ALCOHOL 101: STRAIGHT UP WITH A TWIST
WHAT COUNTS AS HIGH RISK?

• Low Risk
  – Males
    • No more than 2 drinks per day
  – Females
    • No more than 1 drink per day

• High Risk
  – Any pattern of consumption that raises BAC to .08 or higher
    – Males
      • More than 14 drinks per week
      • 5 or more drinks per occasion
    – Females
      • More than 7 drinks per week
      • 4 or more drinks per occasion
WHAT COUNTS AS A DRINK?

• “Standard drink” sizing – 0.6 fl oz of alcohol
• Beer - 12 oz
• Wine - 5 oz
• Liquor - 1.0-1.5 oz
ABSORPTION & OXIDATION OF ALCOHOL

• Factors affecting Absorption
  – Gender
  – Body composition
  – What and how fast you’re drinking
  – Effervescence
  – Food in stomach

• Factors affecting Oxidation
  – Only TIME!
  – We oxidize off 0.016% of our blood alcohol content per hour (roughly one drink per hour)
WHAT THAT MEANS....

• If you stop drinking at 3:00am with a BAC of .08%
  – .08%.... .064%.... .048%.... .032%.... .016%.... .000%
  – You’re not sober until 8:00am

• If you stop drinking at 3:00am with a BAC of .16%
  – .16%.... .144%.... .128%.... .112%.... .096%.... .08%.... .064%.... .048%.... .032%.... .016%.... .000%
  – You’re not sober until 1:00pm

• If you stop drinking at 3:00am with a BAC of .24%
  – .24%.... .224%.... .208%.... .192%.... .176%.... .16%.... .144%.... .128%.... .112%.... .096%.... .08%.... .064%.... .048%.... .032%.... .016%.... .000%
  – You’re not sober until 6:00pm!

What does this mean in the context of impaired driving?
ALCOHOL’S TWO PHASES

Point of diminishing returns: BAC of .055!
Alcohol Myopia & Judgment

BAC

.02% Relaxed
.04% Relaxation continues, buzz develops
.06% Cognitive judgment is impaired
## IMPAIRMENT IN MALES

<table>
<thead>
<tr>
<th>Drinks</th>
<th>100</th>
<th>120</th>
<th>140</th>
<th>160</th>
<th>180</th>
<th>200</th>
<th>220</th>
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</table>

**Approximate blood alcohol percentage**

- **100** pounds: Only safe driving limit
- **120** pounds: Impairment begins
- **140** pounds: Driving skills significantly affected
- **160** pounds: Possible criminal penalties
- **180** pounds: Legally intoxicated
- **200** pounds: Criminal penalties
# IMPAIRMENT IN FEMALES

<table>
<thead>
<tr>
<th>Drinks</th>
<th>Approximate blood alcohol percentage</th>
<th>Body weight in pounds</th>
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<td>(.45)</td>
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Only safe driving limit
Impairment begins
Driving skills significantly affected
Possible criminal penalties
Legally intoxicated
Criminal penalties
TOLERANCE

- Impacts how you feel effects of alcohol
- No impact on actual BAC
- May be more related to environmental factors than physiological factors

What does this mean in the context of impaired driving?
Statistically, the more alcoholic drinks you consume per week, the more likely you are to have a lower grade point average.
## STUDENT-REPORTED ALCOHOL-RELATED CONSEQUENCES

<table>
<thead>
<tr>
<th>Event</th>
<th>% of College Students</th>
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</thead>
<tbody>
<tr>
<td>Got nauseated or vomited</td>
<td>50.6</td>
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<tr>
<td>Did something you later regretted</td>
<td>33.7</td>
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<td>Had a memory loss</td>
<td>33.2</td>
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<td>Got into an argument or fight</td>
<td>29.1</td>
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<tr>
<td>Missed a class</td>
<td>26.2</td>
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<tr>
<td>Driven a car while under the influence</td>
<td>21.8</td>
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<tr>
<td>Performed poorly on a test or important project</td>
<td>19.8</td>
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<tr>
<td>Got in trouble with police or college authorities</td>
<td>11.5</td>
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<td>Seriously considered suicide</td>
<td>3.9</td>
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<tr>
<td>Been arrested for DWI/DUI</td>
<td>1.3</td>
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</table>

*Students who reported that they do not drink were excluded from analysis.*
RISK REDUCTION

• Set limits and keep track
• Pace yourself
• Include food
• Alternate with water or other non-carbonated, non-alcoholic drinks
• Avoid drinking games
• ALWAYS use a designated driver
Alcohol Poisoning Signs and Symptoms

- Cold, clammy skin
- Unconscious and can’t be roused
- Pale, or blue-tinged skin
- Slow or irregular breathing
- Low body temperature
- Vomiting

If You Suspect Alcohol Poisoning

- Call 911!!
- Do not leave the person
- Turn the person on his/her side
- Cover him/her with a sheet or light blanket
Check your learning: Kahoot Trivia Time!

To play, use your mobile device and go to kahoot.it

FOR MORE INFO:
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QUESTIONS/DISCUSSION
ALCOHOL ABUSE AS A VIRUS?

**H1N1**
Aug 2009 - Feb 2010
- 4 deaths
- 169 hospitalizations
- 94,000 flu-like cases

**Preparation:**
Hand sanitizer, face masks, preparedness plans, coughing/sneezing education, vaccine clinics

**Alcohol**
Aug 2009 - Feb 2010
- 1000 deaths
- 250,000 unprotected sexual encounters
- 350,000 injuries

**What will you do??????**
• What was something you learned?
• What is something you think college students don’t know?
• How do the biphasic nature of alcohol and alcohol myopia relate to impaired driving?
• Are there programming possibilities that come to your mind?