INJURY PREVENTION: AN OVERVIEW

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INJURIES...WHAT WE KNOW

- Unintentional injuries are 4th leading case of death in US
- Leading cause of death between ages 1 and 4
- Over 40% preventable
- ATS, ACS, AAST collaborative efforts
- Initiatives and resources:
  - National Trauma Awareness Month
  - Violence and Injury Prevention
  - CDC Injury Center
  - Healthy People 2020 – Injury and Violence
### 10 Leading Causes of Death by Age Group, United States - 2017

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age Group</th>
<th>1-4</th>
<th>5-9</th>
<th>10-14</th>
<th>15-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65+</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Congenital Anomalies</td>
<td>4,580</td>
<td>Unintentional Injury</td>
<td>1,267</td>
<td>Unintentional Injury</td>
<td>718</td>
<td>Unintentional Injury</td>
<td>800</td>
<td>Unintentional Injury</td>
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<td>2</td>
<td>Short Gestation</td>
<td>3,719</td>
<td>Congenital Anomalies</td>
<td>424</td>
<td>Malignant Neoplasms</td>
<td>418</td>
<td>Suicide</td>
<td>517</td>
<td>Suicide</td>
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<td>3</td>
<td>Maternal Pregnancy Comp.</td>
<td>1,432</td>
<td>Malignant Neoplasms</td>
<td>325</td>
<td>Congenital Anomalies</td>
<td>188</td>
<td>Malignant Neoplasms</td>
<td>437</td>
<td>Homicide</td>
<td>4,905</td>
<td>Homicide</td>
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<tr>
<td>4</td>
<td>SIDS</td>
<td>1,363</td>
<td>Homicide</td>
<td>303</td>
<td>Homicide</td>
<td>154</td>
<td>Congenital Anomalies</td>
<td>191</td>
<td>Malignant Neoplasms</td>
<td>1,374</td>
<td>Heart Disease</td>
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<tr>
<td>5</td>
<td>Unintentional Injury</td>
<td>1,317</td>
<td>Heart Disease</td>
<td>127</td>
<td>Heart Disease</td>
<td>75</td>
<td>Homicide</td>
<td>176</td>
<td>Heart Disease</td>
<td>913</td>
<td>Malignant Neoplasms</td>
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<tr>
<td>6</td>
<td>Placenta Cord Membranae</td>
<td>843</td>
<td>Influenza &amp; Pneumonia</td>
<td>104</td>
<td>Influenza &amp; Pneumonia</td>
<td>62</td>
<td>Heart Disease</td>
<td>104</td>
<td>Congenital Anomalies</td>
<td>355</td>
<td>Liver Disease</td>
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<tr>
<td>7</td>
<td>Bacterial Sepsis</td>
<td>592</td>
<td>Cerebrovascular</td>
<td>66</td>
<td>Chronic Low Respiratory Disease</td>
<td>59</td>
<td>Chronic Low Respiratory Disease</td>
<td>75</td>
<td>Diabetics</td>
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<td>Circulatory System Disease</td>
<td>449</td>
<td>Septicemia</td>
<td>48</td>
<td>Cerebrovascular</td>
<td>41</td>
<td>Cerebrovascular</td>
<td>56</td>
<td>Influenza &amp; Pneumonia</td>
<td>190</td>
<td>Cerebrovascular</td>
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<tr>
<td>9</td>
<td>Respiratory Distress</td>
<td>440</td>
<td>Benign Neoplasms</td>
<td>44</td>
<td>Septicemia</td>
<td>33</td>
<td>Influenza &amp; Pneumonia</td>
<td>51</td>
<td>Chronic Low Respiratory Disease</td>
<td>188</td>
<td>HIV</td>
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<tr>
<td>10</td>
<td>Neonatal Hemorrhage</td>
<td>379</td>
<td>Perinatal Period</td>
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<td>Benign Neoplasms</td>
<td>31</td>
<td>Benign Neoplasms</td>
<td>31</td>
<td>Complicated Pregnancy</td>
<td>168</td>
<td>Complicated Pregnancy</td>
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**Data Source:** National Vital Statistics System, National Center for Health Statistics, CDC.

