

# BARTENDER AND SERVER WORKBOOK

**VOL4**

## **Factors Related to Intoxication**

Coaching the Experienced Bartender & Server



**Maj. Mark Willingham, PhD**

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Maj. Willingham earned his PhD in Business Administration with a specialization in Business and Corporate Security focusing on responsible alcohol sales practices. He was the recipient of the Fulbright Fellowship in Police Studies to the United Kingdom where he conducted research on youth access to alcohol prevention, regulation of the alcoholic beverage industry, and control of abusive drinking. Mark served as the International President of the FBI National Academy Associates and has authored four books and over fifty articles in state and national law enforcement journals on leadership, management, and alcohol related issues. Mark is a national speaker on alcohol related risk, mitigation, and responsible alcohol relating issues.

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## **Welcome and Introduction**

The Coaching the Experienced Bartender series is designed for bartenders and servers like you who are already skilled in the basics of serving alcoholic beverages. The objective of the workbook is to refresh your knowledge and awareness and build on your current skills and training to help you reach a new level of responsible alcohol service.

One of the most important duties you have as a bartender or alcohol server is helping your guests drink responsibly to promote a satisfying hospitality experience. It helps ensure the safety of your guests and others in the community. Just like first responders, bartenders, alcohol servers, and other front of the house staff have a responsibility to protect the community. You accomplish this task by preventing your patrons from becoming intoxicated, by not serving intoxicated patrons, and by not allowing intoxicated patrons to drive away from your location. Your knowledge of responsible alcohol service and your ability to apply this knowledge is absolutely vital to the success of your establishment and to the safety of your community.

**One of the most important duties you have as a bartender or alcohol server is helping your guests drink responsibly to promote a satisfying hospitality experience.**

Public safety must be a personal and professional consideration of everyone in the alcoholic beverage industry. Professionals in the retail beverage alcohol industry must adopt and employ a personal value system for the safe service of alcohol and commit to preventing the the sale of alcoholic beverages to underage persons, persons who are intoxicated, and/or persons habitually addicted to alcohol.

It may be counterintuitive to those in the hospitality business to deny someone alcohol service. Refusing service can place employees in a challenging and stressful situation. Sometimes putting limits on alcohol service is the best thing you can do for your patron. Alcoholic beverage service policies, practices, training, and management prepare and help you to provide your guests with a wonderful experience and help you to protect your guests, yourself, and others from alcohol-related harms. In the long run, guests and the community



## Factors Related to Intoxication

As a bartender, alcohol server, or other employee working in an alcoholic beverage service establishment, you must do everything possible to ensure that guests do not become intoxicated at your establishment. There are many factors that you should consider in making alcohol service decisions. These factors can help you determine the best possible approach for the safety of your patrons, yourself, and your community.

What are the major factors that affect how intoxicated a person will become based on the consumption of a set amount of alcohol?

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## Differences Based on Physical Size and Weight

How does a person's body weight affect how intoxicated they will become after a set amount of alcohol?

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In general, the less you weigh, the more you will be affected by a given amount of alcohol. Alcohol, having an affinity for water, will be diluted in your body's total amount of water. Basically, a person's blood alcohol concentration (BAC) is a function of the total amount of alcohol in his or her body divided by the total amount of water in his or her body. For two individuals with similar body compositions but different weights, the larger individual will achieve lower BACs than the smaller one after ingesting the same amount of alcohol because the larger individual has more water in which to dilute the alcohol.

For example, if a drinker weighs 180 pounds, two standard drink units consumed in one hour will generally produce a 0.04 g% BAC. For a person who weighs 100 pounds, those same two drinks will produce a 0.08 g% BAC, well beyond the level of intoxication for driving

a vehicle.

While smaller people are sometimes affected more quickly by alcohol than larger people, larger people with a high percentage of body fat can also become intoxicated more quickly than those with a lean body type.

## Differences Based on Body Type

Will a lean guest become intoxicated more quickly than a guest with a high percentage of body fat?

Circle your answer: **Yes** **No**

Body type is as important as body size. Fat does not absorb blood, water, or alcohol, while muscle does. Because alcohol is water-soluble, it is not readily absorbed into body fat and is passed directly into the bloodstream. The more muscular a person is, the more alcohol it will take to increase his or her BAC because the alcohol will be absorbed by the muscle tissue. Remember, the goal is to reduce the amount of alcohol in the blood. In a person with a higher percentage of body fat, the alcohol stays in the bloodstream, thus raising the BAC.

