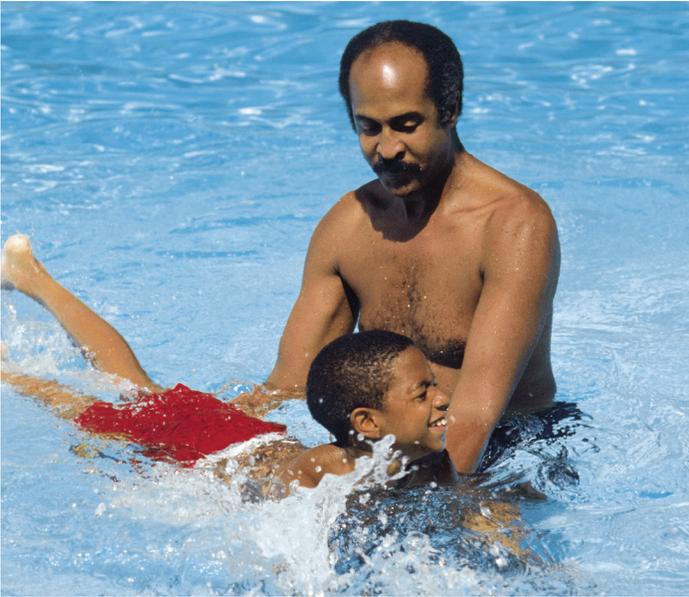


PREVENTING SUMMER INJURIES



Ways to prevent the injuries
that are most common during
the summer months



Arkansas Department of Health
Keeping Your Hometown Healthy



Injury Prevention Center
archildrens.org



PREVENTING SUMMER INJURIES

SUMMER

Summer is a season full of beautiful weather, vacations, sports, and other enjoyable outdoor activities. Unfortunately, summer also means an increase in injuries. There are many ways to prevent the injuries that are most common during the summer months, as you and your family enjoy the warm weather. This brochure includes some helpful tips and facts to help you have a safe and injury-free summer.

4 Motor Vehicles

6 Teen Drivers

8 Motorcycles

10 All-Terrain Vehicles

12 Swimming

14 Personal Watercraft

15 Bicycles

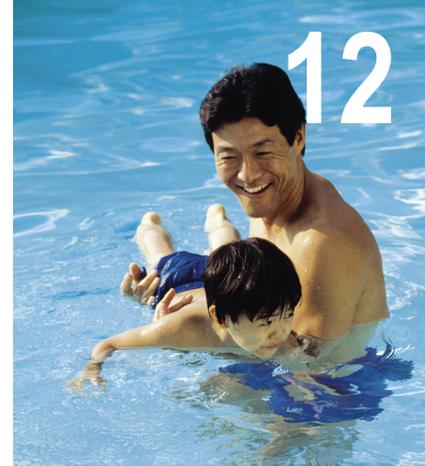
16 Fireworks

17 Individual and Team Sports

18 Hiking and Climbing

19 References

20 Contact Information



MOTOR VEHICLES

The motor vehicle death rate by miles driven in Arkansas is 42% higher than the national average.

-National Safety Council

Risks

- Failure to wear seat belts
- Lack of or misuse of child seats/restraints
- Driving under the influence of alcohol
- Distractions caused by hand held devices while driving
- Inexperienced drivers
- Driving while drowsy

Prevention

- Always use seat belts
- Always use age appropriate car seats and child restraints
- Never drive under the influence of alcohol
- Never use devices that cause distractions (cell phones or other electronics)
- Comply with the Graduated Driver License law for teens by enforcing driving curfews and limiting number of teens in the vehicle
- Never drive while drowsy

Regulations/Guidelines

- **Act 308 of 2009:** Primary Seat Belt Law
 - Permits an officer to issue a citation as a primary stop if the driver or front seat passenger is not buckled up
- **Act 1776 of 2003:** Child Passenger Protection Law
 - A child who is less than 6 years old or weighs less than 60 pounds shall be restrained in a child passenger safety seat properly secured to the vehicle



- **Act 181 of 2009:** "Paul's Law" is named after an Arkansan who was killed in a car crash involving a texting driver
 - All drivers are prohibited from text messaging
- **Act 197 of 2009:** Fewer Distractions Mean Safer Driving Act
 - Drivers under 18 may not use cell phones, regardless of whether a hands-free accessory is employed
 - Drivers who are at least 18 years old but under 21 years old must use hands-free attachments while talking on cell phones
- For more information on the proper use of car seats, please contact the Injury Prevention Center at Arkansas Children's Hospital at 1-866-611-3445 or visit the website at: www.archildrens.org/injury_prevention

In 2005 the use of seat belts across the United States prevented 15,700 fatalities, 350,000 severe injuries, and \$67 billion in costs related to injuries and deaths sustained from motor vehicle crashes.

-National Highway Traffic Safety Administration

In 2007 there were 66,393 motor vehicle crashes in Arkansas. That's more than 7 crashes per hour.

-Arkansas State Police

Potential Lives Saved...

297

every year if the Arkansas traffic related death rate was the same as the national rate.



