It's OBVIOUS

Medical Society of Delaware
LEADING THE WAY TO A HEALTHY DELAWARE

CAMPAIGN FOR KIDS

Promoting the Health and Well-Being of Delaware Youth ... “It’s OBVIOUS”

“It’s OBVIOUS”
“Helping Teens Make Intelligent Decisions”

Topics to be discussed:

• Texting and driving
• Consumption of energy drinks
• Health risks associated with use of computers
• Gun safety
Objectives:

• Understand the danger of teenage texting and driving and discuss strategies to reduce fatalities.

• Clarify what exactly are energy drinks and educate about their harmful effects.

• Identify the health risks of computers and what can be done to reduce identified risks.

• Identify strategies to reduce the risk of firearm injury.
Texting and Driving Statistics

Growing trend and national epidemic: quickly becoming one of country’s top killers

Texting while driving causes:

- 1,600,000 accidents per year
  - Source: National Safety Council
- 330,000,000 injuries per year
  - Source: Harvard Center for Risk Analysis Study
- 11 teen deaths every day
  - Source: Insurance Institute for Highway Safety Fatality Facts
- Accounts for nearly 25% of all car accidents
  - (www.textinganddrivingsafety.com/textinganddrivingstats)
Texting and Driving Does Three Dangerous Things:

- Removes the mind from driving
- Removes your hands from the wheel
- Removes your eyes from the road
Texting and Driving Statistics

Texting while driving is:

- About 6 times more likely to cause an accident than driving intoxicated
- The same as driving after 4 beers
- The #1 driving distraction reported by teen drivers
- Makes you 23 times more likely to crash
- The same as driving blind for 5 seconds (If traveling 55 mph, this would be the length of a football field.)
Cellular Phone Use While Driving

Teens and Adults texting behind the wheel is DWI

“Driving While Intoxicated”

www.textinganddrivingsafety.com/textinganddrivingstats
Cellular Phone Use While Driving

If it’s so dangerous, why do teens text and drive?

- Convenient
- Don’t think it’s a problem
- Adults do it
Cellular Phone Use While Driving

It’s Convenient

- 82% of Americans ages 16-17 own cell phones
- 52% talk on the phone while driving
- 34% say they have texted while driving

www.textinganddrivingsafety.com
Cellular Phone Use While Driving

It’s Not a Problem

• 77% of young adults are very or somewhat confident they can text while driving
• 55% of young adults claim it’s easy to text while they drive

But, it is a problem!

Teens who text spend 10% of their driving time outside their own lane!

www.textinganddrivingsafety.com
Cellular Phone Use While Driving

Many Adults Do It

• 48% of young drivers have seen their parents drive while talking on cell phones
• 15% of young drivers have seen their parents text while driving
• 48% of kids ages 12-17 have been in the car while the adult driver was texting

Solution: Set an example for your teenagers. Don’t text or talk on the phone when driving.

www.textinganddrivingsafety.com
Cellular Phone Use While Driving

What Can Be Done About Texting and Driving?

• Educate teenagers that texting and driving has been banned in Delaware

• 39 states, plus Washington, DC have banned texting and harsher punishments for doing so are being enacted
Delaware Texting While Driving

- Banned in Delaware, Spring 2010

- Banned use of hand held cell phone, PDA’s, laptops, pagers, video games

- Can have hands free devices while driving (seems illogical because the drivers are still taking their minds off the task at hand)

- Concept of disturbances not taken into account – drinks coffee or listening to the radio
How to Stop Texting and Driving?

- Out of sight, out of mind (put your phone in a place you can’t reach).

- Silence is golden – turn off the notifications. The less you hear, the less tempted you will be.

- Designate a texter in your car if driving with another individual.

- Parents – take a text-free, talk-free driving pledge with your teen. LEAD BY EXAMPLE.

Source: onlineschools.com; Quinstreet, Inc, 2012
STOP THE TEXTS, STOP THE WRECKS!

National Highway Transportation Safety Administration
EN  E RY  D RIN K S
The Good, the Bad, and the Ugly
Energy Drinks

WHAT ARE THEY?