This information can be used to approximate the relative risk of intoxication between two similarly sized males—one who is lean and one who has a significant amount of body fat. It can also be used to compare the relative intoxication levels of similarly sized male and female drinkers. Female drinkers generally have a higher percentage of body fat than men and thus, are more at risk of intoxication than a man of similar body weight.

## Differences Based on Gender

A women will become more intoxicated with the same amount of alcohol as a similarly sized man.

Circle your answer: **True** **False**

Why?

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Is there a difference in the alcohol-metabolizing enzyme ADH between men and women?

Circle your answer:    **Yes**    **No**

Which gender has more of the enzyme?

---

Alcohol does not affect men and women equally. Alcohol's effects on women tend to be stronger and last longer. Women have less muscle tissue, and thus less blood to dilute the alcohol. Women have higher levels of estrogen, body fat, and lower levels of body water than men, all of which limits the amount of alcohol absorbed into tissues, thus remaining in the bloodstream. Menstrual cycles also affect absorption rates. Women produce a smaller amount of alcohol dehydrogenase (ADH), an enzyme that breaks down alcohol in the stomach. As a result, women reach a peak BAC about 20% higher than men do. In addition, women are generally smaller in stature than men, resulting in a lower amount of blood in their bodies. However, these generalizations are not true if the woman is very fit and the man is somewhat obese.

On the positive side, studies indicate that women eliminate alcohol from their bodies at a rate 10% greater than that of men. It is therefore important to remember that this difference in the elimination rate is by far outweighed by gender differences related to absorption factors. Women will, in



## Bartender and Server Workbook: Path of Alcohol Through The Body

most cases, reach higher BACs than their male counterparts who consume the same amount of alcohol.

Men typically have more of ADH in the stomach than women, which means that men digest more of the alcohol than women before it is absorbed into their bloodstreams. Men are generally larger and have less body fat than women, thus providing more blood and water to dilute the alcohol.

### Differences Based on Age

Is age a factor in one's ability to metabolize alcohol?

Circle your answer: **Yes** **No**

If so, at what age does the change seem apparent?

---

Compared with younger people, older adults have an increased sensitivity to alcohol, as well as to over-the-counter and prescription medications. A senior citizen who drinks the same amount of alcohol as a younger guest will have a higher BAC, all other factors being equal. Body fat typically increases with age, and enzyme action tends to slow down as a

person gets older. Older individuals also tend to have lower water levels in their bodies, limiting the amount of blood available to dilute the alcohol.

Because of these differences based on age, you should observe older guests carefully when serving them alcoholic beverages. They may become intoxicated more quickly than younger guests. This difference is due to a slowing of enzyme action and, typically, a higher percentage of body fat.



## Differences Based on Emotional State

Will a drinker's anxiety level and fatigue affect how quickly he or she becomes intoxicated?

Circle your answer:    **Yes**    **No**

An emotional guest will have a higher BAC than a guest who is calm, all other factors being equal. When a person is stressed, angry, or afraid, the body diverts blood away from the stomach and small intestine to the muscles. This reduction in blood flow from organs of absorption—the stomach and small intestine—slows the uptake of alcohol into the bloodstream. The stressed, angry, or afraid guest will not feel the effects of the alcohol and may continue to drink. As he or she begins to calm and blood flow returns to the stomach, the guest may experience a sudden increase in his or her BAC. This type of situation can be dangerous for the guest, as well as for other guests in the establishment and the staff.

## Differences Between Drinks

How does strength of the alcohol used in a drink affect intoxication?

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How many ounces of alcohol at what proof does your establishment serve when someone orders a double?

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How many ounces of alcohol are contained in a Long Island iced tea or a zombie?

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## **Bartender and Server Workbook: Path of Alcohol Through The Body**

The stronger the alcohol content in the beverage consumed—that is, the more alcohol a drink contains—the more will end up in the bloodstream, resulting in a higher the BAC. Distilled liquor, such as whiskey or vodka, contains a larger percentage of alcohol by volume than does fermented alcohol—beverages such as beer or wine. A person drinking a 2-ounce martini will have a higher BAC than a person drinking a rum and coke with one standard drink unit, all other factors being equal.

