



Preventable Injuries

Obj. 6.5: Analyze risk factors for unintentional injuries in order to provide safety recommendations.



Leading Causes of Nonfatal Injuries

Use the following chart (see full PDF handout) to answer the questions about causes of injuries.

National Estimates of the 10 Leading Causes of Nonfatal Injuries Treated in Hospital Emergency Departments, United States – 2011

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Unintentional Fall 147,819	Unintentional Fall 980,092	Unintentional Fall 659,063	Unintentional Fall 624,123	Unintentional Struck By/Against 1,039,781	Unintentional Fall 830,843	Unintentional Fall 795,173	Unintentional Fall 984,995	Unintentional Fall 909,229	Unintentional Fall 2,403,146	Unintentional Fall 9,256,761
2	Unintentional Struck By/Against 35,388	Unintentional Struck By/Against 381,370	Unintentional Struck By/Against 429,506	Unintentional Struck By/Against 615,721	Unintentional Fall 921,958	Unintentional Overexertion 675,342	Unintentional Overexertion 589,259	Unintentional Overexertion 498,178	Unintentional Struck By/Against 260,734	Unintentional Struck By/Against 269,421	Unintentional Struck By/Against 4,619,897
3	Unintentional Other Bite/Sting 15,525	Unintentional Other Bite/Sting 173,697	Unintentional Other Bite/Sting 116,853	Unintentional Overexertion 306,379	Unintentional Overexertion 724,410	Unintentional Struck By/Against 656,043	Unintentional Struck By/Against 493,018	Unintentional Struck By/Against 438,778	Unintentional Overexertion 256,738	Unintentional Overexertion 203,047	Unintentional Overexertion 3,440,314
4	Unintentional Foreign Body 11,120	Unintentional Foreign Body 143,838	Unintentional Cut/Pierce 116,813	Unintentional Cut/Pierce 137,359	Unintentional MV-Occupant 703,817	Unintentional MV-Occupant 572,542	Unintentional MV-Occupant 412,035	Unintentional MV-Occupant 383,832	Unintentional MV-Occupant 236,368	Unintentional MV-Occupant 194,678	Unintentional MV-Occupant 2,686,589
5	Unintentional Fire/Burn 10,634	Unintentional Overexertion 94,656	Unintentional Overexertion 86,337	Unintentional Pedal Cyclist 110,225	Other Assault* Struck By/Against 484,128	Unintentional Cut/Pierce 402,941	Unintentional Cut/Pierce 310,614	Unintentional Other Specified 337,326	Unintentional Cut/Pierce 193,449	Unintentional Cut/Pierce 148,065	Unintentional Cut/Pierce 2,165,207
6	Unintentional Other Specified 10,113	Unintentional Cut/Pierce 93,053	Unintentional Pedal Cyclist 84,581	Unintentional Unknown/Unspecified 89,404	Unintentional Cut/Pierce 460,128	Other Assault* Struck By/Against 351,852	Unintentional Other Specified 280,086	Unintentional Cut/Pierce 294,914	Unintentional Other Specified 160,776	Unintentional Poisoning 95,841	Unintentional Other Specified 1,616,657
7	Unintentional Cut/Pierce 7,754	Unintentional Other Specified 73,822	Unintentional MV-Occupant 63,463	Other Assault* Struck By/Against 79,735	Unintentional Other Specified 326,214	Unintentional Other Specified 305,592	Other Assault* Struck By/Against 219,531	Unintentional Poisoning 227,228	Unintentional Poisoning 115,844	Unintentional Other Bite/Sting 93,856	Other Assault* Struck By/Against 1,421,464
8	Unintentional Inhalation/Suffocation 7,501	Unintentional Fire/Burn 65,939	Unintentional Foreign Body 59,229	Unintentional MV-Occupant 78,610	Unintentional Other Bite/Sting 198,384	Unintentional Other Bite/Sting 186,631	Unintentional Poisoning 169,824	Other Assault* Struck By/Against 174,569	Unintentional Other Bite/Sting 93,876	Unintentional Other Specified 74,873	Unintentional Other Bite/Sting 1,231,686
9	Unintentional Overexertion 5,895	Unintentional Dog Bite 41,616	Unintentional Dog Bite 44,996	Unintentional Other Bite/Sting 67,546	Unintentional Unknown/Unspecified 153,778	Unintentional Poisoning 166,092	Unintentional Other Bite/Sting 135,948	Unintentional Other Bite/Sting 149,297	Other Assault* Struck By/Against 58,527	Unintentional Other Transport 66,445	Unintentional Poisoning 991,523
10	Unintentional MV-Occupant 5,342	Unintentional Unknown/Unspecified 41,408	Unintentional Other Transport 38,880	Unintentional Other Transport 48,903	Unintentional Poisoning 151,694	Unintentional Unknown/Unspecified 108,184	Unintentional Unknown/Unspecified 89,046	Unintentional Unknown/Unspecified 78,930	Unintentional Other Transport 50,660	Unintentional Unknown/Unspecified 56,754	Unintentional Unknown/Unspecified 703,763