- Beverages purported to provide mental or physical stimulation.
- Contain large amounts of caffeine and other stimulants.
- Contain sugar or other sweeteners, herbal extracts, amino acids.
- May or may not be carbonated.
- Sales in US was more than $10 billion in 2012 – the fastest growing part of the beverage industry.

Energy Drinks

- Now under scrutiny by FDA due to deaths linked to high caffeine levels.
- Caffeine! is the world’s most commonly used drug.
- Ingredient in Red Bull & Monster Energy is **Glucurolactone** (related to glucose)
Energy Drinks

Energy Drink Consumer Advertising

Red Bull “gives you wings”

Rock Star “scientifically formulated”

Monster Energy “is a killer energy brew”
Energy Drinks

NOW UNDER SCRUTINY BY THE FOOD AND DRUG ADMINISTRATION (FDA) DUE TO DEATHS LINKED TO HIGH CAFFEINE LEVELS.
Energy Drinks

CAFFEINE IS THE WORLD’S MOST WIDELY USED DRUG.

ENERGY DRINKS HAVE 3–5 TIMES THE AMOUNT OF CAFFEINE AS REGULAR SODA.
Energy Drinks

SAFE LIMITS OF CAFFEINE

• Up to 400 mg/day for healthy adults

• 200 mg/day for pregnant females

• 45–85 mg/day for children, depending on weight

Source: Consumer Reports.org
# Energy Drinks

## CAFFEINE CONTENT OF SELECT BEVERAGES

<table>
<thead>
<tr>
<th>BEVERAGE</th>
<th>AMOUNT</th>
<th>CAFFEINE CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola</td>
<td>8 oz</td>
<td>23 mg</td>
</tr>
<tr>
<td>Coffee</td>
<td>8 oz</td>
<td>100 mg</td>
</tr>
<tr>
<td>Red Bull</td>
<td>8.4 oz</td>
<td>81 mg</td>
</tr>
<tr>
<td>Monster Energy</td>
<td>8 oz</td>
<td>92 mg</td>
</tr>
<tr>
<td>5 Hour Energy</td>
<td>1.9 oz</td>
<td>215 mg</td>
</tr>
<tr>
<td>Rock Star Energy Shot</td>
<td>2.5 oz</td>
<td>229 mg</td>
</tr>
<tr>
<td>5 Hour Extra Strength</td>
<td>1.9 oz</td>
<td>242 mg</td>
</tr>
</tbody>
</table>

Consumer Reports.org: “The Buzz on Energy Drink Caffeine”
Energy Drinks

**Glucurolactone**
- Research found it was used in two 40 year–old studies in Japan that made rats swim better. No human studies were ever done!
  - Craig A. Goodman, MD, University of Wisconsin

**Taurine**
- Amino acid found in bile of bulls
- May help prevent heart attacks in women with high cholesterol; however, far better supplements than energy drinks.

**Lack of evidence** to substantiate claims that ingredients, apart from sugar & caffeine, provide any benefits.
Energy Drinks

They are not just bad for you, they are down right dangerous!

- FDA reports linking 92 illnesses and 13 deaths due to 5 Hour Energy shots

- November 16, 2012 – FDA has posted adverse-event reports for two energy drinks:
  - 40 illnesses and 5 deaths related to Monster Energy
  - 13 illnesses and 2 lasting disabilities linked to Rock Star Energy

Source: “More Deaths, Illness Linked to Energy Drinks,” Daniel DeNoon
Energy Drinks

From 2005–2009:

- Emergency Room visits involving energy drinks increased 10 fold:
  - 13,114 visits
  - Half were ages 18–25
  - Also involved drugs and alcohol
Energy Drinks

Case report of Maryland female

- 14 years old
- Died after consuming 2 energy drinks – Cardiac Arrhythmia related to caffeine toxicity

Source: Associated Press, June 26, 2013; NBC News Health; “Mom Sues Monster Energy Drink Over Teen’s Death”
Harmful effects

- Elevate Heart Rate
- Induce Arrhythmia and cause palpitations
- Damage to Teeth (eats away outer layer of enamel – highly acidic)
- Increased Anxiety
- Possibly Increase Blood Pressure
- Creates Headaches
- Possible cause of Seizures, Strokes, Sudden Death

