., Cuthbert, J. P., Bell, J., Corrigan, J., Haarbauer-Krupa, J. (2015). Life Expectancy after Inpatient Rehabilitation for Traumatic Brain Injury in the United States. *Journal of Neurotrauma*, 32(23), 1893-1901. Retrieved February 2, 2016.
4. Bombardier, C. H. (2010). Rates of Major Depressive Disorder and Clinical Outcomes Following Traumatic Brain Injury. *JAMA*, 303(19), 1938. Retrieved February 2, 2016.
5. Diamond, P. (n.d.). Chapter 53 Traumatic brain injury. In R. L. Trestman, K. L. Appelbaum, & J. L. Metzner (Authors), *Oxford Textbook of Correctional Psychiatry*.
6. Centers for Disease Control and Prevention, (July 2015) Web-based Injury Statistics Query and Reporting System (WISQARS) [online] Retrieved July 2015, from <http://www.cdc.gov/injury/wisqars/>
7. Maryland Traumatic Brain Injury Advisory Board 2013 Annual Report accessible at: <http://bit.ly/2c8UPfY> Retrieved September 2, 2016.
8. Traumatic Brain Injury Legislation. (2014, July 28). Retrieved September 2, 2016, from <http://www.ncsl.org/research/health/traumatic-brain-injury-legislation.aspx>
9. Giza, C., Kutcher, J., Ashwal, S., Barth, J., Getchius, T., Gioia, G., Zafonte, R. (2013). Summary of evidence-based guideline update: Evaluation and management of concussion in sports: Report of the Guideline Development Subcommittee of the American Academy of Neurology. *Neurology*, 80, 2250-2257. Retrieved July 15 2016.
10. Centers for Disease Control and Prevention. Implementing return to play: Learning from the experiences of early implementers. (n.d.). Retrieved July 15 2016, from http://www.cdc.gov/headsup/pdfs/policy/rtp_implementation-a.pdf
11. Centers for Disease Control and Prevention. (2015, May 18). Retrieved July 15 2016, from <http://www.cdc.gov/headsup/>
12. HEADS UP to Schools. (2015, February 16). Retrieved July 15 2016, from <http://www.cdc.gov/headsup/schools/index.html>
13. Traumatic Brain Injury Epidemiology and Rehabilitation. (n.d.). Retrieved June 3, 2016, from http://www.cdc.gov/traumaticbraininjury/pdf/TBI_Report_to_Congress_Epi_and_Rehab_Snapshot-a.pdf

Acknowledgments

A special thanks to the Johns Hopkins Center for Injury Research and Policy for their assistance with the compilation of state and national data and the review of this guide.

The project described was supported by Cooperative Agreement Number 5U17CE002001-05 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

Questions? Please contact the
Maryland Department of Health and Mental Hygiene at:
1-866-703-3266 or
dhmh.injuryprevention@maryland.gov

Printed September 2016

Photo Credits:

Falls Among Older Adults: <http://washingtoninhomecare.com/try-tai-chi-to-fight-arthritis/>



Maryland Department of Health and Mental Hygiene.
Violence and Injury Prevention in Maryland: A Resource Guide for Decision-Makers. 2016