Meal Safety

- All meals are buffet style and staff will serve.
- Sanitizer is available at the front of all lines.
- Plates and take away containers are available.
- The hotel has extensive outdoor seating available for meals.
- No eating in the ballroom or breakout rooms/meeting spaces.
- Your welcome bags included individually wrapped snacks to consume outside of meeting space.
- Check the app for menus!

Health and Safety Expectations

- Masking is required in all indoor areas.
  - The only exception: individual lodging rooms.
  - We have masks available.
- If you develop symptoms of illness:
  - Isolate in your hotel room.
  - Do not attend APPLE meetings/presentations.

All meals are buffet style and staff will serve.
Sanitizer is available at the front of all lines.
Plates and take away containers are available.
The hotel has extensive outdoor seating available for meals.
No eating in the ballroom or breakout rooms/meeting spaces.
Your welcome bags included individually wrapped snacks to consume outside of meeting space.
Check the app for menus!
This Weekend

Your team will create and submit a customized, measurable action plan to impact substance misuse on your campus.

A Brief History of APPLE

1991: APPLE Model created at the University of Virginia
1992: First APPLE conference
2015: First NCAA Division II-only APPLE Conference
2017: Name changed to APPLE Training Institute
2021: 4th Division II-only APPLE
Student-Athletes must have a significant voice in the process.

Keys to Success:
- Facilitating Constructive Discussion
  - Ask open-ended questions
  - Encourage students to speak first
  - Listen carefully
  - Show respect
  - Validate concerns

Adapted from The Community Tool Box at the University of Kansas (2012)
How do NCAA student-athletes compare to all students?

<table>
<thead>
<tr>
<th>Substance</th>
<th>Less use than other students</th>
<th>More use than all students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anabolic Steroids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cigarettes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spat Tobacco</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Compared to all college students in 2017, student-athletes are LESS likely to use:

- Amphetamines
- LSD
- Cigarettes
- Marijuana

Compared to all college students in 2017, student-athletes are EQUALLY likely to use:

- Heroin
- Meth
- Anabolic Steroids
- Ecstasy/Molly
- Cocaine
- Vaping

Compared to all college students in 2017, student-athletes are MORE likely to use:

- Spit tobacco
- Hookah
- Cigars
Student-Athlete Use in the Last Year by Race/Ethnicity (2017)

- **Alcohol**
  - American Indian or Alaska Native: 12%
  - Asian or Asian American: 20%
  - Black or African American: 20%
  - Hispanic or Latino: 24%
  - Native Hawaiian or Pacific Islander: 24%
  - White: 28%
  - Multiracial: 28%
  - Other: 24%

- **Marijuana**
  - American Indian or Alaska Native: 12%
  - Asian or Asian American: 20%
  - Black or African American: 20%
  - Hispanic or Latino: 24%
  - Native Hawaiian or Pacific Islander: 24%
  - White: 28%
  - Multiracial: 28%
  - Other: 24%

**Totals include those who did not drink OR had <4 drinks at a time (women) <5 drinks at a time (men)**

Go to [www.united.com](http://www.united.com) and use the code SB6301010

What percent of DII student-athletes drink in healthier ways (<4 drinks per occasion)?

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of DII student-athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>48</td>
</tr>
<tr>
<td>2013</td>
<td>52</td>
</tr>
<tr>
<td>2017</td>
<td>64</td>
</tr>
</tbody>
</table>

DII student-athletes are making healthier choices!

Low-risk drinking has increased significantly.

Totals include those who did not drink OR had <4 drinks at a time (women) <5 drinks at a time (men)
Most DII student-athletes’ alcohol use does NOT interfere with their sport.

- 98% didn’t show up late or miss a practice or competition.
- 93% didn’t perform poorly in a practice or competition.

Top Reasons DII Student-Athletes Don’t Drink:

#1: No desire to experience effects
Don’t want to hurt athletic performance
Concerned about how it may affect health
Don’t want to hurt my academic performance
Against beliefs/values

What percent of DII student-athletes NEVER drink alcohol during their competition season?

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
Student-Athletes, Hazing & Alcohol

**Student Athlete Experiences:**

- At least one form of hazing while in college. 74%
- Hazed by participating in drinking games 47%
- Hazed by having to drink large amounts of alcohol to the point of getting sick or passing out 23%
- Believed coaches and/or advisors were aware of the activities. 25%

Responses of 11,000+ students on 53 campuses.

