

# **Teen Driving Safety:** 2017 Resource Guide

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Teenagers contribute to, and suffer from, the consequences of motor vehicle collisions at a disproportionate rate. Motor vehicle crashes are the leading cause of death for youth ages 15–20. According to the National Highway Traffic Safety Administration (NHTSA) (Young Drivers: 2015 Data - Traffic Safety Facts, 2017), in 2015, 1,886 15- to 20-year old drivers were killed and an additional 195,000 were injured in motor vehicle crashes. Drivers ages 15–20 account for 5.4% of all licensed drivers in the U.S. but are involved in 9% of all fatal crashes.

Teen driver crashes often involve: driver error, lack of safety belt use, excessive speed, reckless driving, single vehicle crashes, nighttime fatal crashes, increased risk with every additional passenger, distractions, and alcohol and drugs.

This resource guide provides links to organizations, programs, publications, and resources focused on teen driving safety. It is divided into 14 sections: (1) organizations; (2) campaigns, programs, and toolkits; (3) data; (4) general publications; (5) Graduated Driver Licensing (GDL); (6) driver education and training; (7) parent supervision; (8) distracted driving; (9) passenger distraction; (10) technology distraction; (11) impaired driving; (12) drowsy driving; (13) drunk driving; and (14) drugged driving.

## **Organizations**

AAA Foundation for Traffic Safety http://www.aaafoundation.org

Governors Highway Safety Association (GHSA) http://www.ghsa.org

Insurance Institute for Highway Safety (IIHS) / Highway Loss Data Institute (HLDI) http://www.highwaysafety.org

Mothers Against Drunk Driving (MADD)

http://www.madd.org

National Highway Traffic Safety Administration (NHTSA) http://www.nhtsa.gov

National Safety Council (NSC) http://www.nsc.org

Students Against Destructive Decisions (SADD) http://www.sadd.org

Youth for Road Safety (YOURS) http://www.youthforroadsafety.org

## **Campaigns, Programs, and Toolkits**

Coutdown2Drive | Safe Kids Worldwide http://www.countdown2drive.org

Keys2Drive | AAA http://teendriving.aaa.com

Parents Are the Key to Safe Teen Drivers | CDC http://www.cdc.gov/parentsarethekey

Parents Central: Teen Driving | NHTSA http://www.safercar.gov/parents/TeenDriving/ teendriving.htm

Parent Toolbox for NH Teen Drivers http://nhparentsofteendrivers.com

Steering Teens Safe: A Parent Guide for Safe Teen Driving https://www.public-health.uiowa.edu/driving/learnmore.php

Teen Driver Source: Children's Hospital of Philadelphia http://www.teendriversource.org

TeenDrivingPlan (TDP) | Children's Hospital of Philadelphia http://www.teendriversource.org/more\_pages/page/teen\_driving\_plan\_tdp/researcher

Vision Zero Network http://visionzeronetwork.org

## Data

Assessment of Characteristics of State Data Linkage Systems | CDC (2013) Milani, J., Kindelberger, J., Bergen, G., Novicki, E. J., Burch, C., Ho, S. M., & West, B. A. http://www.cdc.gov/motorvehiclesafety/linkage

National Center for Statistics and Analysis (NCSA) Data Resource Website: Fatality Analysis Reporting Systems (FARS) Encyclopedia | NHTSA http://www-fars.nhtsa.dot.gov/Main/index.aspx

State Data Information Resources | NHTSA http://www.nhtsa.gov/nhtsa/stateCatalog/stateData.html



State Data System Crash Data Report: 2000–2009 | NHTSA (2014) Nelli, D., Hansen, M., & O'Neil, M. http://www-nrd.nhtsa.dot.gov/Pubs/812052.pdf

# Traffic Safety Facts 2014: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System | NHTSA (2016)

https://crashstats.nhtsa.dot.gov/Api/Public/Publication/812261

Young Drivers: 2015 Data - Traffic Safety Facts | NHTSA (2017) https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812363

## **General Publications**

Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices | NHTSA (2015) www.nhtsa.gov/staticfiles/nti/pdf/812202-CountermeasuresThatWork8th.pdf

