

TRANSPORTATION-RELATED TBI IN UTAH

Facts about transportation-related Traumatic Brain Injury (TBI) in Utah:

- Transportation-related TBIs had the second highest rate of TBI (27.4 per 100,000) next to the rate for falls (46.3 per 100,000) in 2005.¹
- Only 40% who sustained a transportation-related traumatic brain injury, were tested for alcohol, but of those that were tested, 31% tested positive.¹



2005 Traumatic Brain Injury Data

WHO

- Overall males sustained nearly twice as many transportation-related TBIs as females.¹
- Males ages 10-19 suffered the highest rate at 87.1 per 100,000 population.¹
- Males ages 20-29 had the second highest rate at 65.3 per 100,000 population.¹
- Females ages 10-19 had the third highest rate with 60.3 per 100,000 population.¹

HOW

Transportation-related TBIs by Cause ¹			
Cause	Number*	Percent	Rate per 100,000**
Motor Vehicle Occupant	358	67.2%	25.9
Motorcycle	66	12.4%	4.8
Pedestrian	50	9.4%	3.6
ATV/Snowmobile	44	8.3%	3.2
Bicycle	15	2.8%	1.1
All	533	100%	27.4

* N=533 Numbers in table represent sampled cases only.
 ** Rates are adjusted to represent all TBIs.

WHERE

- Transportation-related TBI rates were highest in geographic regions designated as frontier (75.9 per 100,000). Frontier counties are those counties with less than 6 people per square mile.
- Second highest transportation-related TBI rates were in rural areas (45.2 per 100,000) followed by urban (30.5 per 100,000).¹

HOW MUCH

- In 2005, hospital and emergency department charges for transportation-related TBIs totaled \$26 million or 41% of TBI medical costs.¹

What is TBI?

Includes one or more of the following:

- Observed or self-reported unconsciousness or decreased level of consciousness;
- Amnesia;
- Skull fracture;
- Changes in motor function, sensory function, reflexes, speech;
- Seizures; or
- Hemorrhages, bruising or other trauma of the brain.

TBI PREVENTION

Motor Vehicles

- Always wear a seat belt
- Put all children in the correct car seat for their age, height and weight.
- Children should ride in the back seat until age 12.
- Don't drive drunk, drugged or drowsy
- Always wear a helmet when riding motorcycles, ATVs, or snowmobiles
- Children should not operate motorcycles, ATVs, or snowmobiles



TRANSPORTATION-RELATED TBI PREVENTION TIPS²

Bicycling

- Always wear a bicycle helmet
- If riding at night, have a red light, front head light and side reflectors
- Follow the rules of the road
 - Ride on the right side of the road in the same direction as traffic
 - Use hand signals
 - Obey all traffic signals and lane markings
 - Stop and look both ways before entering a street
- Watch for automobiles exiting or entering driveways and parking lots
- Always stop, look left-right-left and listen for traffic before crossing at stop signs, stoplights and busy streets
- Check that the road is clear before turning or changing lanes
- Stop for pedestrians at crosswalks
- To get across a busy street, use the nearest intersection or crosswalk (if using the crosswalk either walk the bike or make sure and yield to pedestrians in the crosswalk)
- Ride 2-3 feet away from parked vehicles (to avoid opening doors)
- Ride single file, the front bicyclist should communicate upcoming hazards to any rear bicyclists and the rear bicyclist should always pay attention to the bicyclist just ahead
- Walk the bike when nervous about traffic or tired

Off Highway Vehicles (OHVs)

- Wear a helmet
- Use the buddy system; never ride alone
- Avoid riding on paved roads
- Use moderate speed and only ride during daylight
- OHV's are designed for one person only; never take a passenger
- Take a required *Know Before You Go* training course through Utah State Parks prior to operating an OHV, for more information visit www.stateparks.utah.gov
- Obey the law; it is illegal for children under 8 years of age to operate an OHV on public land



Snowmobiling

- Stay on groomed and marked trails away from roads, waterways, railroads and pedestrians
- Always wear a protective helmet designed and tested for snowmobile use. Wear goggles and boots to protect eyes and feet
- Use head lights and rear lights as well as wear reflective strips on clothing after dark
- Avoid riding over frozen water
- Refuse to ride with a driver who has been drinking alcohol
- Snowmobile only in areas free of wire or chain fences



Pedestrian

- Always stop at the curb or edge of the road; never run into the street
- Stop and look left-right-left before crossing
- Walk on the sidewalk, not the road
- Walk facing traffic if there is no sidewalk
- Learn the signs that a parked car is about to move; engine noise, backup lights and a driver behind the wheel
- Be extra careful around driveways
- Wear reflective clothing or strips when out after dark
- Use crosswalks where available and don't make mid block crossings

References

¹ Utah Department of Health, Violence & Injury Prevention Program, TBI database

² Brain Injury Association of America *Winter Safety for Children* brochure. <http://www.biau.org/>