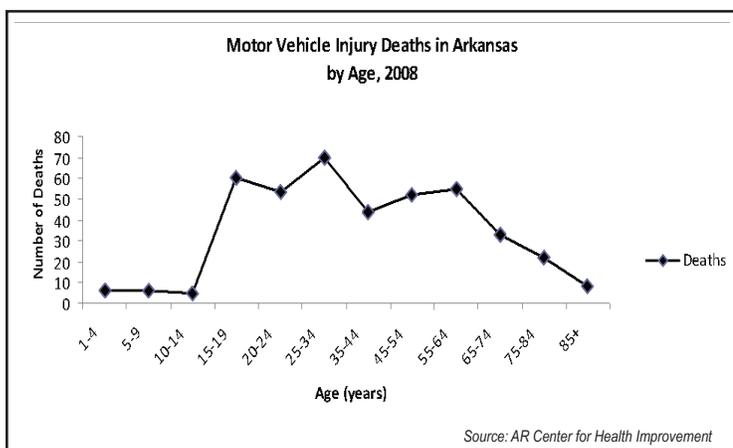
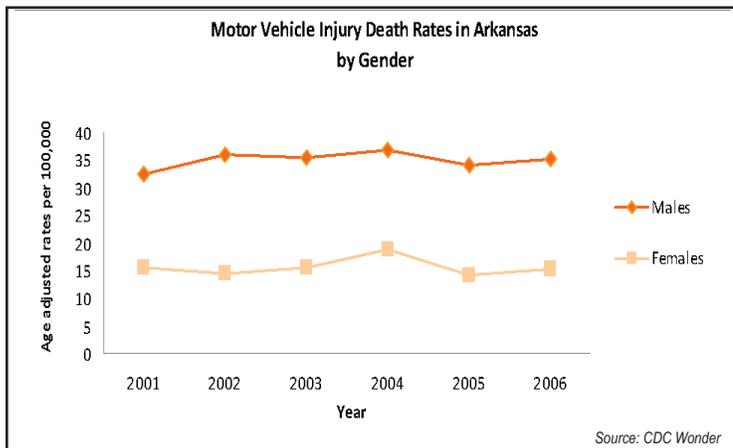
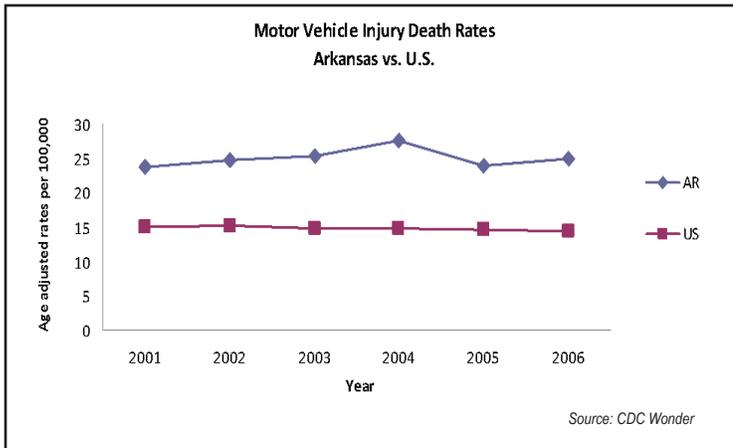
Health Impact

In 2008, 11,773 people were killed in alcohol-impaired driving crashes. That is 32% of all traffic-related deaths in the United States.

- National Highway Traffic Safety Administration

Other Interesting Facts

- In Arkansas, there were 2,450 hospitalizations due to motor vehicle crashes in 2008
- In 2008, regular seatbelt usage among Arkansans was 70% compared to 83% for the United States



TEEN DRIVERS

The first 1,000-1,500 miles of driving for teens are the most critical because the crash risk is higher.

-National Safety Council

Risks

- Failure to wear seat belts
- Inexperience
- Distraction from passengers and electronic devices
- Unsupervised night time driving

Prevention

- Always use seat belts
- Follow principles of the Graduated Driver License, including restricting the numbers of passengers, night time driving, and cell phone use
- Sign a parent-teen driving contract
- Practice driving with a licensed adult in a variety of conditions (rain, night, snow, and icy roads)

Regulations/Guidelines

- **Act 394 of 2009: Graduated Driver License**
 - Drivers with a Hardship or Intermediate License are not allowed to drive between 11pm-4am, unless accompanied by a licensed driver at least 21 years old or if driving is related to school, work, church activities, or in case of an emergency
 - Drivers with a Hardship, Learner's, or Intermediate License are not to use a cell phone at any time while driving, unless in case of an emergency
 - Drivers with a Hardship or Intermediate License can have only one passenger in the car who is under the age of 21, unless the passengers are siblings or unless there is an adult in the front passenger seat who is a licensed driver at least 21 years old



- Hardship license drivers have restrictions on unsupervised driving based on their hardship qualifications
- **Graduated Driver License Steps:**
 - Step 1- Learner's License: Must be at least 14 years old. Must be accompanied by a licensed driver at least 21 years old
 - Step 2- Intermediate License: Must be at least 16 years old. Must already have a Learner's License or have successfully completed vision and knowledge tests. If driver is 16 years old when applying for first licensure, licensed adult supervision is required for the first 6 months
 - Step 3- Unrestricted License: Must be at least 18 years old. Must already have an intermediate license or successfully completed vision and knowledge tests

For more information go to: <http://www.nhtsa.gov/Driving+Safety/Driver+Education/Teen+Drivers/Teen+Drivers+-+Driver+Education>

THE ARKANSAS GRADUATED DRIVER LICENSE LAW IS PROJECTED TO DECREASE THE TEEN DRIVER FATALITY RATE FOR AGES 16-17 BY 20% AND SAVE 7 MILLION DOLLARS EACH YEAR!