Driving Among High School Students – U.S., 2013 | CDC MMWR (2015) Shults, R. A., Olsen, E., & Williams, A. F. 64(12): 313-317. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6412a1.htm

# Evaluation of an Updated Version of the Risk Awareness and Perception Training Program for Young Drivers | NHTSA (2017)

Thomas, F. D., Korbelak, K. T., Divekar, G. U., Blomberg, R. D, Romoser, M. R. E. & Fisher, D. L. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/12913\_-\_evaluation\_of\_an\_updated\_version-031317\_v3b\_-\_tagged.pdf

Examining the Safety Implications of Later Licensure | AAA Foundation (2014) https://www.aaafoundation.org/examining-safety-implications-later-licensure

Getting It to Click! Connecting Teens and Seat Belt Use | GHSA (2014)

http://www.ghsa.org/resources/getting-it-click-connecting-teens-and-seat-belt-use

# Measuring Changes in Teenage Driver Crash Characteristics During the Early Months of Driving | AAA Foundation (2011)

https://www.aaafoundation.org/measuring-changes-teenage-driver-crash-characteristics-during-early-months-driving

Mission Not Accomplished: Teen Safe Driving, the Next Chapter | GHSA (2016) http://www.ghsa.org/resources/mission-not-accomplished-teen-safe-driving-next-chapter

#### Research Report: Teens in Cars | Safe Kids Worldwide (2014)

**Report:** http://www.safekids.org/research-report/research-report-teens-cars-may-2014 **Infographic:** http://www.safekids.org/infographic/infographic-teens-cars

Safety Belt Laws and Disparities in Safety Belt Use Among U.S. High-School Drivers | American Journal of Public Health (2012) García-España, J. F., Winston, F. K., & Durbin, D. R. 102(6): 1128-1134.

http://dx.doi.org/10.2105/AJPH.2011.300493

#### Simulated Driving Assessment (SDA) for Teen Drivers: Results from a Validation Study | Injury Prevention (2015) McDonald, C. C., Kandadai, V., Loeb, H., Seacrist, T. S., Lee, Y., Winston, Z., & Winston, F. K. 21(3): 145-152.

http://dx.doi.org/10.1136/injuryprev-2014-041480

#### Speeding-Related Fatal Crashes Among Teen Drivers and Opportunities for Reducing the Risks | GHSA (2013)

http://www.ghsa.org/resources/speeding-related-fatal-crashes-among-teen-drivers-andopportunities-reducing-risks

#### Teen Driver Crashes 1994-2013 | AAA Foundation (2015)

https://www.aaafoundation.org/teen-driver-crashes-1994-2013-0

#### Teen Driver Safety Fact Sheet | AAA Foundation (2016)

https://www.aaafoundation.org/sites/default/files/TDSW%202016%20FS.pdf

# Teens and Seat Belt Use: What Makes Them Click? | Journal of Safety Research (2016) Shults, R. A., Haegerich, T. M., Bhat, Geeta, & Zhang, X. 57: 19-25.

http://dx.doi.org/10.1016/j.jsr.2016.03.003

#### The Transition to Unsupervised Driving | AAA Foundation (2011)

https://www.aaafoundation.org/transition-unsupervised-driving

#### Under Their Influence: The New Teen Safe Driving Champions | GHSA (2015)

http://www.ghsa.org/resources/under-their-influence-new-teen-safe-driving-champions

#### Using Naturalistic Driving Data to Examine Drivers' Seatbelt Use Behavior: Comparison between Teens and Adults | Journal of Safety Research (2015) Bao, S., Xiong, H., Buonarosa, M. L., & Sayer, J. R. 54: 69-73.

http://dx.doi.org/10.1016/j.jsr.2015.06.006

#### Video and Non-Video Feedback Interventions for Teen Drivers | NHTSA (2016) Reyes, M. L., McGehee, D.V., Jenness, J. W., Krueger, J., & Riegler, K. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812291\_video-and-nonvideofeedback. pdf

