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**TESTIMONY OF MARY DENISE DOWD, MD, MPH, FAAP  
ON BEHALF OF THE AMERICAN ACADEMY OF PEDIATRICS**

**OVERSIGHT HEARING ON THE IMPACTS OF  
UNMANAGED OFF-ROAD VEHICLES ON FEDERAL LANDS**

**NATURAL RESOURCES SUBCOMMITTEES ON  
NATIONAL PARKS, FORESTS, AND PUBLIC LANDS  
HEARING ON OFF-ROAD VEHICLES**

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I appreciate this opportunity to present testimony on behalf of the American Academy of Pediatrics (AAP) before the Natural Resources Subcommittee on National Parks, Forests and Public Lands at this oversight hearing on the impacts of unmanaged off-road vehicles on federal lands. The American Academy of Pediatrics is a non-profit professional organization of 63,000 primary care pediatricians, pediatric medical sub-specialists, and pediatric surgical specialists dedicated to the health, safety, and wellbeing of infants, children, adolescents, and young adults. I am proud to serve as one of the nine members of the Academy's Committee on Injury, Violence, and Poison Prevention, which oversees the Academy's policy regarding transportation safety and injury prevention.

As the Resources Committee examines the enforcement of laws and rules on the use of off-highway vehicles on public lands, the American Academy of Pediatrics urges you to consider not only recreational and environmental issues, but also health and safety issues for our children. All-terrain vehicles (ATVs), minibikes, personal watercraft (PWC), snowmobiles, and other off-road vehicles pose unique dangers to children who ride or operate them.<sup>1</sup> In fact, from the perspective of injury prevention, this situation creates the perfect recipe for tragedy due to the confluence of multiple high risk factors:

- Person Factors: Children lack the physical and developmental maturity to operate an off-road vehicle safely, especially in terms of judgement.
- Environment Factors: Public lands are often difficult to access for rescue crews due to distance and challenging terrain.
- “Agent” Factors: ATVs, snowmobiles and other off-road vehicles allow high rates of speed, weigh a great deal and completely expose the driver. Some, like ATVs, have a tendency to roll if not used properly. PWC operation is different from other motorized vehicles and can confuse operators, especially in crisis circumstances.

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<sup>1</sup> Committee on Injury and Poison Prevention. All-Terrain Vehicle Injury Prevention: Two-, Three-, and Four-Wheeled Unlicensed Motor Vehicles. *Pediatrics*, 2000;105 (6):1352-1354.

## ALL-TERRAIN VEHICLES

Allow me to share with you the statistics regarding children and ATVs:

- Between 1982 and 2006, over 2,300 children were killed in ATV crashes. This is the equivalent of five 747 jets full of children, or 35 fully loaded schoolbuses.
- In 2006 alone, at least 111 children perished due to injuries sustained when riding an ATV.<sup>2</sup>
- An estimated 39,300 children were treated in emergency departments for ATV-related injuries in 2006. Serious injuries among children have ranged from over 32,000 to over 44,000 every year since 2000.<sup>3</sup> Since 1990, over 485,000 children have been treated in hospitals for ATV-related injuries – equivalent to the entire population of Atlanta, Georgia.
- Injuries sustained by children riding an adult-sized ATV are often very serious, including severe brain, spinal, abdominal, and complicated orthopedic injuries. ATV riding involves almost twice the risk of injury serious enough to require hospitalization than any other activity studied. This is true even for activities generally considered to be high risk, including football (62% higher risk for ATV riding), snowboarding (110% higher risk for ATV riding) and paintball (320% higher risk for ATV riding).<sup>4</sup>
- Children lack the strength, coordination, and judgement to operate ATVs safely. In a Consumer Product Safety Commission (CPSC) study, the primary causes of children's deaths on an ATV were overturning, collision with a stationary object, and other collisions.<sup>5</sup> Each of these implies the inability to control the vehicle properly.

I can also speak to the dangers of ATVs from my personal clinical experience. I am a pediatric emergency physician and medical director of the Center for Childhood Safety at the Children's Mercy Hospital in Kansas City, Missouri. As the region's only pediatric trauma center, we receive

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<sup>2</sup> Consumer Product Safety Commission, *2006 Annual Report of ATV Deaths and Injuries*, February 2008, Table 3.

<sup>3</sup> Consumer Product Safety Commission, *2006 Annual Report of ATV Deaths and Injuries*, February 2008, Table 5.

<sup>4</sup> Consumer Product Safety Commission, Briefing Package on Petition No. CP-02-4/HP-02-1, "Request to Ban All-Terrain Vehicles Sold for Use by Children under 16 Years Old," February 2005, p.158.

