



# Child Safety in Rural Settings

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# Revving Up Safety: Hospital-Led Community OHV Education Program for Safe and Responsible Riding

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# Disclosures

Presenters do not have any actual or potential conflict of interest in relation to this program/presentation



## Objectives

- Gain a comprehensive understanding of the term OHV and its significance in injury prevention efforts.
- Explore effective strategies to engage the OHV community and ensure that safety information is well-received.
- Discover approaches to foster community ownership and make the initiative suitable for sustained impact.

# Introduction

Renown Children's Hospital has experienced a substantial rise in OHV-related injuries in our pediatric community. Over the past three years, there has been a concerning rise in both the frequency and severity of injuries sustained by pediatric patients involved in OHV crashes. As an organization, we have identified OHV injury prevention as a top priority in our efforts to ensure the safety of our community.



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CHILDREN'S HOSPITAL



OHV by  
definition:  
Off-Highway  
Vehicle



WHAT IS CLASSIFIED AS AN  
OHV?

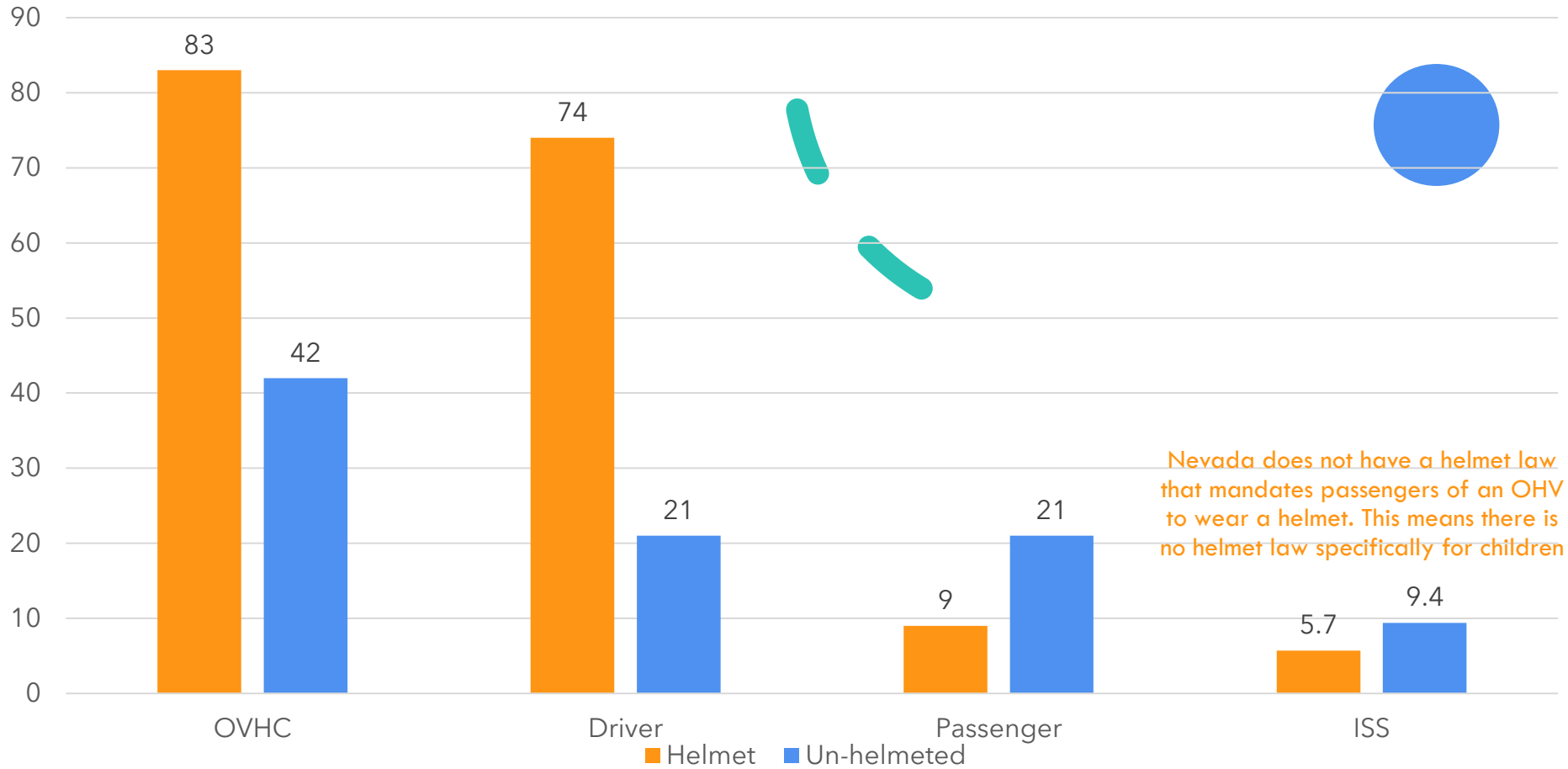
Off-highway vehicle means a motor vehicle that is designed primarily for off-highway and all-terrain use. The term includes, but is not limited to:

OHVs include all-terrain vehicles (ATVs), dirt bikes, sand rails, recreation utility vehicles (RUVs), golf carts, snowmobiles, go-carts, rock crawlers, recreational off-highway vehicles (ROVs) also known as Side by Sides and 4x4s.

Clear as Mud  
Right?



# “MVC” vs OHVC Breakdown





# Find Your Local Trauma Center

<https://www.amtrauma.org/general/custom.asp?page=findtraumacenter>



**About 47% of injuries were located beyond a 50-mile radius from a level II trauma center, suggesting a transport time of over 60 minutes.**

# Community Partnerships



Nevada Offroad Association



Nevada Outdoor School



Tread Lightly!



Local BLM

# Intervention Strategy

1

## Awareness

We shared local and national data on the increasing number of

pediatric traumatic injuries involving OHVs

2

## Education

Through our partnership with the Nevada Outdoor School, we

educated caregivers and youth on safe riding practices in the OHV community

3

## Resources

Provided and responsibly distributed youth helmets to families

that agree to participate in OHV safety education



<b>OHV Helmets Distributed</b>	<b>Caregivers Reached</b>	<b>Survey Responses</b>
40	250	91

# OHV Safety Survey



# Survey Results [91 Responses]

## Caregivers

- 60 % had  $\geq 10$  yrs of experience.
- 65% admitted to having been and/or knowing someone how had been in an OHV crash
- 60 % reported not always wearing a helmet while riding

## Why not?

Inconvenient  
Independence  
Lower Perceived Risk on 4 Wheels  
Don't Need It

## Children

- 50% had children ride or drive OHVs
- 65% of the children identified as OHV were under the age of 11 yrs old
- 25% reported the children don't always wear a helmet while riding

## Why not?

Inconvenient  
Independence  
Don't Need It  
Don't Have One

# What suggestions do you have for improving OHV safety for children (under the age of 18 yrs old)?

Answered: 61 Skipped: 33

Mandatory OHV safety class and a permit to ride like a drivers license for OHV

Proper education/training, parental oversight, enforce infractions of rules/laws

education ok with mandatory helmet use

Education on Safe Riding Practices

Awareness & Resources

Awareness & Education

Helmet Give Away Events

Awareness and Education

Awareness & Education

Awareness on Risk of Injury for Children on OHVs

Make people Aware of Risk & Educate on Safer Practices

Training for ONLY new riders / Don't want to be forced into wearing a helmet

Outreach & Safety Seats

Options for Children's Safety Gear Specific for Side by Side

Appropriate Equipment & No Alcohol

None. Helment rules should apply motorcycles and 4 wheelers, etc, not enclosed side by sides. Helment rules should apply to the very young, not adults and children that are 16+ year old. These decisions should be up to the parents and families to make, not the government.

Classes for kids

Educate the parents.