Young Drivers: 2014 Data – Traffic Safety Facts | NHTSA (2015)

https://crashstats.nhtsa.dot.gov/Api/Public/ ViewPublication/812278

Young Unlicensed Drivers and Fatal Road Traffic Crashes in the U.S. in the Past Decade: A Neglected Public Health Issue | Injury Prevention (2014)

Hanna, C. L., Hasselberg, M., & Laflamme, L. 20(1): 54-56. http://dx.doi.org/10.1136/injuryprev-2013-040809

# Graduated Driver Licensing (GDL)

#### Graduated Driver Licensing | IIHS/HLDI

http://www.iihs.org/iihs/topics/laws/graduatedlicenseintro?topicName=teenagers

#### Graduated Driver Licensing System Planning Guide | CDC (2016)

https://www.cdc.gov/motorvehiclesafety/teen\_drivers/gdl\_guide.html

Effect of Massachusetts' Graduated Drivers Licensing System on Adolescent Motor Vehicle Crashes | Pediatric Critical Care Medicine (2014) Flaherty, M., Garb, J., Miller, N., & Koenigs, L. 15(4): 202. http://dx.doi.org/10.1097/01.pcc.0000449640.72915.03

Graduated Driver Licensing Night Driving Restrictions and Drivers Aged 16 or 17 Years Involved in Fatal Night Crashes — U.S., 2009–2014 | CDC MMWR (2016) Shults, R.A., & Williams, A. F. 65(29): 725-730. http://www.cdc.gov/mmwr/volumes/65/wr/mm6529a1.htm

Long-Term Changes in Crash Rates After Introduction of a Graduated Driver Licensing Decal Provision | American Journal of Preventative Medicine (2014) Curry, A. E., Elliott, M. R., Pfeiffer, M. R., Kim, K. H., & Durbin, D. R. 48(2): 121-127. http://dx.doi.org/10.1016/j.amepre.2014.08.024

Meta-Analysis of Graduated Driver Licensing Laws: Effectiveness of Specific Program Components | NHTSA (2015)

http://www.nhtsa.gov/staticfiles/nti/pdf/812212-TT-Meta-AnalysGDL-LawsEffectSpecProgCompnts.pdf

The Role of Supervised Driving Requirements in a Graduated Driver Licensing Program | NHTSA (2012)

Full Report: http://www.nhtsa.gov/staticfiles/nti/pdf/811550.pdf Traffic Tech Summary: http://www.nhtsa.gov/staticfiles/traffic\_tech/811598.pdf



Teen Crashes Declined After Massachusetts Raised Penalties for Graduated Licensing Law Restricting Night Driving | Health Affairs (2015)

Rajaratnam, S. M. W., Landrigan, C. P., Wang, W., Kaprielian, R., Moore, R. T., & Czeisler, C. A. 34(6): 963-970.

http://dx.doi.org/10.1377/hlthaff.2014.0928

Tracking Progress in Teenage Driver Crash Risk in the U.S. Since the Advent of Graduated Driver Licensing Programs | Journal of Safety Research (2015) McCartt, A. T., & Teoh, E. R. 53: 1-9.

http://dx.doi.org/10.1016/j.jsr.2015.01.001



# Violations and Enforcement of Graduated Driver Licensing Restrictions in North Carolina and Washington State | AAA Foundation (2014)

https://www.aaafoundation.org/violations-and-enforcement-graduated-driver-licensing-restrictionsnorth-carolina-and-washington

## **Driver Education and Training**

A Fresh Look at the State of Driver Education in America | NHTSA (2012) Full Report: http://www.nhtsa.gov/staticfiles/nti/pdf/811543.pdf Traffic Tech Summary: http://www.nhtsa.gov/staticfiles/traffic\_tech/811615.pdf

Development of a Novice Driver Training Module to Accelerate Driver Perceptual Expertise | AAA Foundation (2017)

https://www.aaafoundation.org/development-novice-driver-training-module-accelerate-driver-perceptual-expertise