References:

Compared to other student drinkers, student-athletes who drink...

- Consume more alcohol
- Drink more frequently
- Have more negative consequences including
  - driving under the influence
  - unsafe sexual behaviors
  - criminal offenses

Sources:
Alcohol & Athletic Performance

What do you think? How can alcohol impact your season?

Strongly Disagree

Strongly Agree
Alcohol Negatively Impacts Body Composition

Increases body fat

Often mixed with high-calorie drinks and high-calorie foods

Overall weight gain

Alcohol Decreases Aerobic Performance

- blood flow to muscles and organs
- energy available for muscles to perform
Alcohol Dehydrates
Up to 3% body weight loss within 4 hours of drinking

- Fluid loss
- Chance of heat cramps, exhaustion & stroke
- Temperature tolerance
- Reverses heat acclimation training

Athletes + Rehydration

At least 12 cups of fluid needed per day (96 oz.)

1 alcoholic drink = at least 1 additional cup (8 oz.) of fluid

5 alcoholic drinks = at least 17 cups of fluid (136 oz.)


Alcohol Inhibits Absorption of Key Nutrients

...needed for:
- Converting food into fuel
- Healthy red blood and nerve cells
- Making new oxygen-carrying cells
- Energy metabolism and endurance


Firth & Manzo, For the Athlete: Alcohol & Athletic Performance (2004)

The body spends energy metabolizing alcohol, not making more glucose.

Can lead to severe hypoglycemia 6 to 36 hours after heavy drinking.

American Athletic Institute: www.americanathleticinstitute.org

27% of student-athletes report to practice with low blood glucose levels (not all due to alcohol use)
**Alcohol Impairs Motor Skills**

- Decreases strength, power and sprint performance for up to **three days** (72 hours)
- Decreases HGH secretion by up to 70%
- Reaction time can be affected up to **12 hours** after drinking

Kuhn, Swartzwelder & Wilson (2000) 
*Pumped: Straight facts for athletes about drugs, supplements and training*

American Athletic Institute: [www.americanathleticinstitute.org](http://www.americanathleticinstitute.org)

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**Alcohol Disrupts Sleep & Learning**

NCAA student-athletes average **6-1/4 hours** of sleep on a typical in-season weeknight.

Alcohol reduces time spent in deep, restful sleep which...

- impedes memory formation
- disrupts muscle repair

Sufficient sleep maximizes training gains by regulating hormone release

NCAA Goals Survey, 2019 

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**Alcohol Slows Recovery**

Alcohol delays muscle repair

Drinking *after* exercise:

- increases exercise-induced muscle damage leading to decreases in muscle performance.

Even moderate drinking after competition hinders recovery.

Murphy, et al. (2013); Barnes, et al. (2010); Yusko, et al. (2008); O’Brien & Lyons (2000); American Athletic Institute; [americanathleticinstitute.org](http://americanathleticinstitute.org)

To maximize recovery and enhance performance:

"Alcohol should be avoided...within 16 hours" AFTER a competition or competitive practice (Murphy, et al., 2013)

Risk of injury is doubled:

- Injury rate for non-drinkers 23.5%
- Injury rate for drinkers 54.8%

Murphy, et al. (2013); Barnes, et al. (2010); Yusko, et al., (2008); O’Brien & Lyons (2000); American Athletic Institute; americanathleticinstitute.org

Alcohol Increases Risk of Illness

Drinking *depresses* immune function.

After 4 drinks, white blood cells produce *¼ the defense* they would without alcohol.

Athletes who drink *get sick more often.*

EFFECTS of a hangover:

- Increased heart rate
- Decreased left ventricular performance
- Increased blood pressure
- Decreased endurance performance
- Dehydration
Due to lost physiological conditioning including:
- Heart rate
- Ventilation
- Muscle enzymes

Dehydration of 1 to 2% in body mass reduces muscle capacity.
Most DII student-athletes (78%) have NEVER used cannabis/marijuana OR used more than a year ago.

Marijuana Forms

Ways Consumed
- Smoked in pipe, joint, blunt, or bong.
- Vaporized or vaped.
- Eaten in candy or baked goods.
- Drunk in teas or sodas.
- Cannabis oil or resin may be consumed by dabbing or using sprays or tinctures.

