CARING FOR THE PATIENT WITH A HISTORY OF ALCOHOL ABUSE

INTRODUCTION

Alcohol is the most commonly abused substance in the United States. It has been estimated that between 12 and 14 million Americans abuse alcohol, but that number is most likely much higher. Alcohol abuse causes many complex health problems. The cost for treating these, combined with the social and psychological devastation that goes along with chronic, excessive drinking makes alcohol abuse an enormous public health care issue.

Because alcohol abuse and its impact are so widespread, there will definitely be a time during your career as a Certified Nursing Assistant (CNA) when you will care for a patient with a history of alcohol abuse or a patient who is intoxicated. The patient may not have used alcohol for years, or he/she may still be actively abusing alcohol. But whatever the current status of the patient’s pattern of drinking, as a healthcare professional you need to be familiar with some basic facts and information about alcohol and alcohol abuse. Alcohol abuse is very widespread, people who chronically drink to excess have many health problems, and they are frequent users of the health care system.

OBJECTIVES

When the student has finished this module, she/she will be able to:

1. Identify the correct name of the intoxicating ingredient of alcoholic beverages.
2. Identify the correct definition of alcohol abuse.
3. Identify three signs and symptoms of mild to moderate alcohol intoxication.
4. Identify three signs and symptoms of severe alcohol intoxication.
5. Identify the three factors that are considered to be the causes of alcohol abuse.
6. Identify the definition of a single drink.
7. Identify three serious health problems cause by chronic alcohol abuse.
8. Identify a definition of delirium tremens.
9. Identify the number of daily drinks that is considered dangerous.
10. Identify three areas of concern to be aware of when caring for the intoxicated patient.

WHAT IS ALCOHOL?

Ethanol is the correct name for the alcohol that we drink in beverages, but the two terms will be used here interchangeably. Ethanol is made by fermenting sugars that are found in fruits and grains. Ethanol is found in alcoholic beverages, and alcohol is the most commonly used and most popular intoxicant. Ethanol is also used as an ingredient in hand sanitizers, mouthwashes, hairsprays, perfumes, and some over-the-counter medications (Some cough and cold liquids have a relatively high alcohol content, but this practice is being changed), and alcohol in its denatured form is used as a solvent in other consumer products such as deodorants and cleaning products.
The alcohol content of popular beverages varies considerably. Beers typically have 4-5% alcohol, wines have 10-20%, and “hard liquors” such as gin, rum, and whiskey have 40-50% alcohol. The alcohol content of a beverage, particularly the hard liquors, is sometimes designated by the term proof, e.g., 80 proof whiskey. To determine the alcohol content using proof, simply divide by two: 80 proof is 40% alcohol.

Pure alcohol has been used to treat certain medical problems such as poisoning from ethylene glycol and methanol, but effective antidotes have made this unnecessary. Pure alcohol itself is quite bitter and not really drinkable.

Learning Break: As mentioned previously, alcohol is an ingredient of such diverse products as deodorants, hairsprays and mouthwashes. If you examine one of these products that have alcohol, you will notice that they may contain SDA alcohol. SDA stands for Standard Denatured Alcohol. Standard Denatured Alcohol is ethanol that has had substances added to it that make it suitable for the particular use of the product and either unpleasant or possibly harmful to drink. For example SDA alcohol 38-B that is commonly used in mouthwashes has ingredients such as peppermint oil, which is very bitter. The peppermint oil has an anti-bacterial action, but also (hopefully) discourages misuse of the product.

There are other alcohols aside from ethanol. Isopropyl alcohol is also known as rubbing alcohol. It is more intoxicating than ethanol, but it is extremely bitter, very nauseating, and quite irritating to the stomach, so few people, no matter how determined, can drink enough to become drunk. Methanol is an alcohol that is used in automobile windshield washer fluids and automobile windshield deicers. As with the other alcohols it is intoxicating, but like isopropyl alcohol it is also very bitter. It is also very dangerous and even small amounts can cause serious harm: one of the most feared effects of methanol intoxication is blindness. Ethylene glycol (Commonly called antifreeze) is an alcohol that is used as antifreeze for automobile radiators. Ethylene glycol is intoxicating but unlike isopropyl alcohol and methanol, it has a relatively sweet taste and some people find it palatable. However, it is extremely toxic and even small taste amounts can cause serious harm or death.

Learning Break: Unfortunately, people with an alcohol abuse problem who cannot get ordinary beverage alcohol may drink products that contain ethylene glycol, isopropyl alcohol, or methanol in an attempt to get drunk. Someone who is intoxicated and who chronically abuses alcohol should always be asked if he/she has ingested anything containing ethylene glycol, isopropyl alcohol, or methanol.