Strength of drink can result from different total amounts of ethyl alcohol in the drink. It can also come from differences in the proof (alcohol by volume) of the ingredients.

**Over-pouring makes it difficult to count the actual number of drinks consumed by a guest. Follow house recipes when mixing drinks, and be consistent.**

The alcohol content in a drink can vary significantly from drink to drink. For example, how many ounces of alcohol does your establishment serve when someone orders a double? How many ounces of alcohol are contained in a Long Island iced tea or a zombie? A mixed drink that contains three 1-½ ounce shots of various liquors (such as found in a Long Island iced tea) counts as three drinks, not one. The alcohol content of each drink, then, is very important in calculating BAC. A larger drink will contain more alcohol and result in a higher BAC than a smaller drink of the same alcohol strength. For example, a 24-ounce beer contains twice as much alcohol as a 12-ounce beer of the same brand.

Some alcoholic beverages are more potent than others, even if they are basically the same type of beverage. One beer could have 3.2% alcohol and another type of beer could have 8%. One bottle of wine could be 10% alcohol and another might be 15% alcohol.

The concentration of the drinks that a guest ingests can have a slight effect on the peak alcohol concentration due to the differences in absorption rate of various concentrations of alcohol. Alcohol is most rapidly absorbed when the concentration of the drink is between 10% and 30%. Below 10%, the concentration gradient in the gastrointestinal tract is low and slows absorption. Furthermore, the added volumes of liquid involved slow stomach emptying. On the other hand, concentrations higher than 30% tend to irritate the mucus membranes

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of the gastrointestinal tract and the valve at the base of the stomach, causing increased secretion of mucus and delayed stomach emptying.

For these and other reasons (primarily financial ones), you should avoid over-pouring when mixing drinks. Over-pouring makes it difficult to count the actual number of drinks consumed by a guest. Follow house recipes when mixing drinks, and be consistent. Finally, avoid serving guests more than one drink at a time. Suggesting drinks with low alcohol content is an effective way to help guests drink in moderation.

### **Differences Between Drinks:** *Style of Drink*

How a drink is prepared affects its potency. A drink served straight up or combined with more than one type of alcohol will be stronger than a drink mixed with ice or water. A drink served over ice is less potent than one with the same amount of alcohol served straight up because, as the ice dissolves, it dilutes the strength of the alcohol.

A tall drink, such as a bloody Mary cocktail, is less potent than a standard drink. Although the same amount of alcohol is used in both, the taller glass requires more ice and mixer, resulting in a weaker proportion of alcohol to non-alcohol ingredients.

A drink blended with ice, such as a margarita, daiquiri, or other frozen drink, is more diluted than an unblended drink. Therefore, a blended drink is generally less potent than a drink served over ice or straight up.

Does drink temperature, carbonation, or sweetness affect how quickly alcohol is absorbed?

Circle your answer:    **Yes**    **No**

### **Differences Between Drinks:** *Carbonation*

Alcohol mixed with a carbonated beverage, such as beer, sparkling wine, or tonic will be absorbed into the bloodstream more quickly than alcohol mixed with a noncarbonated beverage, all other factors being equal. Carbonation speeds the alcohol into the system. This expedited transport is the result of carbonation irritating the stomach, causing the valve

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at the base of the stomach into the small intestine to open, allowing the alcohol into the intestine, where 75% to 85% of alcohol is absorbed. Carbon dioxide also causes pressure in the stomach and ADH, moving alcohol into the small intestine more quickly. Carbonation stimulates the valve at the base of the stomach, causing it to stay open a bit longer, allowing more fluid to pass through and into the small intestine.

### **Differences Between Drinks:** *Sweetness*



The valve at the base of the stomach opens more quickly when sweet foods are in the stomach than when sweet foods are not present. This difference is because sweet foods require less digestion. Sweet-flavored alcoholic beverages also cause the valve at the base of the stomach to open sooner and stay open longer, thus allowing the alcohol to pass quickly into the small intestine.

Sugary drinks such as the sodas that are frequently mixed with liquor or wine coolers will speed up the absorption of alcohol.