-ARKANSAS DEPARTMENT OF HEALTH

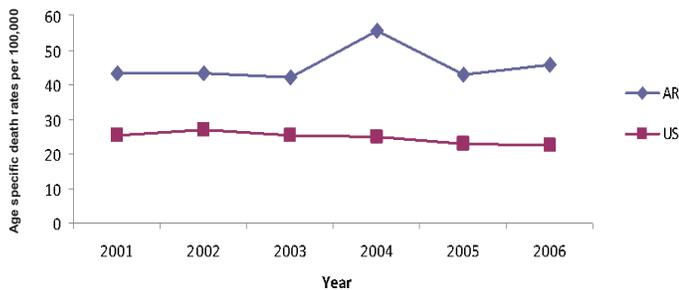
Potential Lives Saved...

19

every year if the Arkansas teen traffic related death rate was the same as the national rate.

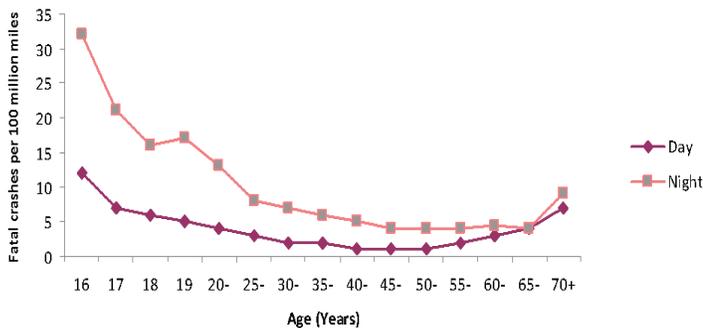


Motor Vehicle Injury Death Rates Among Teens 15-19 years old



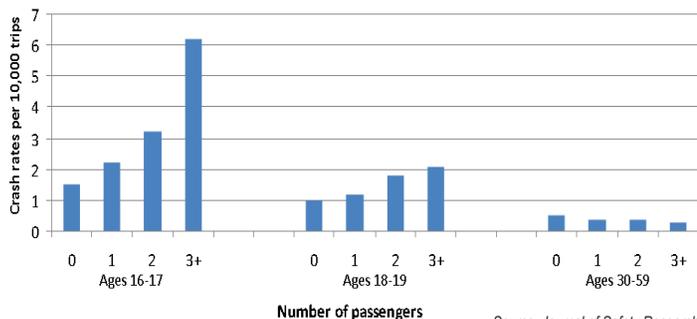
Source: CDC Wonder

United States Fatal Crashes: Day vs. Night, 1995



Source: Journal of Safety Research

United States Crash Rates by Driver Age and Passenger Presence per 10,000 Trips



Source: Journal of Safety Research

Health Impact

Crash rates increase 4 times when 3 or more occupants travel with 16-17 year old drivers when compared to driving alone.

Other Interesting Facts

- In Arkansas, there were over 500 hospitalizations of drivers aged 15-24 due to motor vehicle crashes in 2008
- Deaths among teenage drivers involved in crashes were higher between 9pm-11pm

MOTORCYCLES

Per vehicle mile traveled, motorcyclists are about **35 times** more likely than passenger car occupants to die in a traffic crash.

-National Highway Traffic Safety Administration

Risks

- Not wearing a Federal Motor Vehicle Safety Standard (FMVSS) certified helmet
- Driving under the influence of alcohol
- Low visibility to vehicle drivers
- Reckless driving

Prevention

- Always wear a FMVSS certified helmet
- Always wear proper footwear and abrasive resistant clothing
- Complete safety training course
- Never drive under the influence of alcohol
- Never drive while drowsy
- Always drive a motorcycle with daytime running lights or headlights on

Regulations/Guidelines

- **Act 453 of 1997: Motorcycle Helmet Law**
 - All passengers and operators of motorcycles and motor-driven cycles used upon the public streets and highways of this state shall be equipped with the following equipment under standards set forth by the Office of Motor Vehicle of the State of Arkansas:
 - Protective headgear unless the person is twenty-one (21) years of age or older
 - Protective glasses, goggles, or transparent face shields



The first full year after repealing the Arkansas universal use helmet law, motorcycle fatalities increased by 21%.

-National Highway Traffic Safety Administration



For more information go to:

<http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/807709.pdf>

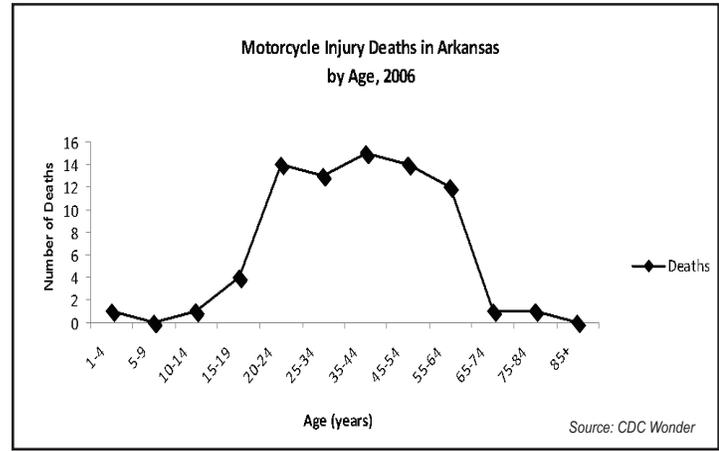
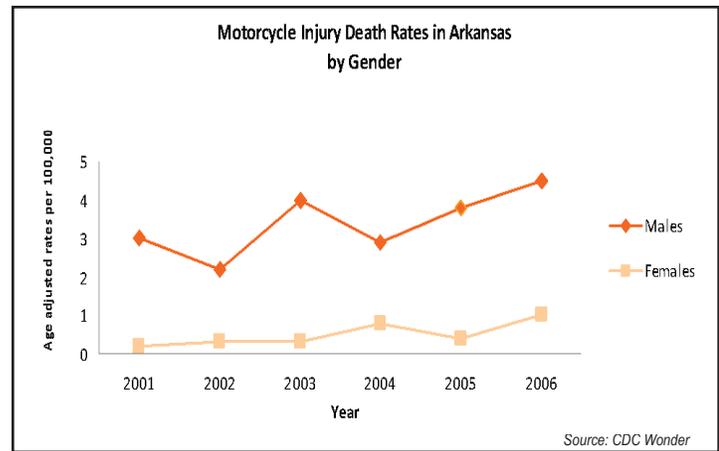
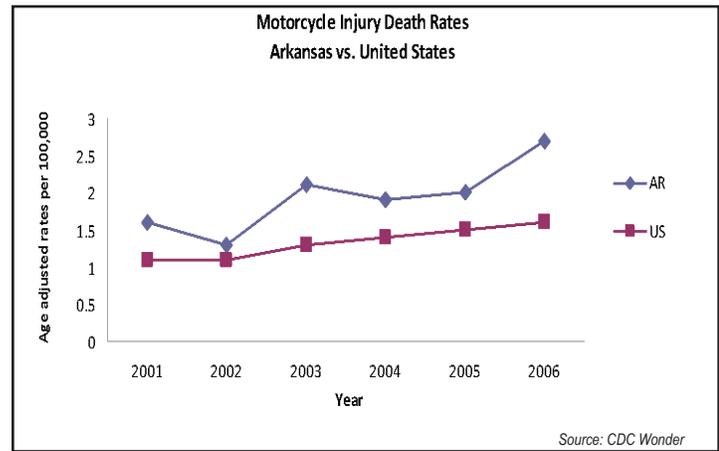
Potential Lives Saved...

30

every year if the Arkansas motorcycle traffic related death rate was the same as the national rate.



Health Impact



Motorcycle death rates for males in Arkansas are 4 times higher than females.

Other Interesting Facts

- In Arkansas, hospitalization rates from motorcycle crashes have more than doubled from 2003-2008
- Death rates from motorcycle crashes in Arkansas have doubled from 2001-2006
- Nationally, 41% of motorcycle operators who died in a single vehicle crash in 2006 had blood alcohol content levels of 0.08 g/dl or higher

ATV ALL-TERRAIN VEHICLES

Children under the age of 16 accounted for 28% of ATV-related injuries in 2008.

-ATVSafety.gov

Risks

- Use of an ATV by drivers under the age of 16 years old
- No Department of Transportation approved helmet or use of other protective gear while riding
- Driving under the influence of alcohol
- No hands-on training on the safe use of the ATV
- More than one rider on a single user ATV
- Riding on any paved surfaces such as city streets, county roads, and highways
- Riding after dark
- Three wheeled ATVs

Prevention

- Complete an accredited training courses for all operators (classroom and field training)
- Always use a helmet while operating an ATV
- Never allow children under the age of 16 years old to operate an ATV
- Always use other protective equipment such as goggles, gloves, long sleeved shirt and pants, and ankle high boots
- Never carry passengers unless the ATV is specifically designed for a passenger
- Always ride on off-road (unpaved) surfaces
- Ride during adequate daylight, potential hazards may not be easily detected using the ATV headlights

Regulations/Guidelines

- State Laws
 - All 3- and 4-wheeled ATVs are required to be registered, and the owner shall receive one numbered decal to be placed on the ATV



- A person under 12 may not operate an ATV unless supervised by a person 18 years or older, or on a parent's land, or with the permission of the land owner
- ATVs may not be used on public streets or highways, except to cross these roads or for farming or hunting to get from one field to another. An ATV may be used on public streets outside city limits to get from one trail to another or to private property
- For an ATV Safety Rider course please contact the ATV Safety Institute at 800-887-2887 or a local 4H/Cooperative Extension Agency or log-on to:

www.uaex.edu

The ATV is designed to use the operator's weight as a counter balance while turning and going up/down a hill.

-ATVsafety.org

Potential Lives Saved...

11

every year if the Arkansas ATV traffic related death rate was the same as the national rate.