<sup>5</sup> Consumer Product Safety Commission, Briefing Package on Petition No. CP-02-4/HP-02-1, "Request to Ban All-Terrain Vehicles Sold for Use by Children under 16 Years Old," February 2005, p.110.

and treat a large number of injured children from urban, suburban, and rural areas. My years of ER experience have taught me what to expect upon hearing the report of an injured child from the incoming ambulance or flight crew. Like the rest of my colleagues, I know when the crew tells us, “12-year-old in an ATV crash,” it is highly likely that our team will soon be treating a severely injured child with multiple serious injuries. With ATV injuries, experience has taught us to expect the worst.

For instance, during one July 4 weekend, an 8-year-old driving an ATV crashed into another ATV. He sustained severe brain and facial injuries when his head was impaled on the handlebar of the second vehicle. He also broke one leg. Upon admission to our ER, the boy was unconscious and unresponsive. A metal bar -- part of the ATV brake handle -- protruded from the left side of his face, near his cheekbone, with brain extruding from the wound. Bone fragments were embedded in the end of the bar. One entire side of his face was disfigured with severe lacerations. A CT scan of his head showed extensive cerebral swelling and bruising with multiple broken blood vessels bleeding into his brain. Sadly, this child did not survive his injuries.

Despite the alarming increases in ATV deaths and injuries, government regulation continues to be all but absent. No ongoing review has ever been undertaken regarding possible additional or revised regulations, in spite of changes in the patterns of ATV design and use. In 2000, the Academy’s Committee on Injury and Poison Prevention (on which I serve) reviewed the evidence regarding children and ATVs and reaffirmed its long-standing recommendation that no child under the age of 16 should operate or ride an ATV.<sup>6</sup>

The Natural Resources Committee has the power to reduce ATV-related deaths and injuries among our nation’s children. If the federal government adopted limitations on ATV use by children on public lands, this would serve as both a powerful message and a model for states and localities. The attention and publicity generated would educate parents, who are often unaware of the safety risks

of these vehicles. Moreover, this committee could have a significant impact on a key issue regarding ATV injuries. When an ATV crash occurs on public land in a remote, unpaved, or inaccessible area, precious hours can be wasted in locating, reaching, and transporting the victim to medical care. Trauma surgeons refer to the “golden hour” after injury as the critical window for initiating medical treatment. By placing meaningful restrictions on the use of ATVs by children on public lands, this committee could reduce the likelihood that children would die of preventable and treatable injuries.

Today, the operation of ATVs on federal lands is governed largely by the laws of the state in which the land is located. If a park or parcel covers portions of more than one state, the laws may differ depending upon one’s location in the park. For example, Yellowstone National Park is set mostly in Wyoming, but also overlaps into Montana and Idaho. Idaho requires all ATV riders under the age of 18 to wear a helmet; Wyoming requires helmets for those under age 18 on an “enrolled road;” and Montana has no helmet law at all.

The American Academy of Pediatrics therefore calls upon the Committee on Natural Resources to direct the Department of the Interior and the Department of Agriculture to adopt a uniform set of laws and guidelines for the operation of ATVs on all federal lands. Rules for riding ATVs should not vary depending upon whether one is riding in a national park, a national forest, or land controlled by any other federal agency. Uniform laws and guidelines would assist rangers in their enforcement activities by eliminating uncertainty and improving safety.

### **POLICY RECOMMENDATIONS**

The American Academy of Pediatrics urges the adoption of the following laws and guidelines for the operation of ATVs on all federal lands:

***Children under 16 should not operate ATVs.*** An ATV can weigh in excess of 500 pounds and travel at speeds of over 60 miles per hour. Children do not possess the physical strength,

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<sup>6</sup> Committee on Injury and Poison Prevention. All-Terrain Vehicle Injury Prevention: Two-, Three-, and Four-Wheeled

coordination, or judgment necessary to pilot these vehicles safely.<sup>7</sup> When a child crashes on one of these large machines, it often rolls over them or traps them beneath it. The result is devastating injuries, including crushed internal organs and multiple broken bones.

***A driver's license should be required to operate an ATV on public lands.*** The federal government does not allow children to drive cars in national forests or parks. Yet an unlicensed child is permitted to drive an ATV at high speeds, without a helmet, on unpaved surfaces in those same areas. This situation defies all logic. The safe use of ATVs requires the same or greater skill, judgment, and experience as needed to operate an automobile. A driver's license should be required to operate any motorized vehicle on public lands.

***Alcohol use by operators of ATVs should be prohibited, with zero tolerance among 16- to 20-year-old operators.*** Just as alcohol- or drug-impaired operation of automobiles threatens the lives of drivers, passengers, and bystanders and is prohibited, operation of any motorized vehicle under the influence of alcohol or drugs should be forbidden. Young drivers under the influence of alcohol or drugs are particularly dangerous because of their relative inexperience and poorer judgment. Alcohol use by those under the age of 21 is already banned by federal and state laws, and zero tolerance policies for underage ATV operators on public lands would strengthen the prohibition and send a strong message to parents and adolescents.