**HOW MUCH ALCOHOL IS NEEDED TO CAUSE INTOXICATION?**

How much alcohol is required to cause intoxication? There is no simple answer to that question, but the first step is to define intoxication. At this time, the legal definition of intoxication in all 50 states as it pertains to driving an automobile is:

Intoxication is a blood alcohol level that is 80 mg/dL or higher.
This figure can be reported in other ways such as 0.08%. Alcohol levels lower or higher than 80 mg/dL could be considered as defining intoxication depending on the situation, but for this module intoxication will be defined as a blood alcohol level of 80 mg/dL or higher. The figure mg/dL is the standard unit that is used to measure alcohol levels, and it stands for milligrams per deciliter, a deciliter being 100 milliliters.

Of course, that figure leaves a lot of questions unanswered. The amount of alcohol influences the level of intoxication: the more someone drinks, the more intoxicated he/she will become. However, the amount of alcohol that is needed to cause intoxication varies greatly from person to person, and the effects a certain alcohol level produces will vary from person to person. Women tend to become intoxicated more easily than men (This will be discussed more in another section of the module), and people who drink a lot and drink regularly are more tolerant of alcohol. It is well known that some people may appear to be, and feel intoxicated at a blood alcohol level lower than 80 mg/dL, but a person who chronically abuses alcohol and is habituated to its effects can have a blood alcohol level that would cause a non-drinker to be completely incapacitated - yet the alcohol abuser would appear to be at most mildly drunk.

For most people, three to four drinks would be enough to cause legal intoxication. A drink is usually defined as 12 ounces of beer, five to six ounces of wine, or an ounce and a half of hard liquor.

**Example:** A 45-year-old man goes to a bar after work and drinks three, 12 ounce bottles of beer. He decides to drive home and on the way he has an accident. He is 165 pounds, the beer was 5% alcohol, and he drank 36 ounces. His blood alcohol level is 105.8 mg/dL. For a 45-year-old woman who weighs 120 pounds, her blood alcohol level after drinking three, 12 ounces bottles of beer would be 145.5 mg/dL.

However, just as some people can tolerate alcohol levels that would be harmful to someone else, the amount of alcohol that needs to be ingested to produce legal intoxication can vary from person to person, as well. Women become intoxicated by less alcohol than men. There is an enzyme in the stomach that metabolizes alcohol before it becomes absorbed. Women have less of this enzyme than men so more alcohol reaches the systemic circulation and the brain, and they become intoxicated by smaller amounts of alcohol. Also, the presence of food in the stomach and how fast the alcohol was consumed can influence the alcohol level and the degree of intoxication.

Alcohol gets absorbed though the stomach very rapidly. Most people feel the effects of an alcoholic drink very soon after ingestion, and the peak effect of an alcoholic drink is usually seen within an hour of ingestion.

**WHAT ARE THE SIGNS AND SYMPTOMS OF ALCOHOL INTOXICATION?**

Alcoholic beverages are consumed for their taste, but also because they alter consciousness, and they make us feel good. Intoxication with alcohol causes many different clinical effects. Mild to moderate alcohol intoxication may cause:

- Abnormal, uninhibited behavior
- Drowsiness
• Decreased inhibitions
• Slurred speech
• Lack of coordination
• Difficulty walking
• Difficulty concentrating
• Diuresis
• Headache
• Dehydration
• Low blood sugar
• Nausea
• Vomiting

In severe alcohol intoxication, when very large amounts of alcohol are ingested, or if smaller amounts are ingested very rapidly, alcohol can cause loss of bladder and/or bowel control, coma, low blood pressure, decreased heart rate, decreased and inefficient breathing, and even death. The following examples would apply to the average person who drinks alcohol occasionally.

**Blood Alcohol Levels and Their Effects on Behavior**

• 20 mg/dL: This blood alcohol level would be attained by a 165 pound man who has had less than one 12 ounce bottle of beer. At this blood alcohol level, someone is likely to feel very relaxed and less inhibited. Some of the skills needed to drive would be impaired.

• 50 mg/dL: This blood alcohol level would be attained by a 165 pound man who drank approximately 18 ounces of beer, six ounces of wine/one glass, or two ounces/one shot of whiskey. At this blood alcohol level, someone is likely to feel quite relaxed, have impaired judgment, a lower level of alertness, and a lower level of hand-eye coordination.