A ohv class like utah

Show them how to drive safely by driving with care and caution. Reckless driving teaches more reckless driving

You could step on their civil rights.

Training parents!!!

Safety Course

proper fit if driving and take riding training and safety class.

They should take the same training as their parents or guardians if age appropriate and be just as aware of their situational surroundings as the driver within reason.

I believe helmets for children save lives, they have proven that for bicycles and motorbikes. If I had any child riding with me I would want them to wear a helmet.

None

All the gear all the time

I was always taught No helmet no riding no exceptions!

Driver training and certification

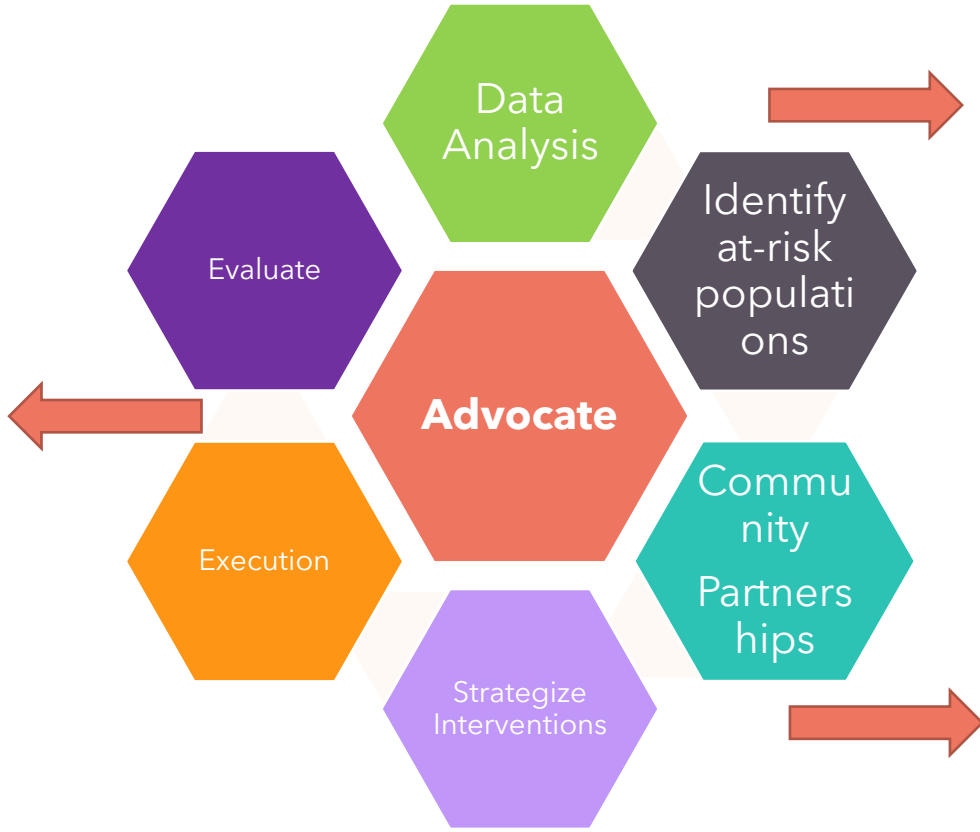
Four point restraints and full doors or screens so that arms and legs stay inside. We always wear helmets when on our motorcycle, and always wear four point restraint seat belts when in our SxS. Restraints and roll cage kept us safe in our crash.

Education and limit speed

# Timeline



**MARCH 2023- MAY 2023**  
 Our monthly safety workgroup created an initiative to engage the OHV community in awareness, education, and resource access for OHV safety. We responsibly distributed free OHV youth helmets, incentivizing community involvement in safety conversations. To reach the highest-risk areas, we brought education directly to the OHV community.



**NOVEMBER 2022**  
 The need became evident during the summer and fall of 2022, prompting us to conduct a more thorough analysis of the data. Upon discovering the underreporting of actual OHV injuries, we made a commitment to delve deeper into understanding injury trends and identifying at-risk populations.