*The "Other Assault" category includes all assaults that are not classified as sexual assault. It represents the majority of assaults.
 Data Source: NEISS All Injury Program operated by the Consumer Product Safety Commission (CPSC).
 Produced by: Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC using WISQARS™.

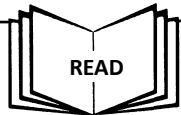
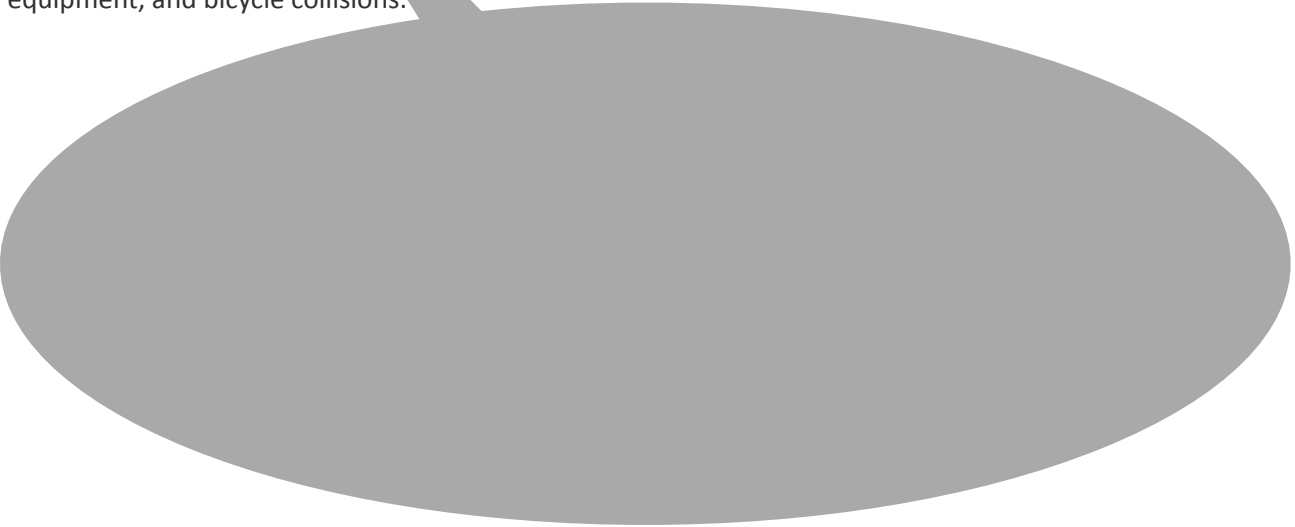


1. What is the overall leading cause of nonfatal injuries? _____
2. What is the leading cause of nonfatal injuries among 15-24 year olds? _____
3. For 15-65+ year olds, in what rank place does "Unintentional MV-Occupant" place? ____ *Note: MV-Occupant stands for Motor Vehicle Occupant*
4. Are bicycle injuries or motor vehicle injuries more common among 5-9 year olds? _____
5. What trend do you notice in unintentional poisoning injuries? What do you think is contributing to this trend?
6. The local fire department is starting a campaign to educate people on testing their smoke alarms. For which age groups would this intervention most likely reduce nonfatal injuries?