Driver Education and Teen Crashes and Traffic Violations in the First Two Years of Driving in a Graduated Licensing System | Accident Analysis & Prevention (2015) Shell, D. F., Newman, I. M., Córdova-Cazar, A. L., & Heese, J. M. 82: 45-52. http://dx.doi.org/10.1016/j.aap.2015.05.011

# Evaluation of Beginner Driver Education Programs: Studies in Manitoba and Oregon | AAA Foundation (2014)

https://www.aaafoundation.org/evaluation-beginner-driver-education-programs-studies-manitobaand-oregon

#### Supplementary Driver Training for New Drivers | AAA Foundation (2012)

https://www.aaafoundation.org/supplementary-driver-training-new-drivers

Variation in Teen Driver Education by State Requirements and Sociodemographics | Pediatrics (2012) Curry, A. E., García-España, J. F., Winston, F. K., Ginsburg, K., & Durbin, D. R. 129(3): 453-457. http://dx.doi.org/10.1542/peds.2011-2303

## **Parent Supervision**

Effectiveness of Parent-Focused Interventions to Increase Teen Driver Safety: A Critical Review | Journal of Adolescent Health (2013) Curry, A. E., Peek-Asa, C., C, H., Mirman, J. H., Hamann, C. J., & Mirman, J. H. http://www.jahonline.org/article/S1054-139X(15)00011-7/abstract?rss=yes



# Improving Parental Supervision of Novice Drivers Using an Evidence-Based Approach | AAA Foundation (2013)

https://www.aaafoundation.org/improving-parental-supervision-novice-drivers-using-evidence-based-approach

# Promoting Parent Involvement in Teen Driving: An In-Depth Look at the Importance and the Initiatives | GHSA (2013)

http://www.ghsa.org/resources/promoting-parent-involvement-teen-driving-depth-look-importanceand-initiatives

# **Distracted Driving**

Distraction.gov http://www.distraction.gov

# Distracted and Risk-Prone Drivers: Select Findings from the 2012 Traffic Safety Culture Index | AAA Foundation (2013)

https://www.aaafoundation.org/distracted-and-risk-prone-drivers

#### Distracted Driving among Newly Licensed Teen Drivers | AAA Foundation (2012) https://www.aaafoundation.org/content/distracted-driving-among-newly-licensed-teen-drivers-0

Do As I Say, Not As I Do: Distracted Driving Behavior of Teens and Their Parents | Journal of Safety Research (2015)

Raymond Bingham, C., Zakrajsek, J. S., Almani, F., Shope, J. T., & Sayer, T. B. 55: 21-29. http://dx.doi.org/10.1016/j.jsr.2015.07.007

#### Teen Distracted Driver Data 2014 | NHTSA (2016)

https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812253

# Using Naturalistic Driving Data to Examine Teen Driver Behaviors in Motor Vehicle Crashes, 2007–2015 | AAA Foundation (2016)

https://www.aaafoundation.org/using-naturalistic-driving-data-examine-teen-driver-behaviors-present-motor-vehicle-crashes-2007-0

## **Passenger Distraction**

Characteristics of Fatal Crashes Involving 16- and 17-Year-Old Drivers with Teenage Passengers | AAA Foundation (2012)

https://www.aaafoundation.org/characteristics-fatal-crashes-involving-16-and-17-year-old-drivers-teenage-passengers

Characteristics of Teens-with-Teens Fatal Crashes in the U.S., 2005–2010 | Journal of Safety Research (2014) Williams, A. F., & Tefft, B. C. 48: 37-42. http://dx.doi.org/10.1016/j.jsr.2013.11.001

The Effect of Passengers on Teen Driver Behavior | NHTSA (2012)

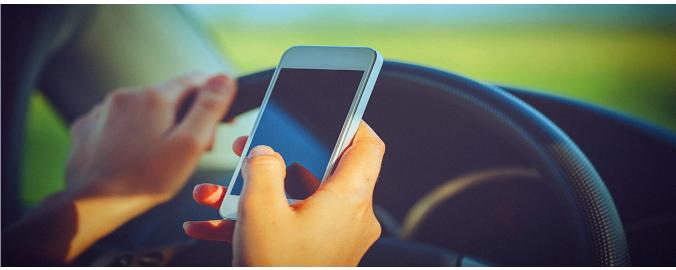
**Full Report:** http://www.nhtsa.gov/staticfiles/nti/pdf/811540.pdf **Traffic Tech Summary:** http://www.nhtsa.gov/staticfiles/traffic\_tech/811613.pdf

