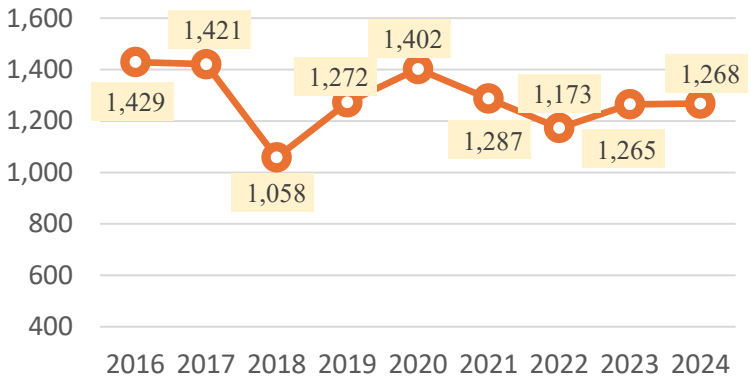
Injury Prevention: **Adolescents and ATVs**

All-terrain vehicles (ATVs) are motorized vehicles designed for off-road and dirt road use. ATVs are characterized by a seat designed to be straddled by the operator, handlebars for steering, and low-pressure tires. ATVs are primarily used for recreation but prove useful for yard and farm work. Riding ATVs can result in serious injury and even death.

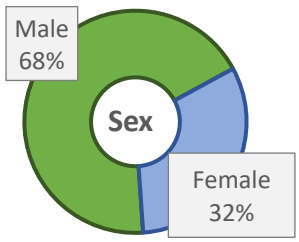
ATV-related injuries resulted in **11,575** emergency department (ED) visits[1] among Kentucky adolescents[2] from 2016-2024. The median cost of an ED visit for an adolescent ATV-related injury was **$2,023.**

From 2016-2024, **44** Kentucky adolescents died from ATV-related injuries.

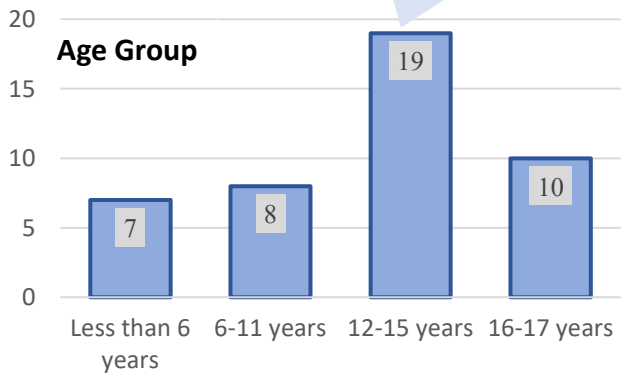
Kentucky Adolescent ATV-Related Injury ED Visits, 2016-2024



Kentucky Adolescent ATV-Related Injury Deaths by Age Group and Sex, 2016-2024



The greatest number of deaths (43%) occurred among 12- to 15-year-olds.



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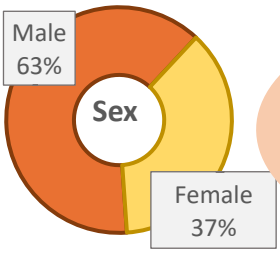

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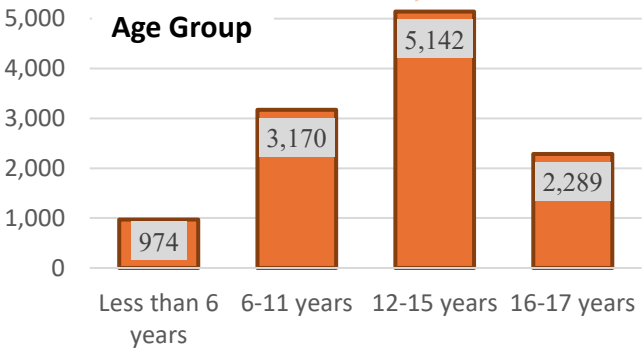
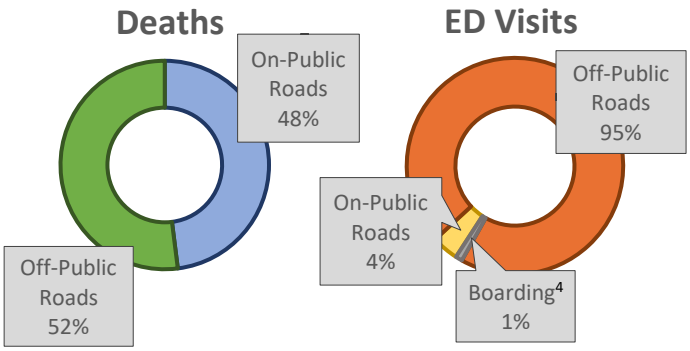