**NOVEMBER 2022 - FEBRUARY 2023**  
 The data matched our clinical observations. We collaborated with OHV community leaders and nonprofits to deliver credible safety messaging. Recognizing their resistance to outsiders, we ensured the information came from within the OHV community for better reception.



# Next Steps

## Awareness

- Seek further partnerships within the OHV community
- Continue to engage with the OHV community about the dangers of OHVs

## Educate

- Seek platforms to deliver OHV safety information
- Refer families to the Nevada Outdoor School for Safety OHV education courses
- Engage the Hunt and Game Industry to help provide education

## Resources

- Helmet Distribution Events
- Partnership with local OHV dealers to share educational material and/or incentives for safer riding practices
- MORE CARROT and PERSISTANCE

# Summary

- Follow the Data
- Build partnerships with members of the OHV community
- Collaborate on a tangible intervention strategy
  - Awareness
  - Education
  - Resources
- PERSISTANCE!!!





Thank you

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# Too Big To Handle

## ATVs Pose Dangers to Children



SAFE KIDS  
Grand Forks

# What Is An ATV?

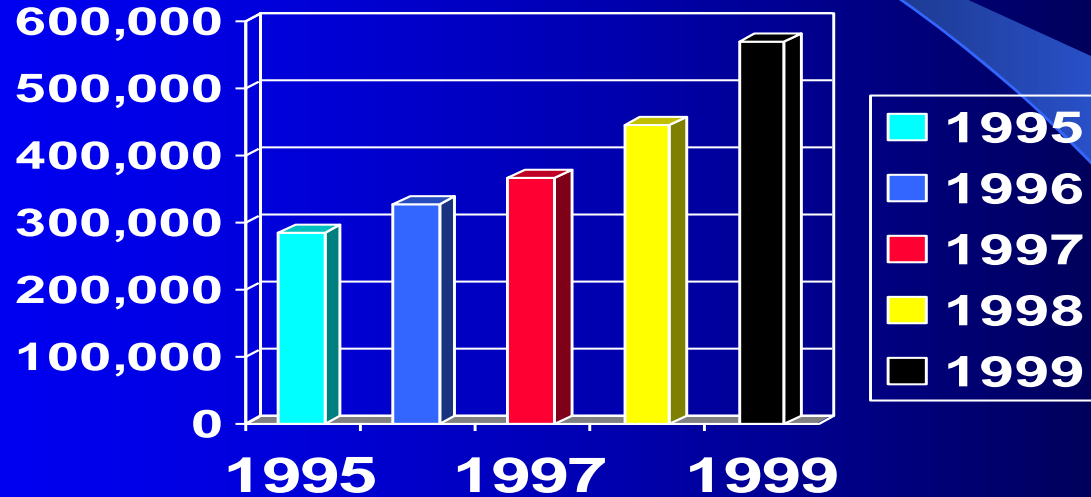
- All-terrain vehicles (ATVs) are motorized vehicles with three or four wheels and large, low pressure tires.
- They are designed to be used by a single operator in off-road areas, not on public roads.



There are 8 million ATVs in use. *Safe Kids USA*

## New Unit ATV Sales

Source: Motorcycle  
Industry Council



ND Parks & Recreation identifies there are 11,681  
ATVs registered in North Dakota for 2001-2003.

# Use of ATVs Increasing

- No longer used just for farming and ranching.

Only 9% of the ATVs involved in this region's injuries were purchased for work purposes.  
32% were purchased for recreational purposes.  
36% are used for work and play.



- Now a popular recreational activity.

# The Appeal ....



- Built for speed, and designed with flair and finesse, all-terrain vehicles are also simply loads of fun to ride, enthusiasts say.
- *“I like to fly through the air,”* said one 11-year old ATV rider.



# Why So Popular?

- It is common to see children, even very young children, riding ATVS on farms, trails and at the lake.

Only 1 local injury happened at the lake.  
65% happened in rural fields or yards.