**Produced by:** National Center for Injury Prevention and Control, CDC using WSOARS™.
NATIONAL INJURY PREVENTION PROGRAMS

• Alcohol/Drug Overdose
• ATV
• Burns
• Firearm Safety
• Geriatric Falls
• Helmet Use
• Motor Vehicle Safety

• Pedestrian Safety
• Pediatric Falls
• Poisoning
• Prescription Drug Overdose
• Snowmobiles
• Sports Injuries/Concussion
• Water-Related Injuries
NEBRASKA DEMOGRAPHICS

- Over 77,000 square miles
- 1.95 million people
- 93 counties
- 89% of cities have less than 3,000 people (hundreds of towns less than 1,000)
- 88 hospitals in Nebraska; 64 are Critical Access Hospitals
- Paid versus Rural EMS Squads
• Safe Kids Nebraska (Safe Kids Coalition)
• Concussion (Training Courses)
  • CDC:
    • Heads UP Concussion in Youth Sports
    • Heads UP Clinicians: Addressing Concussion in Sports Among Kids and Teens
  • NFHS-National Federation of High Schools:
    • Concussion in Sports: What You Need to Know
• Older Adult Falls (Prevention Programs)
  • Tai Chi: Moving for Better Balance
  • Stepping On
  • Stopping Elderly Accidents, Deaths & Injuries (STEADI)
THE CHALLENGE: OLDER ADULT FALLS IN THE US

• 1 in 3 Americans aged 65+ fall each year

• Every 13 seconds an older adult is treated in the ER for a fall

• Every 20 minutes an older adult dies form a fall

• Leading cause of head injuries

• In 2013, the total cost of falls was $34 billion

• Total cost may reach $67.7 billion by 2020
BENEFITS OF TAI CHI FOR BALANCE

• 12 week classes with balance tests (most ongoing)-instructors “suggested donation”
  • Sit to Stand
  • Single Limb Stand
  • 75 classes in Omaha with 2,441 attendees

• Compared with Oregon Research Institute (ORI), Omaha’s data shows more improvement

• Ncoa.org/FallsPrevention says Tai Chi for Balance:
  • 55% reduction in falls rate
  • $530 net benefit per participant
  • 509% ROI
  (National Council of Aging, 2015)
TOOLKIT

• Fall statistics
• Physical Activity
• Home Safety
• Medication
• Vision
• Falls Tracker
• Balance Self Test
• New instructor training yearly - applications in June for Fall on website

• Tai Chi 8 form and 16 form refreshers 7/year (and Shibashi)

• Bring it to your community!
  www.taichibalance.org
ADVERTISING

• Social Media
• Press releases
• Radio ads
• Flyers to schools before end of the year:
  • Library
  • In-house advertising
VENDORS

- Choking Charlie/CPR for Parents
  - Water Watchers for Parents
    - Lucy Lifeguard
    - Reach, throw or go
  - Float or sink which do you think
- Police and Fire-tour of equipment
  - Skin cancer awareness
  - Fingerprinting/IDs
FREEBIES

- Bounce house inflatables
- Pool noodles/Kickboards
- Lifejackets
- Sunscreen
- Backpacks
- Floating keychains
- Large prize giveaways
PREVENTING LAWN MOWER INJURIES IN CHILDREN

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LIFELONG IMPACT

• Lawn mower injuries to children are often extremely traumatic and can include amputation or even death

• The emotional distress can last a lifetime for the child and family
LAWN MOWER INJURY STATISTICS

• In the US:
  • 9000+ Children go to the ER for lawn mower related injuries every year
    • 24 ER visits per day
    • Cuts, fractures, burns, amputation
    • Hand/finger most commonly injured body region
  • 800 children are run over by a riding mower annually
    • Of these incidents, 600 require amputation of some kind
  • Lawn mower related injuries are the leading cause of amputations for children
  • 80% of injured children are boys
  • Most commonly injured ages are 3 and 16
  • Children younger than 5 are more likely than older children to be burned
  • Children 5-17 are more likely than younger children to be struck or cut by the lawn mower or a projectile
WHEN CAN KIDS MOW THE LAWN?