• 80 mg/dL: At this blood alcohol level someone’s gait and speech will be noticeably affected. Judgment, memory, and the ability to reason are adversely affected, as well.

• 150 mg/dL: This blood alcohol level would obtained by a 165-pound man who drank four 12 ounce cans of beer, plus a bit of another, 18 ounces/three glasses of wine, or about six ounces/two-three shots of whiskey. At this blood alcohol level, someone would be considered drunk by most observers. Typical effects at this blood level of alcohol would be blurred vision, significant loss of balance, nausea and vomiting, and grossly impaired judgment. People who have a blood alcohol level of 150 mg/dL or higher may behave aggressively and in ways that are socially quite unacceptable.

After levels of 150 mg/dL, many people have difficulty functioning and higher levels can be dangerous. Alcohol is legal and considered by many people to be relatively
harmless. But death from alcohol ingestion is possible. Alcohol is a central nervous system depressant, a respiratory depressant, it can lower blood pressure, and it can cause the blood sugar to drop to dangerously low levels, especially in children. When blood alcohol levels of 200 mg/dL or higher are attained, aspiration is possible, breathing becomes inadequate, and blood pressure can become dangerously low. Deaths from alcohol - uncomplicated by an accident or ingestion of a drug - are not common, but they are not unusual.

**Learning Break:** Low blood sugar - hypoglycemia - is a real risk for children who drink alcohol. Children have lower body stores of glucose, and alcohol prevents new glucose from being formed from body fat and protein. If a child becomes intoxicated, she/he will not be able to eat, the body’s store of glucose gets depleted and no new glucose can be formed. The brain depends on glucose for energy, and if no glucose is available and the blood sugar level gets very low, serious neurological damage is possible.

**How Quickly is Alcohol Eliminated From the Blood?**

The amount of time someone feels the effects of alcohol will depend for the most part on how much was ingested. The more alcohol that was consumed the longer someone will be intoxicated and at high levels intoxication can last for many hours.

As with any drug, alcohol is metabolized and eliminated. The effects of intoxication slowly diminish and the blood level drops, as well. For most people, blood alcohol levels decrease at about 15-20 mg/dL an hour. The rate at which alcohol is eliminated from the blood and how fast blood alcohol levels decrease varies from person to person. Someone who drinks occasionally will eliminate alcohol more slowly than someone who is a chronic drinker. A chronic drinker may eliminate alcohol from the blood at a rate of 30-40 mg/dL per hour.

**What is a Hangover?**

Alcohol is imbibed because of the pleasant sensation of intoxication. But after the blood alcohol has been eliminated and someone has “sobered up,” the euphoria of alcohol intoxication is often replaced by a hangover.

Someone who has drunk alcohol to the point of noticeable intoxication will often feel quite sick after the blood alcohol is back to zero, and this feeling of illnes is called a hangover. The typical signs and symptoms of a hangover are abdominal pain, headache, nausea, and vomiting. The effects of a hangover can last for 24 hours or more, and although a hangover can be very, very uncomfortable it is not dangerous for a healthy individual. However, if someone has medical problems such as diabetes or heart disease, the dehydration and stress of a hangover could be a problem.

The exact cause of a hangover is not known. It may be due to dehydration, as alcohol is a mild diuretic; it may be due to a disturbed sleep pattern; it may be due to the congeners found in alcohol, substances produced during fermentation that are mildly toxic when ingested in large amounts; or it may be due to an accumulation of breakdown
products of alcohol metabolism. The only cure for a hangover is time; it has to be allowed to run its course.

CARING FOR THE PATIENT WHO IS ACUTELY INTOXICATED

Acute alcohol intoxication is not considered a medical emergency unless the patient is having difficulty breathing, hypotension, or severe hypoglycemia. In most cases, someone who is acutely intoxicated can be easily cared for with observation and simple supportive care, and the old phrase of “let them sleep it off” does have some truth to it.

However, acute alcohol intoxication should not be considered lightly. Alcohol is legal and very popular in our society and because of this many people do not realize, or tend to downplay its potential for harm. Death from alcohol poisoning is very uncommon, but it should be remembered that alcohol is a powerful drug. Acute alcohol intoxication can cause serious physical harm and the psychological effects should not be underestimated. High blood levels of alcohol are associated with abnormal and at times, dangerous behavior. Someone who is very intoxicated may act very aggressively and recklessly, and her/his judgment is likely to be very, very poor. The basic care of someone who is acutely intoxicated is simple and most people will recover with nothing more than a hangover, but anyone who is acutely intoxicated should be seen by a physician and/or have a medical evaluation.