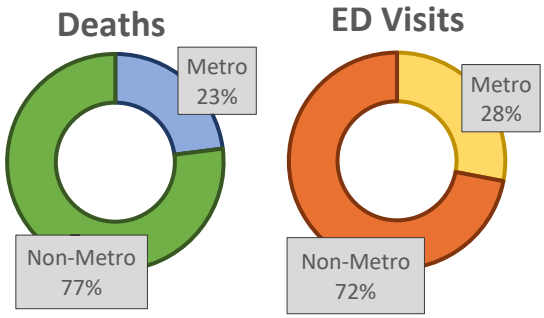
[1]ED visits represent encounters of care and could be greater than the number of individual patients treated in Kentucky. [2]Adolescents are Kentucky residents under the age of 18. Data sources: Kentucky Outpatient Services Database, Office of Data Analytics; Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. June 2026. Data are provisional and subject to change.

Kentucky Adolescent ATV Injury-Related ED Visits and Deaths by Injury Details, 2016-2024

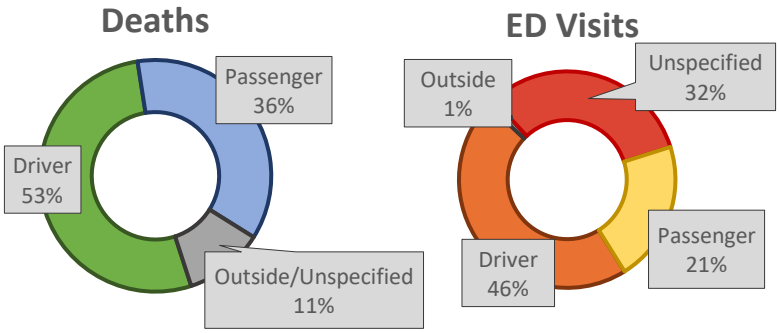
On- and Off-Road Use[3]



Location[5]



Occupant Type



More than 50% of adolescent ATV-related deaths occurred while driving an ATV on public roadways.

The majority of adolescent ATV-related ED visits occurred off public roadways and in non-metro areas. Almost 1 in 2 adolescents were driving the ATV leading to injury-related ED visits.

Information on ATV type from ED visits show that adolescents were primarily on special ATVs (65%), a 3- or 4-wheeled ATV (34%), and dune buggies (1%).

Traumatic Brain Injuries

Traumatic brain injuries (TBI) were observed among 52% of the ATV-related adolescent deaths from 2016-2024.

Nine percent of the ATV-related ED visits resulted in a TBI diagnosis.

[3]"On-Public Roads" is defined as injuries occurring on public roadways, while "Off-Public Roads" is defined as injuries occurring off public roadways. [4]"Boarding" refers to an injury occurring while getting on the ATV. [5]"Location" is defined as metro (counties containing metropolitan statistical areas with populations of 50,000 or higher) and nonmetro (those with less than 50,000 in any urban cluster population) per the 2013 National Center for Health Statistics urban–rural classification. Data sources: Kentucky Outpatient Services Database, Office of Data Analytics; Kentucky Death Certificate Database, Kentucky Office of Vital Statistics, Cabinet for Health and Family Services. June 2026. Data are provisional and subject to change.

ATV Operation and Safety Recommendations

Age and ATV Engine Size Recommendations

Age Group	ATV Engine Size
< 6 years old	Use not recommended
6-11 years old	Under 70 cc
12-15 years old	70-90 cc
16 years and older	Over 90 cc

Safety Tips

Always follow the ATV manufacturer's minimum age recommendation warning label. Read the owner's manual carefully, and keep the ATV in good working condition.

Never carry passengers unless the ATV is specifically designed for more than one rider.

Always wear eye protection, long sleeves, long pants, gloves, and over-the-ankle boots.

Do not drive in adverse weather, hazardous terrain, or insufficient light.

Do not operate on paved roads. If crossing a paved road is necessary, be extremely careful.

Wear a helmet approved by the U.S. Department of Transportation, the American National Standards Institute, or the Snell Memorial Foundation. Replace helmet every five years or if damaged.

Additional Resources

- Kentucky restrictions on operation of all-terrain vehicle (KRS 189.515), effective June 29, 2021
- Consumer Product Safety Commission (CPSC); 1.800.638.2772
- Children should never ride adult ATVs: cpsc.gov/education/atv-safety-children
- ATV Safety Institute Trainings and Riding Tips; 1.800.887.288

Images: www.flaticon.com

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