- They are a “special gift choice” for birthdays & Christmas.
- Many families “Go ATVing” together.
- Prices are decreasing so they are more affordable to families.



# The Problem

For a child, a fun ride  
can quickly turn catastrophic.

- ATVs can reach speeds of up to 75 mph and weigh as much as 800 pounds.
- A full size ATV can have an engine larger than 600 cc.

In our region, 72% of the injuries occurred to children using an adult sized ATV with an engine  $\geq 90$  cc.

Parents owned 94% of these ATVs & 82% of these children had permission to operate the ATV.



# Children Do Not Have the Skills to Handle ATVs

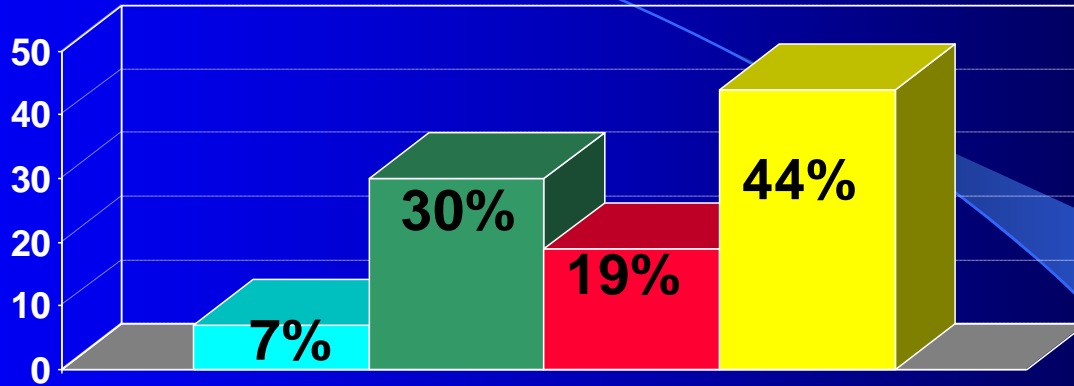
- Children under the age of 16 do not have the cognitive and physical capabilities to operate these vehicles safely.
- Children lose control & fall from the vehicle, they collide with stationary or moving objects, or the vehicle rolls over on uneven surfaces.



33% of the local injuries were the result of running into something.

37% resulted from the ATV tipping.

## Age for Local Injuries



■ < 5 yrs. ■ 5-8 yrs. ■ 9-12 yrs. ■ 13-16 yrs.

### In our region:

- 23% of the injuries happened to 15 year old boys
- 74% of all injuries happened to boys, 26% to girls
- 93% of those injured were Caucasian

# Common ATV-Related Injuries

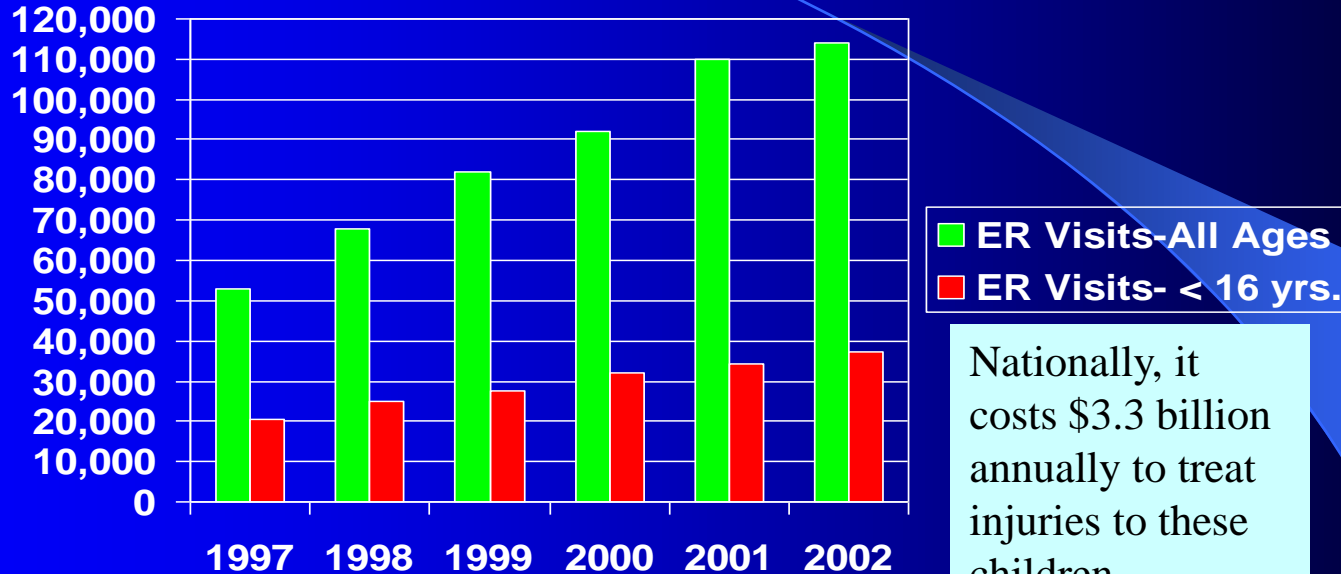
- Clavicle/extremity fractures and dislocations
- Abrasions & lacerations
- Abdominal trauma
- Head injuries
- Spinal trauma