The Basics of Care for an Acute Alcohol Intoxication

- Safety: The intoxicated patient is a risk to himself/herself and others. The patient’s coordination, judgment, ability to ambulate, and depth perception are impaired. Unfortunately, the intoxicated patient may not realize this or may deny the fact. You will have to make sure the environment is safe, and that the intoxicated patient does not attempt to do anything that requires complicated thinking or motor coordination.

- Emotional/psychological issues: Alcohol lowers inhibitions. The intoxicated patient may become very emotional or aggressive, and say or do inappropriate things. It is important to remember that the patient generally means no harm. Don’t react personally or emotionally yourself.

- Vital signs: Alcohol intoxication can lower the blood pressure, elevate the heart rate, and decrease the respiratory rate. These vital signs must be closely monitored.

- Aspiration: Alcohol intoxication often causes vomiting, and it also depresses the gag reflex. These patients are at risk for aspirating vomit into their lungs and this is especially likely to happen when the person is sleeping. If the intoxicated patient is sleeping, he/she should be positioned on his/her side or stomach. These patients should also be repositioned frequently to avoid pressure injuries.

- Low blood sugar: if an intoxicated patient is sleeping, he/she cannot eat and if that patient is not well nourished, the blood sugar stores can become exhausted. That
can cause permanent neurological damage, but the intoxicated patient who is sleeping cannot easily be evaluated for the signs and symptoms of hypoglycemia. It is important to check these patients frequently. Make sure they respond normally to stimuli such as gentle shaking or calling their names. Many patients who are acutely intoxicated will be treated with IV fluids that contain dextrose, and this will help prevent hypoglycemia.

When the alcohol level is below 80 mg/dL and the patient is coherent, oriented to time, place, and is able to walk without assistance, the patient can be considered to be sober. The amount of time it may take for the patient to be considered sober will vary considerably, depending on the initial blood alcohol level and the level of intoxication.

ARE THERE PEOPLE WHO SHOULD NOT DRINK ALCOHOL?

Although there is good evidence that moderate alcohol consumption is healthy and may even be healthier than complete abstinence, alcohol is a drug and there are people who should not drink, drink with considerable caution, or only rarely drink. These would include:

- Women who are, or may be pregnant: Alcohol is very toxic to the developing fetus. Alcohol ingestion during pregnancy can cause the fetal alcohol syndrome, a syndrome of severe physical and psychological damage. Also, babies born to mothers who drink excessively are at risk for going through alcohol withdrawal.

- Liver disease: Alcohol is very damaging to the liver. Anyone who has liver disease such as hepatitis should not drink.

- Diabetes: Alcohol can decrease blood sugars levels, and it can interfere with the effectiveness of oral medications that are used to treat diabetes. People with diabetes have a higher risk for developing atherosclerosis and heart disease, alcohol ingestion increases the risk for developing those diseases, so alcohol and diabetes are not a good combination. Finally, many people are not aware that alcoholic beverages, especially beer and wine, are a form of carbohydrates and sugar and this would be particularly important for the person who has diabetes.

- Medications: Alcohol should not be used or should be used very carefully if someone is taking these commonly prescribed medications: anti-depressants, methadone, medications used for ADHD such as Ritalin®, and sedatives and/or sleeping pills such as Valium®. Drowsiness is a frequently reported side effect of these medications, and drowsiness is the most common effect of alcohol. Flagyl® (Generic name, metronidazole) is an antibiotic that is often used for skin infections and gynecologic infections, and anyone taking this drug should not drink alcohol.
CHRONIC ALCOHOL ABUSE: THE SCOPE OF THE PROBLEM

It was mentioned in the introduction that between 12 and 14 million Americans abuse alcohol. This is only an estimate and it is probably far too low. However, those figures still represent approximately 5 percent of the population, and that means that 1 out of every 20 Americans has a drinking problem. That figure alone is disturbing, but there are other facts about this public health crisis that are even more frightening to contemplate:

- Twenty percent of all hospitalized patients have an alcohol problem.
- Alcohol abuse and its complications is the third leading cause of preventable death in the United States.
- Deaths related to alcohol abuse cost the health care system close to $200 billion a year.
- Alcohol abuse is one of the leading causes of such serious diseases as esophageal cancer, liver disease, pancreatitis, and gastrointestinal bleeding.
- Alcohol abuse is one of the leading causes of motor vehicle accidents, homicides, and suicides.
- Drinking while pregnant can cause fetal alcohol syndrome which can cause of fetal alcohol syndrome.