• According to the AAP, children should be at least:
  • 12 years or older to operate a Push Mower
  • 16 years or older to operate a Riding Mower

• Before learning to mow the lawn, children should be:
  • Strong and mature enough to operate the mower
  • Show good judgement and decision making

• Teens should be supervised by an adult before they are allowed to mow on their own
LAWN MOWING SAFETY TIPS

• Kid-free zone
  • Keep children out of the lawn while mowing
  • Children younger than 6 years of age should be kept indoors during mowing
    • They tend to be attracted to a mower in use

• Never allow a child to ride as a passenger on a riding mower

• Never let children play on or near a lawn mower, even when it is not in use
LAWN MOWING SAFETY TIPS (CONT.)

• Teach and supervise teens:
  
  • Children should be at least 12 years old to operate a push mower and at least 16 years old before using a riding mower
  
  • An adult should supervise teens before they are allowed to operate a lawn mower on their own
  
  • Always wear closed toed shoes and eye protection when mowing
ATV SAFETY PROGRAM

Renae Jacobson, BSN, RN, CCRN, Trauma Nurse Coordinator

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HOW DID IT START?

• In 2014, CHI GSH reported 18 admits to ATV accidents
• In 2015, it doubled to 36
• We recognized the need for education
• We partnered with amazing agencies!!!
• Over 92% of ATV-related fatalities involve one or more unsafe behaviors

• In many sources, greater than 90% of ATV injuries to youth under 16 happen when operating an adult size ATV

• Nationally in 2015, there were an estimated 97,200 emergency room visits related to ATV injuries

• In Nebraska, according to DHHS, out of 1335 agricultural-related trauma injuries requiring medical care from 2012-2014, ATVs were most frequent cause of injury, 18.1%

• ATV injuries are predominantly males and persons aged 10-15 (15.7%), 16-24 (15.3%), and 55-64 years (14.9%)
**ATV Aware**

**The Issue**
All-terrain vehicles (ATVs) are a useful mode of transportation on farms and ranches, yet there are known safety hazards associated with their use. Statistics from the Nebraska Department of Health & Human Services show 528 hospital emergency room visits due to ATV incidents in 2016, and that does not include a large number of accident victims treated elsewhere. Nationally, a staggering 44% of child fatalities from 1983 to 2015 were age 12 and under. Education for awareness of safe behaviors related to ATV use is lifesaving for all ages.

**As a result of attending this session, I plan to:**
- “share with grandchildren and son-in-law”
- “wear my helmet”
- “slow down”
- “speak up and train my family”
- “be more aware of what I am doing”

**The Response**
Together, Nebraska Extension, Nebraska Safety Center, Central States Center for Agricultural Safety and Health, and CHI Health Good Samaritan in Kearney offer “ATV Aware” as a program in a variety of settings. A custom-made simulator, made to mimic the actual experience of riding an ATV, lets participants learn about safe riding behaviors and laws. We will customize the experience for any outdoor or indoor public event, as well as programs for schools, organizations, clubs, or businesses, with or without the electric simulator.

**The best thing this presenter did was:**
- “thoroughly addressed our questions”
- “made very interesting”
- “kept it fun”
- “4-wheeler demonstration”
- “explain things correctly”

**Contact:** Susan Harris-Broomfield, Educator – Rural Health, Wellness and Safety
susan.harris@unl.edu • 308.837.0645 • UNL Extension, PO Box 31, Minden NE 68959
ATV SIMULATOR
ATV SIMULATOR PROGRAM

- Has reached over 10,000 in Nebraska, Indiana, Kansas, and Wyoming (face to face learning opportunities)
- Cost: $65 plus .76 mile from Kearney
- Contact: Susan Harris-Broomfield, Educator – Rural Health, Wellness and Safety
- susan.harris@unl.edu · 308.832.0645 · UNL Extension, PO Box 31, Minden NE 68959
✓ Size of ATV matters!
✓ Where your body should be matters!
✓ Loads can change your stability!
  ✓ Roadway Dangers!
  ✓ Dangerous Terrains!
  ✓ Correct Protection!
  ✓ Laws in Nebraska!
✓ Don’t forget the UTVs!
  ✓ Risky behaviors!