In our region the types of injuries are:

U/E Fracture	15%	L/E Fracture	26%
Lacerations	24%	Head Injury	9%
Neck/Back	15%	Abdominal	12%

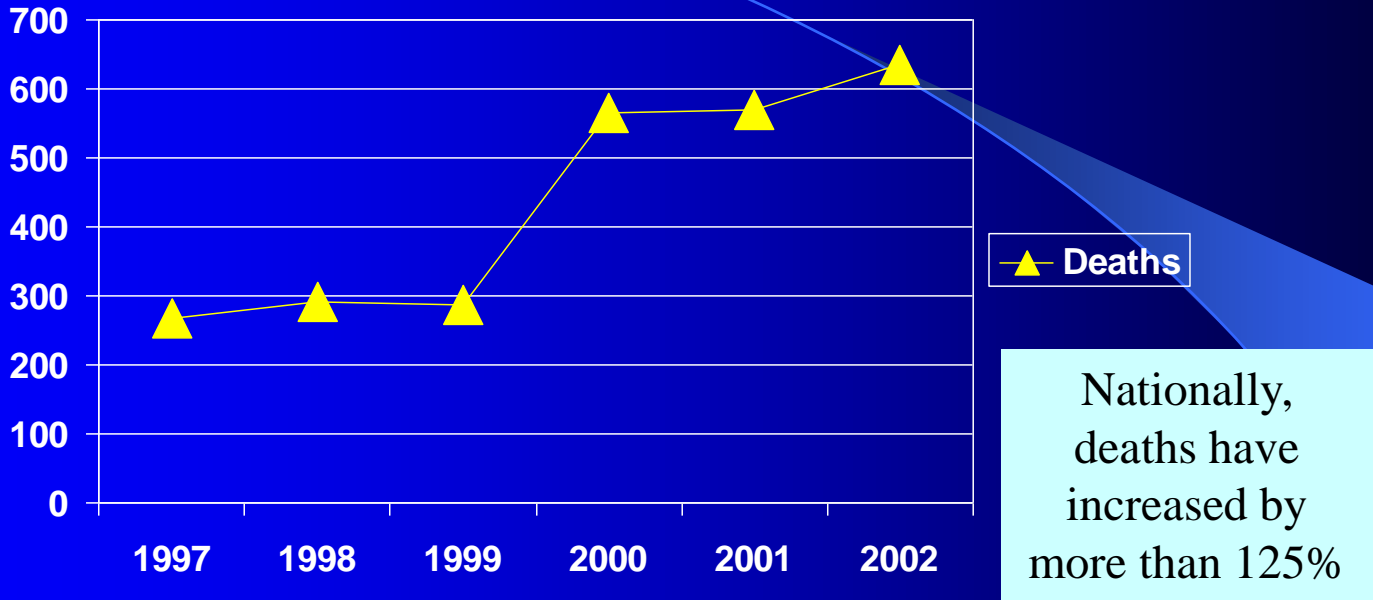
# Consumer Product Safety Commission Statistics



Nationally, it costs \$3.3 billion annually to treat injuries to these children.

