Motor Vehicle Collision and Injury Risk in Kentucky, 2017

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Kentucky Injury Prevention and Research Center
Kentucky Injury Prevention and Research Center (KIPRC) as bona fide agent for the Kentucky Department for Public Health (KDPH) in violence and injury prevention

- KIPRC has been in partnership with KDPH since 1994

Data & Maps

- Motor vehicle occupants include drivers and passengers
- At-fault drivers are only drivers in the primary motor vehicle units in which collisions occurred
- Collisions are based on Kentucky county drivers
- Collision rate denominators based on registered drivers in the Kentucky Division of Driver Licensing System 2017
- Hospitalization rate
  - Numerators based on Kentucky county residents in Kentucky ED facilities seeking care for motor vehicle traffic-related injuries
  - Denominators based on Census 2017 Annual Kentucky county populations
- Counts less than 5 are suppressed
- Rates based on counts less than 20 may be unstable
- Data are provisional and subject to change

The Grant Number, 6 NU17 CE924846 02 03, funded by the Centers for Disease Control and Prevention, supports this data request.
MOTOR VEHICLE OCCUPANT COLLISIONS
Kentucky Motor Vehicle Occupant Collision-Related Injury Rate by County of Residence, 2017

Rate per 100,000*
- unstable
- 68 - 242
- 243 - 306
- 307 - 361
- 362 - 599

*Rate is based on the number of occupants (drivers and passengers) who sustained fatal and nonfatal injuries in a motor vehicle collision per 100,000 residents. Rates based on counts less than 20 may be unstable.

Kentucky Motor Vehicle Occupant Injury-Related Emergency Department Visit Rate by County of Residence, 2017

Rate per 100,000*
- unstable
- 275 - 664
- 665 - 866
- 867 - 1066
- 1067 - 3064

*Rate is based on the number of motor vehicle traffic occupants who visited the emergency department due to motor vehicle injuries per 100,000 residents. Rates based on counts less than 20 may be unstable.

Data Sources: Kentucky Outpatient Services Database [2017], Kentucky Office of Health Policy; Annual County Estimates of the Resident Population [2017]: April 1, 2010-July 1, 2017, released March 2018, US Census Bureau, Population Division. Data are provisional and subject to change.

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Kentucky Motor Vehicle Occupant Collision Injury Risk Index by County of Residence, 2017

Index Score is calculated by averaging county ranks in the 1) motor vehicle collision occupant injury (fatal and nonfatal) rates; and 2) motor vehicle traffic occupant emergency department visit rates.

Kentucky Motor Vehicle Occupant Collision Injury Risk Index: Hot Spots by County of Residence, 2017

Legend
- Interstate
- Parkway
- US Roadway
- Not Significant
- Hot Spot - 90% Confidence
- Hot Spot - 95% Confidence
- Hot Spot - 99% Confidence


Index Score is calculated by averaging county ranks in the 1) motor vehicle collision occupant injury (fatal and nonfatal) rates; and, 2) motor vehicle traffic occupant emergency department visit rates.

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AT-FAULT DRIVER FACTORS
Kentucky Motor Vehicle Driver At-Fault Collision Rate by County of Residence, 2017

Rate per 100,000*
- 860 - 2458
- 2459 - 3030
- 3031 - 3500
- 3501 - 4827

*Rate is based on the number of at-fault drivers involved in a motor vehicle collision per 100,000 drivers currently registered in the Kentucky Division of Driver Licensing System.

Data Sources: Collision Report and Analysis for Safer Highways (CRASH) file [2017], Kentucky State Police, Frankfort, KY; Kentucky Division of Driver Licensing System (KDLIS) [2017], Kentucky Department of Transportation, Frankfort, KY. Data are provisional and subject to change.

The Grant Number, 6 NU17 CE924846 02 03, funded by the Centers for Disease Control and Prevention, supports this data request.
Kentucky Motor Vehicle Distracted Driver At-Fault Collisions by County of Residence, 2017

No. of Collisions*
- 17 - 110
- 111 - 210
- 211 - 414
- 415 - 10751

*Count is based on the number of at-fault drivers involved in a motor vehicle collision where distracted and/or inattentive driving were a contributing factor.

Data Source: Collision Report and Analysis for Safer Highways (CRASH) file [2017], Kentucky State Police, Frankfort, KY. Data are provisional and subject to change.

The Grant Number, 6 NU17 CE924846 02 03, funded by the Centers for Disease Control and Prevention, supports this data request.
Kentucky Motor Vehicle Unrestrained Driver At-Fault Collisions by County of Residence, 2017

No. of Collisions*

- 12 - 48
- 49 - 96
- 97 - 227
- 228 - 4225

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Data Source: Collision Report and Analysis for Safer Highways (CRASH) file [2017], Kentucky State Police, Frankfort, KY. Data are provisional and subject to change.

*Count is based on the number of at-fault drivers involved in a motor vehicle collision who did not wear a seatbelt.
Kentucky Motor Vehicle Injury-Related Emergency Department Visit Rate by County of Residence, 2017

Rate per 100,000*
- unstable
- 275 - 664
- 665 - 865
- 867 - 1066
- 1067 - 3064

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*Rate is based on the number of motor vehicle traffic occupants who visited the emergency department due to motor vehicle injuries per 100,000 residents. Rates based on counts less than 20 may be unstable.

Data Sources: Kentucky Outpatient Services Database [2017], Kentucky Office of Health Policy; Annual County Estimates of the Resident Population [2017]: April 1, 2010-July 1, 2017, released March 2018, US Census Bureau, Population Division. Data are provisional and subject to change.

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Kentucky Motor Vehicle At-Fault Collision Injury Risk Index by County of Residence, 2017

MVC Index Score
- 1st Quartile
- 2nd Quartile
- 3rd Quartile
- 4th Quartile

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Data Sources: Collision Report and Analysis for Safer Highways (CRASH) file, Kentucky State Police [2017]; Kentucky Division of Driver Licensing System (KDLIS) [2017], Kentucky Department of Transportation; Kentucky Inpatient Hospitalization and Outpatient Services Database [2017], Kentucky Office of Health Policy; Annual County Estimates of the Resident Population [2017]; April 1, 2010-July 1, 2017, released March 2018, US Census Bureau, Population Division. Data are provisional and subject to change.

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**AT-FAULT DRIVER**

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**MOTOR VEHICLE OCCUPANT**

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