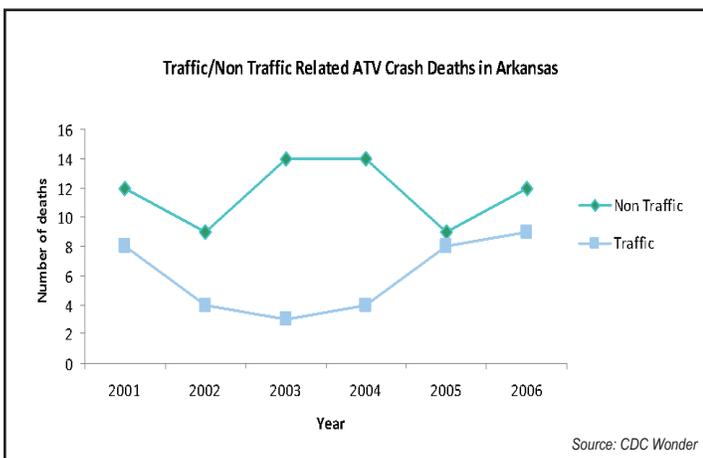
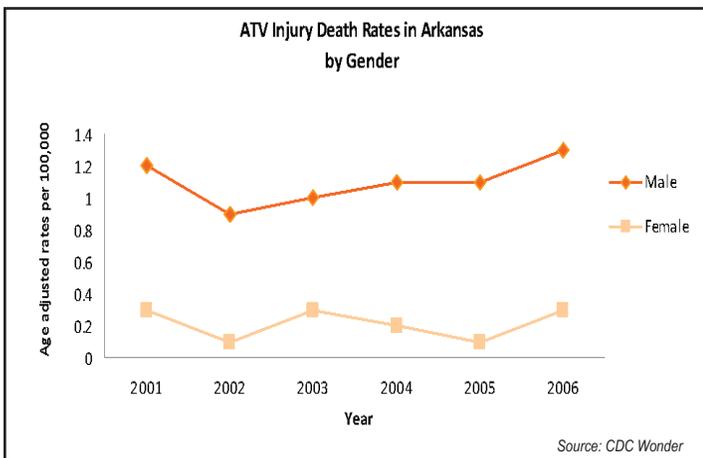
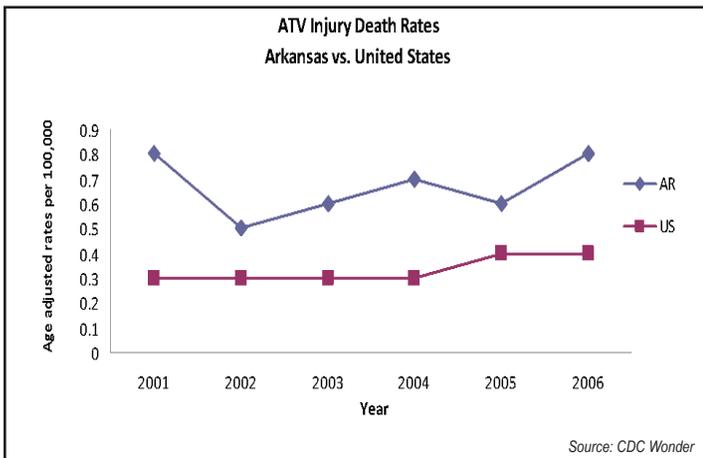


Health Impact

In Arkansas, there was a **25%** increase of ATV crash death rates on public roadways in traffic from 2003 through 2006.

Other Interesting Facts

- Nationally, there was a 4% increase in ATV crash death rates on public roadways in traffic from 2003 through 2006
- In 2008, less than 2% of all ATV crash victims in Arkansas reported helmet use



SWIMMING

Risks

- Minors left unsupervised near water (lakes, rivers, or swimming pools)
- Failure to wear life jackets
- Unfenced pools
- Swimming in hazardous water conditions
- No CPR training

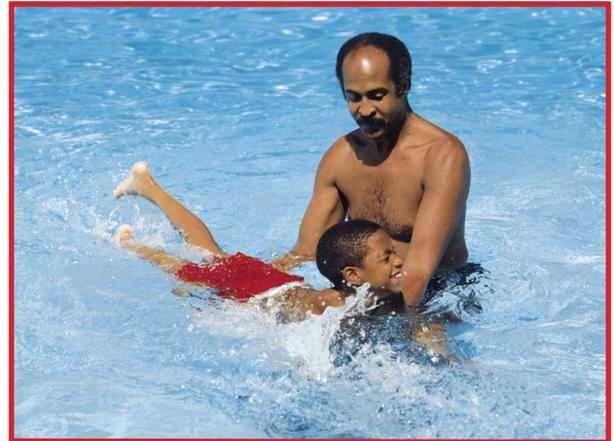
Prevention

- Install 4-sided fences around swimming pools with self locking gates
- Always wear life jackets when boating
- Always supervise children in/around any body of water
- Designate a “water watcher”, who is a person who agrees to watch the water where children are playing at all times without being distracted
- Learn how to swim

Regulations/Guidelines

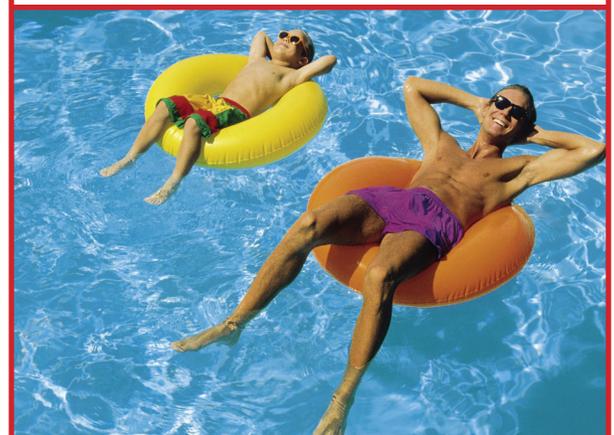
- The Arkansas Department of Health is responsible for the safety regulations of public swimming pools, spas, wading pools, and waterslides. The guidelines for unauthorized entry into the pool area are as follows:
 - The barrier shall not be less than four feet in height. The barrier shall not have spaces greater than four inches horizontally. There shall not be more than four inches of space between the bottom of the barrier and the ground’s surface or the pool deck
 - The barrier may be any fence, wall, or structure which prevents entry except through self-closing, self-latching, and lockable gates or doors

- For more information regarding swimming pool ordinances please go to:
<http://www.healthy.arkansas.gov/aboutADH/RulesRegs/SwimmingPools.pdf>



**IN 2005, THERE
WERE 3,582 FATAL
UNINTENTIONAL
DROWNINGS IN THE
UNITED STATES.
THAT’S ABOUT 10
PEOPLE A DAY!**

**-CENTERS FOR DISEASE CONTROL
AND PREVENTION**



**Drowning is
the second
leading cause
of death in
children aged
1-4 years old in
Arkansas.**

**-Centers for
Disease Control
and Prevention**

Potential Lives Saved...