DISCUSS

Brainstorm

With a small group, list as many specific examples of types of injuries as you can in the bubble below. You may use the chart from the Do Now exercise to help, but be sure you add more specific injury examples. For example, the category “Unintentional Struck By/Against” might include injuries from sports, playground equipment, and bicycle collisions.

**A Cup of Health with CDC Podcast**

Listen to the Podcast, “What We’re Learning About Deaths from Unintentional Injuries,” and follow along on the transcript handout. Answer the questions below based on Dr. Moffett’s responses.

1. Why do researchers use the term “unintentional injury” instead of “accident?”
2. Give three examples of things that qualify as “unintentional injuries” and one example of something that does not.
3. What is the #1 leading cause of death from unintentional injury? _____
4. What is one cause of unintentional injury that is on the rise among adults? _____
5. On the individual level, what are two things parents can do to prevent injuries for their children?
6. By how much have unintentional injury rates increased recently? ____%



The 3 E's of Injury Prevention

Review the definitions below, then read about the 3 E's of injury prevention.

Did you know?

- Violence and injuries together kill more people ages 1–44 in the U.S. than any other cause (*NCIPC: WISQARS*)
- Violence and injuries cost more than \$406 billion in medical care and lost productivity each year (*Finkelstein EA et al 2006*)

Unintentional injury: any injury that was unplanned and does not result from intent (as in violence); the most common unintentional injuries result from motor vehicle crashes, falls, fires/burns, drowning, poisonings, and aspirations

Injury prevention: an effort to prevent or reduce the severity of bodily injuries caused by external mechanisms before they occur

Injury prevention strategies are often categorized as the 3 E's: **E**ducation, **E**ngineering modifications, and **E**nforcement/enactment. In the table below, examine some examples related to traffic and automobile safety and then write your own examples for drownings.

3 E's	Traffic & Auto Safety	Drowning
Education	-promote seat belt use -discourage impaired driving -promote child safety seats	
Engineering	-vehicle crash worthiness -seat belts, airbags, locking seat belts for child seats	
Enforcement/enactment	-passage and enforcement of primary seat belt laws, speed limits, impaired driving enforcement	



3E Interventions to Reduce Injuries

Challenge: Team up to improve health and safety by reducing unintentional injuries in your community!

Directions:

- 1) Choose one type of injury to focus on. Our injury type is: _____
- 2) Choose one of the 3 E's. We will approach the problem through: **E**_____
- 3) Create an intervention that helps reduce injury. Use the planning table on the next page to work on it together in class. Then assign tasks to finish creating and implementing the intervention for homework.
- 4) Be ready to present your 3E intervention during the next class period.



3E Intervention Planning

Question or Consideration	Ideas & Action Plan
<p>What evidence do you have that your specific type of injury is a problem in your community?</p>	
<p>Why did you choose to target the injury with your chosen method--the "E" you selected?</p>	
<p>Describe your intervention:</p>	
<p>Plan out your intervention to consider the 4 W's:</p>	<p><i>Who:</i></p> <p><i>What:</i></p> <p><i>When:</i></p> <p><i>Where:</i></p>
<p>What evidence will you collect to determine if your intervention was successful?</p>	
<p>What tasks do you need to accomplish to create and implement your intervention? <i>(Make a specific list, using team member names, and deadlines)</i></p>	



Risk Factors and Injury Prevention

For each of the following types of injury, list one risk factor and one preventative strategy.

1. Childhood poisonings

- a. Risk factor:
- b. Preventative strategy:

2. Burns

- a. Risk factor:
- b. Preventative strategy:

3. Motor vehicle crashes

- a. Risk factor:
- b. Preventative strategy:



Create Your 3E Intervention:

Plan your tasks to accomplish to create your injury prevention intervention:

Team Member	Task	Deadline