Risk
- Some delivery methods make it difficult to know how much THC is being consumed.
- Difficult to predict effects or how long they may last.
- Most research is on lower THC concentrations.
- Potential for abuse and mental health issues.

THC strength increasing

1995 2014

1970's: ~1‐1.5% THC

4% 3x more potent 12%

2017 = 17%

THC levels build up over time

Marijuana effects can last several days

- Respiratory system
- Cardiovascular system
- Cognition
- Psychomotor performance
- Perception
- Motivation
- Mental health
- Immune System

Respiratory Systems

- Muscles deprived of optimal energy level
- More quickly fatigued
- Decreased performance


Cardiovascular System

- Resting heart rate (20%-100% increase from 1 joint)
- Blood pressure
- Efficiency in oxygen distribution
- Stamina
- Endurance
  - Can affect ability to regulate body temperature

Cognitive and Psychomotor Performance

Skill impairment may last up to 36 hours
- Slowed reflexes
- Disrupted balance and posture
- Increased risk of injury
- Increased time needed to learn (up to 5 hours)
- Reduced ability to problem-solve

Misuse of cannabis with high THC or contaminated with synthetic cannabinoids can result in acute anxiety or psychosis.

What is the effect of marijuana on athletic performance?

- “THC does NOT enhance aerobic exercise or strength.” (Kennedy p. 825 [review of 15 studies])
- “No evidence of performance-enhancing effects.” (Ware, p. 483)
- Because of...“decreased exercise performance, possibly secondary to increases in heart rate and blood pressure, which may alter perceived exertion, marijuana may be considered an ergolytic [performance impairing] agent.” (Hore, p. 10)

Brain is not fully developed until about age 25:

Impacts:
- Reasoning
- Impulse control
- Planning
- Decision-making

Brain development in healthy children and teens (Ages 5-20)

Impact:
- Reasoning
- Impulse control
- Planning
- Decision-making

Research supported by NIAAA and the U.S. Dept. of Veterans Affairs

4 year study of 3,800 adolescents, starting at age 13

- Caused changes in normal brain structure development
- Greater impact on thinking skills
- Effects remained after drug use stopped


Alcohol & Team Success
Abstaining from alcohol use while in season can increase the likelihood of having a successful season.

Keller (2013) Alcohol and Performance Potential Impacts are higher for college student-athletes.

The lingering effects of alcohol hangovers reduce athletic performance by up to 11.4% in elite athletes (e.g., national teams)
Impacts are higher for college student-athletes.
What Is Acceptable Performance?

<table>
<thead>
<tr>
<th>Full Capacity: 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Performance: 90%</td>
</tr>
<tr>
<td>Is 80% Capacity Acceptable?</td>
</tr>
</tbody>
</table>

[Graph showing performance levels]

What would a 15% performance INCREASE look like for your team?

For your individual performance?

<table>
<thead>
<tr>
<th>2018 Actual</th>
<th>15% increase prediction for 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record</td>
<td>12-6, 667</td>
</tr>
<tr>
<td>Goals</td>
<td>209</td>
</tr>
<tr>
<td>Assists</td>
<td>127</td>
</tr>
<tr>
<td>Shots</td>
<td>639</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Record</td>
<td>14-4, 778</td>
</tr>
<tr>
<td>Goals</td>
<td>240</td>
</tr>
<tr>
<td>Assists</td>
<td>146</td>
</tr>
<tr>
<td>Shots</td>
<td>734</td>
</tr>
</tbody>
</table>
### 2018 Actual | 15% Increase Prediction | 2019 Actual (20-25% Increase) | 2021 Actual (20-25% Increase)
--- | --- | --- | ---
Record | 12-6, .667 | 15-3, .816 | 14-4, .778
Goals | 209 | 240 | 263
Assists | 127 | 146 | 151
Shots | 639 | 734 | 778

On your phone, go to kahoot.it
Enter GAME PIN
Then SPIN for your nickname & make sure your nickname appears on the screen
The **QUESTION** will appear on your phone screen 1st

Then you’ll automatically see the question at the top with answer options below.

You get extra points for speed!

---

**Ready to compete?**

There will be **PRIZES!**

Take a screen shot if you win 1st, 2nd or 3rd place!