14

every year if the Arkansas drowning related death rate was the same as the national rate.

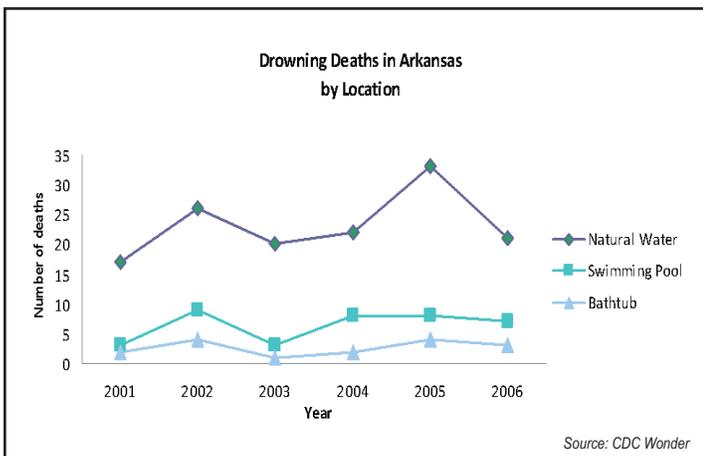
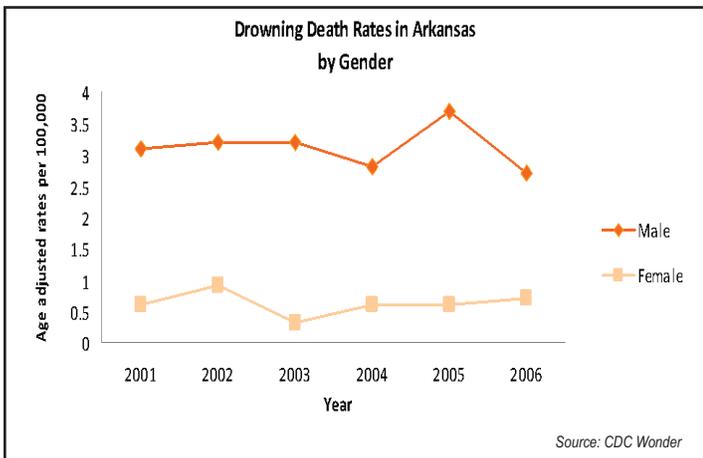
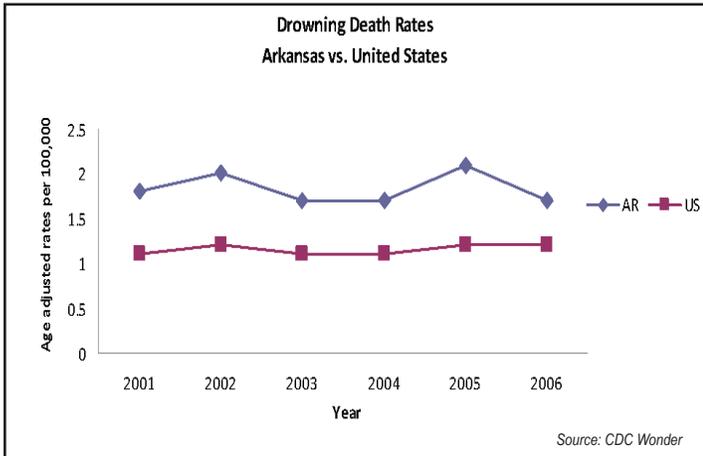


Health Impact

Of near drowning patients seen in the emergency room, 2% will have a good outcome, 80% may have brain damage, and 18% will die.

Other Interesting Facts

- In Arkansas, children between the ages of 1-4 had the highest rate of hospitalizations due to drowning among all age groups
- Infants are most likely to drown in the bathtub, toddlers in the home swimming pool, and teenage boys are most likely to drown in lakes and rivers



PERSONAL WATERCRAFT



Risks

- Failure to wear a life jacket
- Improper use or reckless driving of the personal watercraft
- Use of alcohol
- Untrained operator is unaware that steering is lost when power is not maintained

Prevention

- Always wear a US Coast Guard approved life jacket
- All operators should attend a safety training course
- Inspect watercraft annually to ensure that it is safe and operational
- Do not allow children under 16 years old to operate a personal watercraft
- Never drive watercraft where people are swimming

Regulations/Guidelines

- Act 693 of 2009: Rachel's Law is named after a central Arkansas teen who died from injuries sustained from a personal watercraft crash
 - Raised the minimum age for operating a motorized watercraft from 14 to 16 years old
 - People born in 1986 or later must complete a training course on boat safety before they operate a motor boat or a personal watercraft
 - Anyone aboard a personal watercraft must wear an approved life jacket
- For more information about boating safety courses please contact Arkansas Game and Fish Commission: 1-800-364-4263 or visit their website at: <http://www.agfc.com/education/Pages/EducationBoating.aspx>

In the United States, 11 children under age 13 lost their lives while boating in 2008.