Teen Driver Risk in Relation to Age and Number of Passengers | AAA Foundation (2012) https://www.aaafoundation.org/content/teen-driver-risk-relation-age-and-number-passengers-0

Young Drivers and Their Passengers: A Systematic Review of Epidemiological Studies on Crash Risk | Journal of Adolescent Health (2015) Ouimet, M. C., Pradhan, A. K., Brooks-Russell, A., Ehsani, J. P., Berbiche, D., & Simons-Morton, B. G. 51(1): S24-S35. http://dx.doi.org/10.1016/j.jadohealth.2015.03.010

## **Technology Distraction**

Distracted & Dangerous: Helping States Keep Teens Focused on the Road | GHSA (2014) http://www.ghsa.org/resources/distracted-dangerous-helping-states-keep-teens-focused-road



Distracted Driving Map | LawAtlas http://lawatlas.org/datasets/distracted-driving

#### The Great Multitasking Lie Infographic | National Safety Council (2013)

http://www.nsc.org/learn/NSC-Initiatives/Pages/distracted-driving-the-great-multitasking-lie-infographic.aspx

# Impact of Texting Laws on Motor Vehicular Fatalities in the U.S. | American Journal of Public Health (2014)

Ferdinand, A. O., Menachemi, N., Sen, B., Blackburn, J. L., Morrisey, M., & Nelson, L. 104(8): 1370-1377.

http://dx.doi.org/10.2105/AJPH.2014.301894

## Young Drivers Report the Highest Level of Phone Involvement in Crash or Near-crash Incidences | NHTSA (2012)

Download: http://www.nhtsa.gov/staticfiles/nti/pdf/811611.pdf

## **Impaired Driving**

Alcohol and Marijuana Use Patterns Associated with Unsafe Driving Among U.S. High School Seniors: High Use Frequency, Concurrent Use, and Simultaneous Use | Journal of Studies on Alcohol and Drugs (2014)

Terry-McElrath, Y. M., O'Malley, P. M., & Johnston, L. D. 75(3): 378-389. http://dx.doi.org/10.15288/jsad.2014.75.378

# Association Between Riding with an Impaired Driver and Driving While Impaired | Pediatrics (2014)

Li, K., Simons-Morton, B. G., Vaca, F. E., & Hingson, R. 133(4): 620-626. http://dx.doi.org/10.1542/peds.2013-2786 Community Anti-Drug Coalitions of America's (CADCA) Toolkit to Prevent Impaired Driving http://www.preventimpaireddriving.org

Driving Under the Influence of Alcohol, Marijuana, and Alcohol and Marijuana Combined Among Persons Aged 16–25 Years – U.S., 2002–2014 | CDC MMWR (2015) Azofeifa, A., Mattson, M. E., & Lyerla, R. 64(48): 1325-1329. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6448a1.htm

Impaired-Driving Prevalence among U.S. High School Students: Associations with Substance Use and Risky Driving Behaviors | American Journal of Public Health (2013) Li, K., Simons-Morton, B. G., & Hingson, R. 103(11): e71-e77. http://dx.doi.org/10.2105/AJPH.2013.301296

The National Center for DWI Courts (NCDC) http://www.dwicourts.org

## **Drowsy Driving**

Prevalence of Motor Vehicle Crashes Involving Drowsy Drivers, U.S. 2009-2013 | AAA Foundation (2014)

https://www.aaafoundation.org/prevalence-motor-vehicle-crashes-involving-drowsy-drivers-us-2009-2013

#### Prevalence of Self-Reported Drowsy Driving, U.S.: 2015 | AAA Foundation (2015)

https://www.aaafoundation.org/prevalence-self-reported-drowsy-driving-united-states-2015