Energy Drinks

Message to Parents:

- Encourage your teenager to avoid drinking these energy drinks
- Energy drinks provide TEMPORARY stimulation, but more likely will result in ENERGY LOSS and FATIGUE.
The Technological Revolution
POSITIVE EFFECTS OF COMPUTERS/ ELECTRONIC DEVICES

For Children:

- Improves spatial awareness
- Improves iconic skills (images and diagrams)
- Improves visual attention skills
- Improves attention span in ADD
- In autistic children, iPads helpful in teaching, learning, stimulating the brain
- Improves learning skills and prepares children for preschool and beyond.
POSITIVE EFFECTS OF COMPUTERS/ ELECTRONIC DEVICES

For Adolescents/Young Adults:

- Can help teens interact with others across US and world
- Social networking with sites like Facebook and Myspace can develop new relationships
- Internet access can increase knowledge on a variety of topics
POSITIVE EFFECTS OF COMPUTERS/ ELECTRONIC DEVICES

For Adolescents/Young Adults:

- Use of Smart Phone applications to track their health and collect data in an organized way
- Nearly 13,000 health and fitness apps
  - Count calories
  - Pedometers
  - “Body Media”
  - “Luminosity”
  - Reduce stress with music
- Use of computers in school
HEALTH RISK OF COMPUTERS/ ELECTRONIC DEVICES

Working on Computer for Long Periods of Time:

- **Hands/Wrist:**
  - Carpal tunnel syndrome
  - Tenosynovitis
  - Epicondylitis
  - Tendonitis

- **Back/Neck:**
  - Cervical strain
  - Thoracic strain
  - Lumbar strain
  - Shoulder/hips
HEALTH RISK OF COMPUTERS/ELECTRONIC DEVICES

Working on Computer for Long Periods of Time:

- **Vision:**
  - Eye strain fatigue
  - Blurred vision
  - Dry eyes
  - “20-20-10” rule

- **Behavior:**
  - Violent computer games can increase risk of aggressive behavior
  
  Negatively impact school performance
HEALTH RISK OF COMPUTERS/ELECTRONIC DEVICES

Working on Computer for Long Periods of Time:

- **Radiation:**
  - Very low frequency radiation exposure (non-ionizing)
  - LCD monitor is best (no real effect on health)

- **Sleep:**
  - Using computer or Smart Phone before bed reduces melatonin
All Computers and Electronic Devices Should Be Used in MODERATION

- Set limits on computer use (except for homework) to **2 hours or less** screen time each day.
- Take frequent breaks
- Get teenagers to exercise and pursue other activities
- Ergonomic evaluation of desk and chair
Adult Statistics

- Majority of adults (62%) use internet or email at their job
- 50% of employed Americans check their emails on weekends
- 46% check email on sick day
- 34% check email when on vacation (11% do so often)
- 1 in 5 employed American email users send and respond to work-related emails off hours.
Heavy technology use is linked to

FATIGUE
STRESS
SLEEP DISORDERS
DEPRESSION
GUNS AND VIOLENCE
HOW BIG IS THE PROBLEM?

- One child/teenager is injured by a gun every hour.
- There are 7,351 visits to the ER every year due to gun injuries.
- 453 of these patients die from gun shot wounds.

Guns and Violence

HOW BIG IS THE PROBLEM?

- The majority of the guns are from the person’s home.
- One-third of all homes in the US have guns.
- 1.7 million children/teenagers live in a home with a loaded gun.

US has highest rate of firearm related deaths among children <15 years old

Nearly all unintentional firearm fatalities in children occur in or around the home.
  - 50% occur in home of victim
  - 40% occur in home of friend or relative

Source: Up to Date, November 11, 2013, “Prevention of Firearm Injuries in Children,” Gill, AC; and Wesson, D.
Guns and Violence

ACCIDENTAL RELATED GUN INJURY

VS.

VIOLENCE/INTENTIONAL RELATED GUN INJURY
Accidental Injury

Example:

- 5–year old picks up a loaded gun on the coffee table and shoots his brother.
Examples:

- Teenager who is vulnerable to bullying and stress is contemplating suicide and knows there is a loaded gun in his parent’s dresser.