-US Coast Guard Boating Accident Report

Among boating-related deaths, 90% occurred on boats where the operator had not received boating safety instruction.

-US Coast Guard Boating Accident Report

Health Impact

United States Boating Fatalities/Injuries-2008 (Ranked by Top 5)

Rank	Type of Boat	Total Deaths N=614	Total Injuries N=3062
1	Open Motorboat	353	1669
2	Personal Watercraft	45	920
3	Cabin Motorboat	59	296
4	Canoe/Kayak	114	129
5	Rowboat	43	48

Source: US Coast Guard-All US

BICYCLES



Risks

- Failure to wear a helmet
- Low visibility to vehicle drivers
- Lack of supervision of minors
- More than one person on a single passenger bicycle
- Not wearing the proper footwear while riding
- Performing stunts/jumps

Prevention

- Always use a helmet
- Use hand signals
- Always follow traffic signals

- Always wear bright clothes during the day to increase visibility
- Always wear reflective clothing at night
- Never build/use jumping ramps
- Attach head/tail lights on bicycle
- Attach reflectors on bicycle
- Never allow children to ride their bicycle at night

Regulations/Guidelines

- Use a bicycle helmet that meets the standards set by the Consumer Product Safety Commission at all times while riding

For more information go to:

<http://www.nhtsa.gov/Bicycles>

Bicycle helmets can reduce head injury by as much as 85%.

-Centers for Disease Control and Prevention

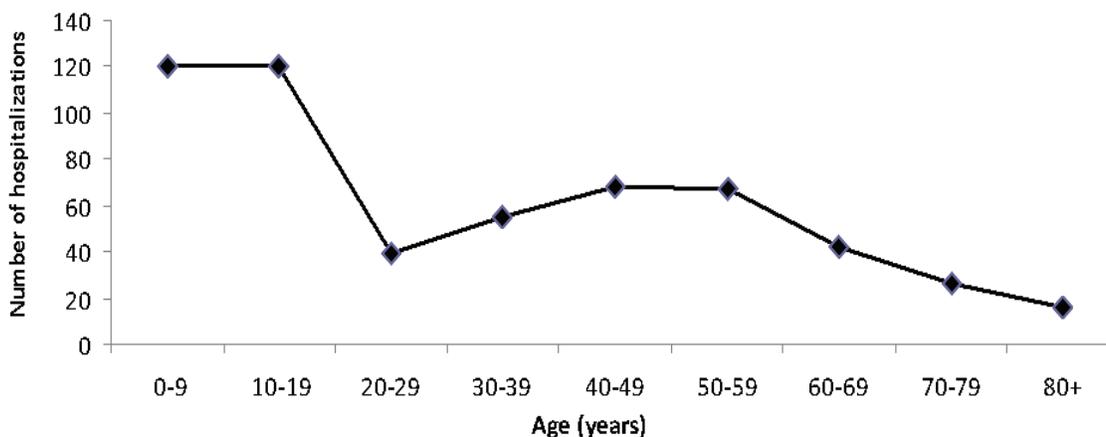
93% of Arkansas high school students who rode a bicycle reported never or rarely wearing a helmet.

-Youth Risk Behavior Survey (YRBS)



Health Impact

Number of Hospitalizations from Bicycle Injuries
in Arkansas 2003-2008



Source: Arkansas Department of Health

FIREWORKS

Risks

- Permanent blindness, scarring, burns, or death due to mishandling of fireworks
- Hand and finger injury due to firecrackers
- Severe burns due to firecrackers or sparklers
- House fires ignited by fireworks

Prevention

- Take kids to watch a professional fireworks display
- Tell children to stay away from fireworks and sparklers

Regulations/Guidelines

- Federal Law regarding illegal fireworks sale and distribution
 - Under the Federal Hazardous Substances Act, the U.S. Consumer Product Safety Commission prohibits the sale of the most dangerous types of fireworks and the components intended to make them. The banned fireworks include various large aerial devices, M-80s, quarter-sticks, half-sticks, and other large firecrackers. Any firecracker with more than 50 milligrams of explosive powder and any aerial firework with more than



130 milligrams of flash powder is banned under federal law, as are mail order kits and components designed to build these fireworks

For more information go to: <http://www.cdc.gov/ncipc/factsheets/fworks.htm>

In July, children sustain about 45% of injuries related to fireworks.
-Centers for Disease Control and Prevention

Sparklers burn at more than 1,000°F!
-Centers for Disease Control and Prevention

Health Impact

Fireworks-Related Deaths/Injuries, 2007

US Total Deaths	US Total Injuries
11	9,800

Source: Centers for Disease Control and Prevention

INDIVIDUAL & TEAM SPORTS



Risks

- Increase risk of mild brain injury (concussion) in high impact sports
- Injuries to joints/limbs are increased due to overexertion and contact sports
- Over exposure to sun/heat increase risk of heat stress and heat stroke
- Failure to properly hydrate can cause exhaustion and increase risk of dehydration

Prevention

- Prevention training for coaches in traumatic brain injury, dehydration, and concussion management
- Always supervise minors in organized sports
- Always use athletic safety equipment during play and ensure it is the right size

Regulations/Guidelines

- In the event a player is suspected to have a mild traumatic brain injury (concussion):
 - Remove athlete from play
 - Ensure athlete is evaluated by an appropriate health care professional
 - Inform athlete's parents or guardians about the known or possible concussion and give them the fact sheet on concussions
 - Allow athlete to return to play only with permission from an appropriate health care professional
- For more information on concussions please visit: <http://www.cdc.gov/concussion/sports/>



For every 20 minutes of play, kids over 90 lbs should drink 8 oz of water.

