

## Causes of Brain Injury

### **Falls**

Falls continues to be the leading cause of traumatic brain injury (TBI) (35.2%) in the United States. Falls cause half (50%) of the TBIs among children ages 0 to 14 years and 61 percent of all TBIs among adults ages 65 years and older.

### **Motor Vehicle-Traffic Crashes**

Among all age groups, motor vehicle crashes and traffic-related incidents were the second leading cause of TBI (17.3%) and resulted in the largest percentage of TBI-related deaths (31.8%). The highest rates among adults ages 20 to 24 years.

### **Struck By/Against Events**

Struck by/against events, which include colliding with a moving or stationary object, are the second leading cause of TBI among children ages 0 to 14 years, at 25 percent.

### **Distracted Walking**

Reports of injuries to distracted walkers treated at hospital emergency rooms have more than **quadrupled** in the past seven years and are almost certainly underreported. There has been a spike in pedestrians killed and injured in traffic accidents.

### **Assault**

Assaults produce 10 percent of TBIs in the general population; they account for only 2.9 percent in children ages 0 to 14 years and 1 percent in adult's ages 65 years old and older.

### **Unknown**

21 percent of TBIs have other or unknown causes.

- Firearm use is the leading cause of death related to TBI.
- Nine out of 10 people with a firearm-related TBI die.
- Nearly two thirds of firearm-related TBIs are classified as suicidal in intent.

Blasts are a leading cause of TBI for active duty military personnel in war zones.

## Fall Prevention:

Children's Injuries are preventable: Protect the Ones You Love

### **Play Safely**

Make sure the surface on your child's playground is made of shock-absorbing material, such as hardwood mulch or sand.

# Injury Prevention

## Make your Home Safer

- Install window guards to keep young children from falling out of open windows.
- Use safety gates at the top and bottom of stairs when young children are around.

## Supervision is Key

Supervise young children at all times around fall hazards, such as stairs and playground equipment, whether you're at home or out to play.

## Keep Sports Safe

Make sure your child wears protective gear during sports and recreation. For example, when in-line skating, use wrist guards, knee and elbow pads and a helmet.

- Wear a **helmet** and make sure your children wear helmets when:
  - Riding a bike, motorcycle, snowmobile, scooter or all-terrain vehicle
  - Playing a contact sport, such as football, ice hockey, or boxing
  - Using in-line skates or riding a skateboard
  - Batting and running bases in baseball or softball
  - Riding a horse
  - Skiing or snowboarding
- Play responsibly, follow the rules and don't use unnecessary force.
- For in-line skating, skateboards don't go at night, obey road rules, stay off the streets and don't hitch a ride behind a vehicle.
- Water safety
  - Always swim with a buddy.
  - Never drink alcohol and swim.
  - Never dive in water less than 9 feet deep. Enter water feet first in unfamiliar water bodies.
  - Use life jackets when boating and for water sports.
  - Watch for undercurrents when swimming in the ocean.

## Adult Safety

### Distracted walking – leading causes:

- Looking down to text or play a video game while walking.
- Using headphones
- Talking on a cell phone
- A CBS News headline from July 30, 2012 reads as follows:

### Distracted walking a growing phone-related danger

# Injury Prevention



(AP) WASHINGTON - A young man talking on a cellphone meanders along the edge of a lonely train platform at night. Suddenly he stumbles, loses his balance and pitches over the side, landing head first on the tracks.

The following highway sign was developed by the Delaware State office of Highway Safety: "Walk Smart. Arrive Alive."

## Senior Safety

Make living areas safer for seniors, by:

- Removing tripping hazards such as throw rugs and clutter in walkways
- Using nonslip mats in the bathtub and on shower floors; Installing grab bars next to the toilet and in the tub or shower
- Installing handrails on both sides of stairways
- Improving lighting throughout the home
- Maintaining a regular physical activity program to improve strength and balance
- Have your vision checked regularly
- Have your health care provider review your medicines regularly
- Avoid rickety ladders

## Motor Vehicular Accidents and Driving Safety

- **Buckle Up**
  - Wear a seat belt every time you drive or ride in a motor vehicle.
  - Buckle your child in the car using a child safety seat, booster seat, or seat belt according to child's age, height, and weight.  
[http://www.cdc.gov/MotorVehicleSafety/Child\\_Passenger\\_Safety/index.html](http://www.cdc.gov/MotorVehicleSafety/Child_Passenger_Safety/index.html)
  - Seat belts reduce serious injuries and deaths from crashes by about 50 percent.
- **Never drive under the influence of drugs or alcohol.**
  - Alcohol-impaired drivers are involved in about 1 in 3 crash deaths, resulting in nearly 11,000 deaths in 2009.
  - People who drink and drive put everyone on the road in danger.
  - Men were responsible for 4 in 5 episodes (81%) of drinking and driving in 2010.
  - Young men ages 21-34 made up only 11 percent of the U.S. adult population in 2010, yet were responsible for 32 percent of all instances of drinking and driving.
- **Distracted driving due to cell phone use**
  - Distraction from cell phone use while driving (hand held or hands free) extends a driver's reaction as much as having a blood alcohol concentration at the legal limit of .08 percent. (University of Utah)
  - The No.1 source of driver inattention is use of a wireless device. (Virginia Tech/NHTSA)
  - Drivers who use cell phones are four times as likely to get into crashes serious enough to injure themselves. (NHTSA, Insurance Institute for Highway Safety)

# Injury Prevention

- Driving while distracted is a factor in 25 percent of police reported crashes.
- Driving while using a cell phone reduces the amount of brain activity associated with driving by 37 percent (Carnegie Mellon).

## Everyone can:

- Choose not use their cell phones when driving.
- Choose not to drink and drive and help others do the same.
- Before drinking, designate a nondrinking driver when with a group.
- If out drinking, get a ride home or call a taxi.
- Don't let friends drink and drive.
- Choose not to binge drink themselves and help others not to do it.
- Talk with a doctor or nurse about drinking and driving and request counseling if drinking is causing health, work, or social problems.

## Violence Prevention

### Gun Safety

- Always keep your guns unloaded and locked.
- Explain to children that guns are dangerous, never to touch a gun and if they see one to remove themselves from there and tell an adult.
- Police recommend the best way to avoid gun risks is to remove them from your home.

### Teens

- Watch for signs that may lead to violent behavior and seek counseling.
- Drug abuse
- Depression
- Family history of suicide
- History of past trauma or abuse
- Bullying
- Peer pressure and involvement in gangs

### Ways to resolve conflict in a non-violent way:

- Stop and think. It's easy to act tough; it takes guts to act smart.
- Walk away until the other person has calmed down.
- Negotiate and compromise.
- Diffuse the situation with humor.
- Take 10 deep breaths.

### References:

# Injury Prevention

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

<http://thinkfirst.org/>