### **Differences Between Drinks:** *Drink Temperatures*

Warm drinks enter the bloodstream more quickly than cold drinks. It generally takes the stomach longer to warm cold beverages to body temperature before digestion begins and the contents of the stomach are passed into the small intestine.

### **Differences Between Drinks:** *Caffeine*

Can caffeine contribute to alcohol intoxication?

Circle your answer: **Yes** **No**

Caffeine is a stomach irritant. It tends to cause the valve at the base of the stomach to open more quickly to allow the irritant to pass out of the stomach. This action accelerates alcohol mixed with the caffeine to move quickly into the bloodstream.

The most prevalent caffeine-based alcoholic beverage is an alcohol energy drink (AED). In general, because alcohol is a depressant and caffeine is a stimulant, mixing alcohol and caffeine may cause a guest to continue to drink past the point of intoxication.

For example, in 2012, an 18-year-old college student died of acute alcohol poisoning. In court, the attorney reported the young man had a BAC of .40, or 5 times the legal limit. It was also stated the he had consumed several alcoholic beverages mixed with energy drinks. It was argued that without the energy shots, the young man would have become incapacitated before reaching his lethal 0.414g% BAC.

## **Differences Based on Ancillary Factors**

### **Ancillary Factors:** *Rate of Drinking*

As alcohol moves through the body, its effect on a guest's BAC depends on the rate at which it enters the bloodstream. Because the liver can remove alcohol from the body at the rate of only 2/3 drink per hour, consuming more alcohol than that will result in a buildup in the guest's bloodstream, raising his or her BAC.

If a customer two drinks in an hour, while the liver is breaking down the alcohol in the first drink, the alcohol in the second drink gets backed up and stays in the bloodstream. Consider if the customer orders three more drinks in the next hour. While the alcohol in the second drink is being broken down, there is now alcohol from three drinks backed up in the bloodstream.

How quickly someone is drinking affects how quickly the alcohol hits the bloodstream. Someone who does a shooter will get intoxicated more quickly than someone sipping a shot of alcohol over an hour or drinking a beer. Gulping drinks and ordering frequently will increase the amount of alcohol taken into the system.



## **Bartender and Server Workbook:** Path of Alcohol Through The Body

Alcohol can affect guests long after they have stopped drinking. Although they may appear fine, guests may become intoxicated after leaving the establishment, because alcohol will continue to enter the bloodstream as the drinks move from the stomach into the small intestine and into the bloodstream to the brain and organs.

### **Ancillary Factors:** *Water Consumption*

How does the service of water to patrons help prevent intoxication?

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It is important to offer water to guests. Drinking alcohol causes dehydration, making guest thirsty. Being thirsty can cause them to drink more alcohol than they ordinarily would to quench their thirst. You can help by offering water with drinks and refilling water glasses often.

Serving water with each drink helps dilute the alcohol as it is consumed. It also tends to delay the absorption of the alcohol by giving the drinker another task to occupy their time during the drinking process.

### **Ancillary Factors:** *Food Consumption*

How does food consumption affect intoxication?

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Are carbohydrates of the best type of food to serve with alcohol to help prevent intoxication?

Circle your answer:    **Yes**    **No**

Why or why not?

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A guest who has not eaten will have a higher BAC than a guest who has eaten, all other factors being equal. One of the major factors to have an impact on the rate at which alcohol enters the bloodstream is food. Food keeps alcohol in the stomach for a longer period of time, slowing the rate at which alcohol reaches the small intestine.

Offering food is one of the most important things you can do to help prevent intoxication. The best food items to offer someone who is drinking are fatty and high in protein because these types of food are digested more slowly and help to keep alcohol in the stomach. Foods such as pizza, chicken wings, cheese, and deep-fried items slow alcohol absorption because they are digested more slowly than non-fatty and low-protein foods.

Having food in your stomach can have a powerful influence on the absorption of alcohol. The food will dilute the alcohol and slow the emptying of the stomach into the small intestine, where alcohol is very rapidly absorbed. Peak BAC could be as much as 3 times higher in someone with an empty stomach than in someone who has eaten a meal before drinking. Eating regular meals and having snacks while drinking will keep a guest from getting too drunk too quickly.