Injuries have more than doubled in the past 6 years due to bigger, faster machines & increased frequency of use!

# More CPSC Statistics



Children account for 35 % of the ATV deaths.

US Consumer Product Safety Commission

# Risk Factors for Injury

- No helmet use
- Carrying one or more passengers
- Lack of mature judgment
- Lack of adequate strength and coordination
- ATV too big for the rider's size/age





# Population at Risk

- Children under 16 years:
  - 14% of all drivers but 40% of injuries & 35% of deaths
- Males over-represented
  - 3 times more likely to be injured
  - Younger males most at risk
- Most children (95%) are operating vehicles rated for adults



# Just the Facts!

- More than 174 children were killed last year & more than 34,800 were seriously injured.
- Nationwide, 1,714 children under 16 were killed in ATV crashes between 1982 and 2001 – that's almost four out of every 10 ATV fatalities. 799 of them were under age 12.



# ATVs are not a toy!



82% of the children injured in our region had parental permission to operate the ATV and 59% were being supervised\* when injured.

\*Parent knew where child was riding but most were not on the scene.

Parents mistake these machines as toys, and never think of the dangers associated with this powerful equipment.

# The Current Safety Approach Industry and Federal Government

- Recommendation that children under 16 not ride adult-sized ATVs
- Warning labels on ATVs & small print warnings in advertising



# The Current Safety Approach Industry and Federal Government

- Recommend proper safety gear
  - ATV helmet
  - Durable long-sleeved shirts and long pants
  - Goggles
  - Gloves
  - Boots
  - Identification flags



# The Current Safety Approach

## Industry and Federal Government

- General Safety Information
  - Take an approved safety course
  - Do not carry passengers
  - Never ride on public roads or paved surfaces
  - Ride only on designated trails
  - Throttle limiters
  - Never operate an ATV under the influence of drugs or alcohol
- Ban sales of 3-wheeled ATVS



For the children injured locally, only 4 watched a training video & 3 attended an ATV class. 25% of them had < 2 yrs. experience driving.

# Recent News Stories



## Locally:

More injuries happen in May at the start of the peak riding season.

Injuries commonly occur on Sunday afternoon followed by Friday evening..

- There have been several recent fatalities in ND & MN
- Rates of injuries & deaths are 2X higher in states without safety requirements (Dr. Jim Helmkamp, Center for Rural Emergency Medicine at West Virginia University)

# Current ND Law

- ND law does not adequately protect children on ATVs—it applies to public access areas, not private property.
  - ATVs must be registered if operated in public access areas.
  - A valid driver’s license or safety course permit is required for public access areas.
  - Children 12-16 years can get a operators permit by completing a safety course & written exam.



- Infractions are rarely enforced because they are considered “farm equipment”.
  - Fine is only \$20-\$50.



# Recommendations

Children under 16 should not  
ride or operate ATVs!

- Enact laws to:
  - Ban children younger than 16 from operating an ATV (American Academy of Pediatrics, American Academy of Orthopedic Surgeons, Consumer Federation of America, Consumers Union)
  - Institute licensing of ATV drivers
  - Require training for all ATV operators



# Summary

- ATV injuries experienced by children are common and serious.
- More education is needed to alert parents about the risk to children.
- Advocate for increased use of helmets and other safety practices to reduce injuries and deaths.
- Enforce existing laws & enact stricter ones.

# Thank You!



For helping us keep our children  
safe and injury free!

For more information contact...



**Safe Kids**®

**Grand Forks**

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Thank you.



SAFE  
KIDS  
WORLDWIDE.