#### School Start Times and Teen Driver Crashes | NHTSA (2015)

http://www.nhtsa.gov/staticfiles/nti/pdf/812227-SchoolStartTimesAndTeenDriverCrashesTT.pdf

Young Drivers' Perceptions of Culpability of Sleep-Deprived versus Drinking Drivers | Journal of Safety Research (2012) Williams, L. R., Davies, D. R., Thiele, K., Davidson, J. R., & MacLean, A. W. 43(2): 115-122.

http://dx.doi.org/10.1016/j.jsr.2012.02.002

## **Drunk Driving**

Alcohol-Impaired Driving: 2015 Data – Traffic Safety Facts | NHTSA (2016) http://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812350

Alcohol Policies and Alcohol-Related Motor Vehicle Crash Fatalities Among Young People in the US | Pediatrics (2017) Hadland, S. E., Xuan, Z., Sarda, V., Blanchette, J., Swahn, M. H., Heeren, T. C., Voas, R. B., & Naimi, T. S. 139(3): 30-37. http://dx.doi.org/10.1542/peds.2016-3037 Increasing Alcohol Ignition Interlock Use: Successful Practices for States | CDC (2014) http://www.cdc.gov/motorvehiclesafety/impaired\_driving/ignition\_interlock\_states.html

Policy Impact: Alcohol-Impaired Driving | CDC (2011) http://www.cdc.gov/motorvehiclesafety/pdf/policyimpact-alcohol-a.pdf

Teen Drinking and Driving: A Dangerous Mix | CDC Vital Signs (2012) http://www.cdc.gov/vitalsigns/teendrinkinganddriving/index.html

## **Drugged Driving**

Cannabis Effects on Driving Skills | Clinical Chemistry (2013) Hartman, R. L., & Huestis, M. A. 59(3): 478-492. http://dx.doi.org/10.1373/clinchem.2012.194381

Correlate of Drug Use and Driving Among Undergraduate College Students | Traffic Injury Prevention (2014)

Kohn, C., Saleheen, H., Borrup, K., Rogers, S., & Lapidus, G. 15(2): 119-124. http://dx.doi.org/10.1080/15389588.2013.803221

Drive High, Get a DUI Campaign | Colorado Department of Transportation (CDOT) https://www.codot.gov/safety/alcohol-and-impaired-driving/druggeddriving

Driving Under the Influence, Public Policy, and Pharmacy Practice | Journal of Pharmacy Practice (2015)

Sigona, N., & Williams, K. G. 28(1): 119-123. http://dx.doi.org/10.1177/0897190014549839

Drug Involvement of Fatally Injured Drivers – Traffic Safety Facts | NHTSA (2010) http://www-nrd.nhtsa.dot.gov/Pubs/811415.pdf

Drugged Driving | Office of National Drug Control Policy

https://obamawhitehouse.archives.gov/ondcp/drugged-driving

# Fatal Crashes from Drivers Testing Positive for Drugs in the U.S., 1993-2010 | Public Health Law Research (2014)

Wilson, F. A., Stimpson, J. P., & Pagan, J. A. 129(4): 342-350. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4037460

# State Approaches to Addressing Drugged Driving | SAMHSA'S Center for the Application of Prevention Technologies (2014)

http://www.samhsa.gov/capt/sites/default/files/resources/approaches-drugged-driving.pdf

Teen Drugged Driving: A Community Awareness Activity Toolkit | Office of National Drug Control Policy

https://obamawhitehouse.archives.gov/sites/default/files/ondcp/issues-content/drugged-driving/ ondcp\_teendruggeddrivingtoolkit\_41613\_final.pdf

Trends in Alcohol and Other Drugs Detected in Fatally Injured Drivers in the U.S., 1999–2010 | American Journal of Epidemiology (2014) Brady, J. E., & Li, G. 179(6): 692-699. http://dx.doi.org/10.1093/aje/kwt327

Understanding the Limitations of Drug Test Information, Reporting, and Testing Practices in Fatal Crashes | NHTSA (2014)

http://www.nhtsa.gov/staticfiles/nti/pdf/812072-UnderstandLimitsDrugTest-ResearchNote.pdf



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