Any kind of food will slow the absorption rate of any alcohol that has not already passed into the intestines. Putting food into the stomach causes the valve at the base of the stomach to close until the food is digested. Staying in the stomach for a longer period of time allows for alcohol to reach the intestines more gradually and to be absorbed into the bloodstream at a much slower rate. When the valve opens again, the intestines receive a mixture of food and alcohol. This mixture of food and alcohol further slows



the alcohol absorption because the alcohol is dispersed in the food instead of by itself in a pure state.

The type of food in a meal (e.g., carbohydrate, fat, protein) has not been shown to have as much of an affect as the size of the meal and proximity between food being consumed and alcohol being consumed. Studies have shown reductions in peak alcohol concentration (as opposed to those of a fasting individual under otherwise similar circumstances) of 9% to 23%.

**The types of bar foods and snacks can make a difference...While food such as peanuts, pretzels, and chips is common bar fare, these items can make guest thirsty and increase their consumption of alcohol.**

The types of bar foods and snacks can make a difference. Avoid serving snack items that are high in sugar or carbohydrates. While better than nothing, these items are easily digested and thus less effective in slowing the movement of alcohol into the small intestines. In addition, they tend to cause the food to pass from the stomach to the small intestine more quickly. Foods high in carbohydrates such as pretzels, vegetables, fruits, and pasta are quickly digested and may actually speed the absorption rate of alcohol into the bloodstream. While food such as peanuts, pretzels, and chips is common bar fare, these items can make guest thirsty and increase their consumption of alcohol. Pretzels and chips are also high in carbohydrates, which are easily digested.

Take special care if you know a guest is dieting because the individual may not have eaten or may have eaten considerably less than usual. Alcohol may pass more quickly from his or her stomach to the small intestine.

Eating food after consuming alcohol may have little affect on patron intoxication. Trying to prevent becoming intoxicated by drinking only on a full stomach will just result in a well-fed drunk!

### **Ancillary Factors:** *Dehydration*

A dehydrated person's blood volume will be lower from sweating and it will take less alcohol to reach a higher BAC. As a result, alcohol will affect this person more quickly than a person who is not dehydrated.

### **Ancillary Factors:** *Mood*

Strong emotions such as depression, stress, or anger can alter how alcohol is absorbed. Someone who is depressed, tired, or stressed will be affected more quickly. Thus, if a guest is sad, alcohol may make him or her sadder. A person who is depressed will likely become more depressed when drinking. If the drinker is happy, alcohol may make him or her happier. The psychological composition of an individual becomes important when drinking because alcohol may diminish some controls that keep the person functioning well under usual circumstances. Loss of those controls may lead to difficulties such as aggression and other unwanted behaviors.



You should closely monitor patrons who you believe are hungry, angry, lonely, or tired. Someone “ready to party” can also be affected more quickly because he or she expects or intends to be affected quickly.

### **Ancillary Factors:** *Anxiety*

When a person is anxious about something, the stomach secretes a mucus coating, which slows down or stops digestion and absorption. The anxious drinker will not immediately feel the affects of the alcohol. He or she may drink more and faster because of not feeling the effects of the alcohol. Eventually, enough alcohol will be absorbed through the stomach and this person will relax. The mucus will disappear, and a large quantity of alcohol will be dumped into the intestines and the person will seem to become instantly intoxicated. Pay attention to

your customers' mood and make sure that you are not over-serving them when they don't seem to be affected by the alcohol.

### **Ancillary Factors: *Fatigue***

Another factor that makes a difference in intoxication is fatigue. Fatigue can increase the rate at which a person becomes intoxicated. Fatigue may intensify the effects of alcohol. In general, a guest who begins drinking while fatigued will show signs of intoxication more quickly than one who is not fatigued because a fatigued guest's liver is less efficient at removing alcohol from the body. This reduction in the liver's ability to process alcohol leads to higher BAC levels.

### **Differences Based on Illness**

Healthy people break down alcohol more quickly than those in poor health. They have more blood, and their liver works more efficiently. Many people seem more susceptible to alcohol's effects when they are ill or recovering from a recent illness. Additionally, certain medical conditions, such as those taken to treat diabetes or liver disease, may affect an individual's ability to tolerate or break down alcohol.