***ATV use should be banned on paved roads in public lands.*** All-terrain vehicles lack the features necessary to operate safely on roads and highways. Most have few or no lights, mirrors, signals or safety features. A significant number of crashes occur on paved roads where cars or trucks cannot see the ATV, or where ATV operators make unexpected maneuvers. In the CPSC survey on ATV

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Unlicensed Motor Vehicles. *Pediatrics*, 2000;105 (6):1352-1354.

<sup>7</sup> Consumer Product Safety Commission, Briefing Package on Petition No. CP-02-4/HP-02-1, "Request to Ban All-Terrain Vehicles Sold for Use by Children under 16 Years Old," February 2005, p.17.

crashes mentioned earlier, the highest number of fatalities occurred on paved surfaces.<sup>8</sup> Use of ATVs should be allowed only on designated, well-maintained trails.

***Appropriate protective gear should be required to operate an ATV on public lands.*** Research regarding motorcycles and bicycles tells us that helmets save lives and that helmet laws result in greater helmet use.<sup>9,10,11</sup> The federal government should take a leadership role and require ATV riders on public lands to wear a helmet.

***Carrying passengers on an ATV should be prohibited.*** The vast majority of ATVs are not designed to carry passengers. An ATV's large seat is meant to allow a rider to shift his or her weight and maneuver adequately. Children can easily be thrown from these vehicles at high speeds. The Academy is even aware of cases where parents drive ATVs with children strapped onto the rear in a car seat, in the tragically mistaken perception that this is somehow safe. In a recent CPSC analysis of 184 child deaths involving ATVs, the agency concluded that, "CPSC has long recommended against the carrying of passengers on ATVs, and yet 24 percent of the deceased children were riding as passengers, and 45 percent of the fatalities occurred in multiple rider situations. Certainly, if CPSC's recommendations had been followed, the deaths of at least 45 child passengers would not have occurred."<sup>12</sup>

***ATVs should not be operated before sunrise or after sunset.*** ATVs are challenging to operate safely even under ideal conditions. Darkness adds an unacceptable degree of additional risk, due to both unseen hazards and the difficulty of being seen by other vehicles. The use of ATVs in low light or darkness should be prohibited.

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<sup>8</sup> Consumer Product Safety Commission, Briefing Package on Petition No. CP-02-4/HP-02-1, "Request to Ban All-Terrain Vehicles Sold for Use by Children under 16 Years Old," February 2005, p.108.

<sup>9</sup> Kraus JF, Peek C, McArthur DL, Williams A. The effect of the 1992 California motorcycle helmet use law on motorcycle crash fatalities and injuries. *JAMA*. 1994;272:1506-1511.

<sup>10</sup> Watson GS, Zador PH, Wilks A. Helmet use, helmet laws, and motorcyclist fatalities. *Am J Public Health*. 1981;71:297-300.

<sup>11</sup> Committee on Injury and Poison Prevention. Bike Helmets. *Pediatrics*, 2001;108(4) 1030-32.

<sup>12</sup> Consumer Product Safety Commission, Briefing Package on Petition No. CP-02-4/HP-02-1, "Request to Ban All-Terrain Vehicles Sold for Use by Children under 16 Years Old," February 2005, p.110.

The popularity of all forms of motorized recreational vehicles raises serious questions about safety, particularly on public lands. The vast majority of concerns elucidated about ATVs also apply to other off-road vehicles. It is difficult to overemphasize the risk involved in allowing immature children to operate these dangerous machines in remote, unsupervised, and potentially hazardous circumstances.

## **CONCLUSION**

In conclusion, the American Academy of Pediatrics urges you to support meaningful restrictions on children riding or operating ATVs and other off-road vehicles on public lands. Clearly, ATVs pose a significant hazard to children who ride them. This fact is indisputable. The cost to society is also high, not only in regard to loss of life and health but in actual dollars. In 2005, the journal *Pediatrics* published a study in which my colleagues estimated that total hospital charges for children's ATV injuries over a two-year period exceeded \$74 million.<sup>13</sup> If no further action occurs this year, we can expect over 100 children to die and over 35,000 to be treated in the emergency room again next year due to ATV-related incidents.

Our current regulatory systems and educational programs are not protecting children from tragic ATV deaths and injuries. I hope this committee will take a leadership role on this issue and ensure the safety of children on public lands by supporting the common-sense measures recommended by the American Academy of Pediatrics. Again, thank you for this opportunity to testify. I stand ready to answer any questions you may have.

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<sup>13</sup> Killingsworth, Jeffrey et.al., "National Hospitalization Impact of Pediatric All-Terrain Vehicle Injuries," *Pediatrics*, 2005;115(3):e316-e321.