-Children's Healthcare of Atlanta

Health Impact

Sports Participation and Injuries, United States, 2007

Type of Recreation	Participants	Injuries
Baseball	14,000,000	167,661
Football	17,800,000	455,193
Soccer	13,800,000	198,679

Source: National Safety Council

HIKING AND CLIMBING



In the last 5 years, there were 989 hospitalizations from venomous spider bites in Arkansas.

-Arkansas Department of Health

Risks

- Falls
- Failure to wear safety equipment
- Faulty equipment
- Snake bites, insect bites and stings
- Loss of navigation and/or direction

Prevention

- Always perform safety checks of equipment before each use
- Complete a safety course on proper climbing techniques
- Always use appropriate fall protection on heights above 15 feet
- If a snake is seen while hiking, back away from it slowly and do not touch it
- Always apply insect repellent containing DEET and check often for ticks
- Always travel with a supply kit that contains: first aid kit, compass/GPS, map, flashlight, blanket, batteries, food, clothes, water, and medications

Regulations/Guidelines

- For additional information on popular rock climbing sites in Arkansas and safety tips please visit:

<http://www.arkansas.com/outdoors/Rock-Climbing/>

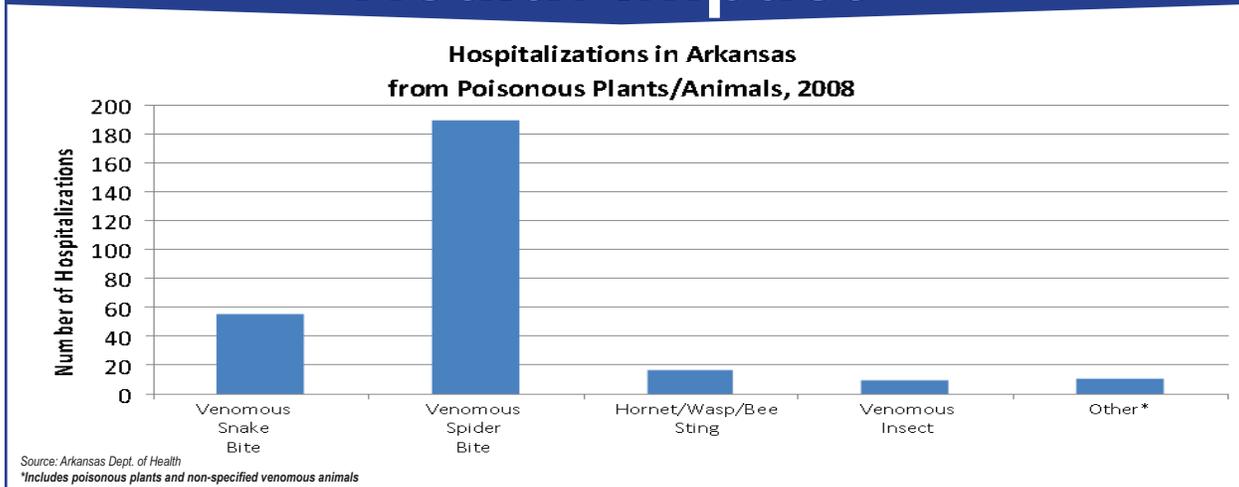
<http://arkansasclimbers.ning.com/>

<http://www.ouachitarocks.com/Destinations/destinations.html>

People who fell from a height over 20 feet were 10 times more likely to be hospitalized than people who fell from 20 feet or lower.

-Nationwide Children's Hospital

Health Impact



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Arkansas State Police

<http://www.asp.state.ar.us>

ATV Safety National Statistics

<http://www.atvsafety.gov/stats.html>

ATV Safety Institute

<http://www.atvsafety.org/>

Centers for Disease Control and Prevention

Drowning: <http://www.cdc.gov/HomeandRecreationalSafety/Water-Safety/waterinjuries-factsheet.htm>

Fireworks: <http://www.cdc.gov/ncipc/factsheets/fworks.htm>

Children's Healthcare of Atlanta

http://www.choa.org/menu/documents/ourservices/heat_illness_prevention.pdf

National Highway Traffic Safety Administration

<http://www.nhtsa.gov/>

National Safety Council: Family Guide to Teen Driver Safety

<http://gdl.kytc.ky.gov/teen%20driver%20experience.pdf>

Nationwide Children's Hospital in Science Daily (2009, July 22). Rock Climbing-related Injuries Increasing. ScienceDaily. Retrieved May 3, 2010, from

http://www.climbing.com/exclusive/above/first_national_study_to_examine_rock_climbing-related_injuries/

Arkansas Department of Health: Trauma in Arkansas Manual

<http://www.healthy.arkansas.gov/programsServices/injuryPreventionControl/TraumaticSystems/Documents/trauma/traumaplan.pdf>

United States Coast Guard

<http://www.uscgboating.org/statistics/default.aspx>

PREVENTING SUMMER INJURIES



Arkansas Department of Health
Keeping Your Hometown Healthy

4815 West Markham Street
Little Rock, AR 72205
Phone: 501-661-2000 or 1-800-462-0599
For more information go to:
www.healthy.arkansas.gov



ARKANSAS CENTER FOR HEALTH IMPROVEMENT

ACHI: 501-526-2244



Injury Prevention Center
archildrens.org

It only takes a moment.

Injury Prevention Center: 1-866-611-3445