### **Differences Based on Ethnicity, Genetics, and Family History**

The genetic background of a guest is an important determinant in his or her response to alcohol. There are several important examples of this phenomenon. Up to 50% of the Asian population carries modifications to their enzymes responsible for the metabolism of alcohol. As a result, drinking alcoholic beverages causes these individuals to have facial flushing, become sick or nauseous, have headaches, and experience dizziness and rapid heartbeat. It appears that one of the liver enzymes necessary to process alcohol is not active in these individuals. It is estimated that up to 50% of Asians are susceptible to these reactions to alcohol.

First-degree relatives (i.e., children, siblings, or parents) of alcoholics have been estimated to have a 7 times greater chance of developing alcoholism. Male relatives of male alcoholics are at particularly high risk, with the expectancy of becoming an alcoholic ranging from 20% to 50%. It appears that this risk factor is not just genetic; growing up with an alcoholic parent contributes to a person's drinking behavior.

## **Differences Based on Drinking Experience**

Another factor that appears to influence the effect of alcohol on an individual is his or her prior experience with drinking. When all other factors are kept constant, the individual who is not experienced with alcohol is more likely to display more variable and less pleasant responses than the experience drinker. As people become experienced drinkers, they often learn to compensate for some of the alcohol-induced behaviors. These differences are psychological adaptations to the experience of drinking—having adapted to the experience of drinking does not mean that experienced drinkers do not become intoxicated.

Inexperienced guests often show signs of intoxication after drinking a small amount of alcohol because their bodies are unaccustomed to it and are sensitive to smaller amounts. Remember: while guests may have had only one or two drinks at your establishment, you can be held liable if they were visibly intoxicated when they left your establishment.

Young drivers between the ages of 16 to 19 with a BAC of 0.02 to 0.05% (one to two drinks) are at least 7 times more likely to be killed in a crash than a sober driver of any age. At 0.08% BAC (three to four drinks), young drivers are 40 times more likely to be killed than a sober driver and 20 times more likely to be killed than a 55-year-old driver at the same BAC level. By 0.12% BAC (four to six drinks), a 16- to 19-year-old is 90 times as likely to die in a traffic crash as a sober driver.



## **Differences Based on Drinking Environment**

The environment in which a person drinks is an important determinant of the effects of alcohol. For example, drinking at a festive party will often cause the person to become more festive. A good example of this phenomenon is the behavior of the thousands of people who attend Mardi Gras in New Orleans each year. This is essentially a huge party that goes on and on, and people's behavior and energy level is increased by the group. In contrast, it would be expected that drinking at sad occasions would result in more sadness.

## **Differences Based on Altitude**

While it is not a factor in Florida, it is worth knowing that a change in altitude can affect intoxication. Higher altitude or atmospheric pressure can make drinks seem twice as potent as they really are. Flying or mountain vacationing can increase the rate at which a person's body reacts to alcohol.

## **Differences Based on Drug Use**

Mixing alcohol with drugs can affect the rate of alcohol absorption. Guests who consume alcohol while using illegal drugs or medications such as cold tablets, tranquilizers, antihistamines, or high blood pressure medications can compound the effects of alcohol or expose themselves to dangerous interactions.

Many common drugs (illegal drugs and prescription/over-the-counter medications) impair the user and increase the effects of alcohol. Using alcohol with other drugs can be very dangerous to a person's health and safety.



It is often difficult to know if a guest is taking medication. Sometimes, you may notice signs of illness such as coughing, sneezing, or runny nose. Seeing these indicators provides a good opportunity to ask the guest how he or she is feeling and to find out if the individual is taking medication. There is no way to know how alcohol will react with drugs. Alcohol, like many medications, is a depressant. Taking medication could possibly double the effects of alcohol. Medications or other drugs may cause quicker or unexpected results in combination with alcohol. Mixing alcohol with illegal drugs is particularly dangerous because it may cause the person to experience an overdose. Alcohol interactions may also make herbal remedies harmful or even toxic to the body.

No amount of alcohol is too small to interact with medications. Even in relatively small amounts, alcohol may intensify the harmful side effects of medications. These include drowsiness, reduced coordination, skin reactions, blurred vision, and other symptoms that may reduce a person's ability to safely operate a vehicle and lead to serious or even fatal accidents.

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The effects of mixing alcohol and illegal drugs can be extremely unpredictable and dangerous. Generally, this scenario can cause anything from mild nausea to disruptive and dangerous behavior or even death. For example, even small amounts of alcohol may lower the amount of heroin needed to fatally overdose. A guest under the influence of heroin may inadvertently overdose after just one drink.