- Teenager who is angry at his teacher and fellow students and plans to seek revenge.
Preventing Accidental Injury

Case controlled study measured:

- Association of firearm storage practice
- Risk of unintentional & self-inflicted wounds
- Identified 4 strategies, with each associated with decreased risk of firearm injury in gun-owning households:
  1. Store guns unloaded
  2. Lock guns away
  3. Separate ammunition from guns
  4. Lock ammunition separately away from guns

(JAMA 2005)
Gun Safety

These four strategies, each associated with a decreased risk of firearm injury, can be used to prevent suicide and unintentional injury in children and adolescents in gun-owning households.
Gun Safety

Keeping guns in the home is associated with an increased risk of homicide by a family member or relative.

Keeping guns in the home is associated with an increased risk of suicide by a family member.
Gun Safety

Access to firearms increases the risk of violence against peers.

Firearms used in school-based shootings in the US were obtained from the homes of the perpetrators, their friends, or relatives.
Gun Safety

SO WHY KEEP GUNS IN THE HOME?

➢ Handgun owners typically keep guns in the home for self-defense

➢ Homeowner deaths caused by suicide, homicide, and unintentional injury out number deaths associated with self-defense by 40:1

It is true that firearms may be easily accessible even if not kept in the home.
Gun Safety

Take Away:

Removal of guns from the home and the secured storage of guns in the home are *logical* strategies for *reducing injury-related mortality*. 
Gun Safety

CITY OF WILMINGTON HAS A PROBLEM

- City set a record in 2013:
  - 154 people were shot
  - 18 were fatalities

- As of January 26, 2014:
  - 10 people were shot
  - 2 fatalities

Gun Safety

RISK FACTORS FOR VIOLENCE–RELATED INJURIES

- Previous history of fighting
- Violent discipline from parents
- Access to firearms
- Alcohol and drug use
- Gang involvement
- Exposure to domestic violence
- Media violence

The most effective approach to gun injury prevention involves the combination of several strategies:

COUNSELING
EDUCATION
LEGISLATION
REGULATION
Targeted prevention programs, such as those identified by “Blue Prints for Violence Prevention,” may reduce risk factors.

An effort by the State of Colorado to identify model violence prevention programs and implement them.

Gun Safety

Other Strategies:

- Providing gun locks
- Gun safety program
- Gun safety/modification features
  (loaded chamber indicator, magazine disconnect device, grip safety device, firing pin block)
- Legislative efforts
Gun Safety

HOW CAN YOU HELP YOUR TEENAGER?

Safest home is one without guns, but there is an incremental benefit to storing guns locked away, unloaded, ammunition stored in separate location.

AAP Connected Kids: “Safe, Strong, Secure.”
Gun Safety

HOW CAN YOU HELP YOUR TEENAGER?

Media

- Limit child/teenager total media time to less than 2 hours/day
- No TV in bedroom
- Monitor programs for violence
- Remove computers/cell phones from the bedroom at night.
- Limit controversial programming
Gun Safety

HOW CAN YOU HELP YOUR TEENAGER?

- Talk To Your Children!
  - Initiate discussions about family values, violence, sexuality, drugs
Gun Safety

HOW CAN YOU HELP YOUR TEENAGER?

- Keep your children involved in alternative entertainment
  - Athletics
  - Hobbies
  - After school programs
HOW CAN YOU HELP YOUR TEENAGER?

- Take your children to your doctor if you suspect depression, anxiety, or emotional problems.
Gun Safety

HOW CAN YOU HELP YOUR TEENAGER?

- Teach your children conflict resolution skills
Gun Safety

HOW CAN YOU HELP YOUR TEENAGER?

- Evaluate your teen for impulsivity and don’t ever let them carry a gun!
Gun Safety

HOW CAN YOU HELP YOUR TEENAGER?

➢ Refer to support services for help (school, clergy, counselors, police)
Thank you!

Stephen J. Kushner, DO
Immediate Past President, MSD
Family Physician, Christiana Care Health System