Because alcohol can adversely interact with hundreds of commonly used medications, it's important for you to observe changes in behavior, not just the amount your guest is drinking.

If you suspect a guest is under the influence of illegal drugs, notify your supervisor and refer to your establishment's procedure for refusing service. Guests who are under the influence of drugs are less likely to make responsible decisions about how much alcohol they should drink before becoming intoxicated.

To identify a guest who may be under the influence of illegal drugs, look for the following signs: dizziness, nausea, vomiting, panic, anxiety, paranoia, or aggressive behavior.

### **Stomach Irritation**

Alcohol irritates the stomach. If a large quantity of alcohol accumulates in the stomach, the stomach will shut down and no digestion will take place. The valve at the base will stay closed and the alcohol will not pass into the intestine. The result is that very little absorption takes place. The alcohol just sits in the stomach and continues to irritate it until the stomach finally rejects the source of irritation and vomiting occurs.

### **Combination of Factors**

You can learn a lot about a guest's level of intoxication by carefully watching for physical and behavioral changes. Keep in mind that a change in behavior is more significant than the actual behavior itself.

Keep in mind that some guests will have a combination of these factors, resulting in a higher risk of these factors and resulting in a higher rate of intoxication. For example, an elderly woman on medication who is consuming a martini or an obviously irritated man with a high percentage of body fat who has had two Long Island ice teas in an hour are both at higher risks for intoxication than a young person in good health. These types of guests require

even more attention on your part to prevent intoxication.

Remember, everyone reacts differently to alcohol. Factors that cause people to react differently to alcohol include:

- Food
- Emotions
- Medication
- Potency of Drink
- Physical Characteristics
- Rate of Consumption
- Rate of Absorption

The key is to observe behaviors and not just the number of drinks served.

## **Concern for Mis-Identification of Behaviors**

There is a big difference between a normally loud and boisterous guest and a guest who is quiet when he or she first arrives at your establishment and then becomes loud and boisterous after a few drinks. Take the time to talk to your guests to get to know them. In addition to observing their behavior, knowing your guests will help you determine the purpose of their visit as well as their level of intoxication. If guests are determined to become intoxicated, you want to know about it. Continue talking to each guest throughout his or her stay.



You can tell someone is feeling the effects of alcohol when he or she loosens up and let down his or her guard. Some people go through a dramatic personality change. They might start out quiet and withdrawn and end up very talkative and animated.

You want to pay attention to see if alcohol intensifies their behavior. Some people become obnoxious. Others withdraw and become antisocial. In some cases, guests get very emotional.

Watching for changes in talking to your guests can also prevent a potentially embarrassing situation. Certain disabilities and physical conditions can cause a guest to stumble, slur his or her speech, or have difficulty concentrating. Observation and communication will help you avoid mistakenly seeing these actions as signs of intoxication.

## Let's See What You Have Learned

What are the major factors that affect how intoxicated a person will become based on the consumption of a set amount of alcohol?

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How does a person's body weight affect how intoxicated they will become after a set amount of alcohol?

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Will a lean guest become intoxicated more quickly than a guest with a high percentage of body fat?

Circle your answer: **Yes** **No**

A women will become more intoxicated with the same amount of alcohol as a similarly sized man.

Circle your answer: **True** **False**

Why?

---

Is there a difference in the alcohol-metabolizing enzyme ADH between men and women?

Circle your answer: **Yes** **No**

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How does strength of the alcohol used in a drink affect intoxication?

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How many ounces of alcohol at what proof does your establishment serve when someone orders a double?

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How many ounces of alcohol are contained in a Long Island iced tea or a zombie?

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**Bartender and Server Workbook: Path of Alcohol Through The Body**

Does drink temperature, carbonation, or sweetness affect how quickly alcohol is absorbed?

Circle your answer: **Yes** **No**

Can caffeine contribute to alcohol intoxication?

Circle your answer: **Yes** **No**

How does the service of water to patrons help prevent intoxication?

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How does food consumption affect intoxication?

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Are carbohydrates of the best type of food to serve with alcohol to help prevent intoxication?

Circle your answer: **Yes** **No**

Why or why not?

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