Add to these facts the economic burden caused by days missed at work, workplace accidents, decreased workplace productivity, the huge cost of caring for the health care problems caused by alcohol abuse, and the psychological and social fallout from problem drinking and it is easy to see that excessive drinking is a public health care crisis.

WHAT IS ALCOHOL ABUSE?

This may seem like a simple question, but experts have been debating for many years to try and find a precise definition of alcohol abuse. There is still no universal agreement on how to determine when someone can be labeled a problem drinker.

But many people who work in the field of alcohol abuse feel that trying to find a “one size fits all” definition that can tell us who is/is not a chronic abuser of alcohol is pointless. Instead, they have focused on the impact of excessive drinking. Drinking, many experts believe, is a problem if it causes problems for the abuser, his/her family, or community.

The way to know if someone is abusing alcohol or if that person can be considered an alcoholic is to look at the effects of that person’s drinking habits. These experts also point out that it is not how much someone drinks, but the effects of a person’s drinking habits. Some people can drink relatively large amounts and would not fit a definition of a problem drinker, while others may drink far less and have an alcohol abuse problem.

There are many simple assessment tools that healthcare professionals use to determine if someone may have a drinking problem. Several commonly used assessment tools are:

- CAGE: Ask someone if their friends and/or family have ever asked them to Cut down on their drinking; if they have ever been Annoyed if someone asked about their drinking; if they have ever felt Guilty about their drinking; and if they...
ever need a drink as an Eye-opener to start the day. Most experts feel that if someone answers yes to two or more of these question that person is likely to have a drinking problem. Also, if someone is given the CAGE assessment and that person says that she/he needs an eye opener in the morning that alone is a strong indication of a drinking problem.

- **TWEAK:** Tolerance - how many drinks can you hold? WORried - are friends and family worried about your drinking? Eye openers - do you need a drinking the morning? Amnesia - have you said or done something while you were drinking and you can’t remember? K (cut down) - do you or your family ever feel you should cut down on your drinking? The first two questions count for two points each and the last three for one point each. If someone has a TWEAK score of two or higher this is an indication of a drinking problem.

- **MAST:** This is the Michigan Alcohol Screening Test. It is a 22 question exam, but it can also be shortened to these 2 questions, and still be an accurate screening tool: 1) Have you ever had a drinking problem, and 2) Was your last drink within 24 hours? In its full from it is considered to be one of the most accurate assessment tools for determining whether or not someone has a drinking problem.

These tests are designed to be screening tools. They can give a strong indication that a drinking problem exists. But they are not definitive, and they are simply an initial step in the attempt to answer the questions: Is this person an alcoholic? Does this person have a drinking problem?

The American Medical Association defines alcoholism in this way.

“Alcoholism is a primary, chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. The disease is often progressive and fatal. It is characterized by continuous or periodic: impaired control over drinking, preoccupation with the drug alcohol, use of alcohol despite adverse consequences, and distortions in thinking, most notably denial.”

Some of the key points in this definition are continuous; impaired control; preoccupation; adverse consequences; and denial. The person with an alcohol problem then is continually drinking or thinking about drinking, she/he cannot control the urge to drink or control drinking behavior, and he/she continues to drink despite adverse consequence and denies that the drinking is a problem.

That definition is inclusive and it provides a clear picture of the alcoholic: a person whose life is controlled by and focused on drinking. For the purpose of this module, alcohol abuse will be defined in this way.

**Alcohol abuse is a chronic pattern of unhealthy or dangerous drinking.**

People with an alcohol abuse problem have a need to drink, and many of them eventually become physically and mentally addicted to alcohol. It is very, very difficult to stop drinking if the pattern of abuse has been going on for many years.
HOW MUCH ALCOHOL IS TOO MUCH?

How much alcohol is too much? When does moderate drinking become problem drinking and cause damage to the body?

These are important questions, but there are no sure answers. One drink is usually defined as one 12 ounce can of beer, one 4-6 ounce glass of wine, or one drink containing 1.5 ounces of hard liquor. Many authorities feel that more than four drinks a day or more than 14 drinks a week for men, or more than three drinks a day or more than seven drinks a week for women significantly increases the risk of alcohol damage to the body.

Learning Break: Moderate alcohol consumption may have health benefits. But no one knows exactly what those benefits are, exactly how much alcohol is safe, and exactly who can drink how much.

WHY DO PEOPLE ABUSE ALCOHOL? WHAT IS THE CAUSE OF ALCOHOL ABUSE?

The reasons for alcohol abuse are as varied as the numbers of individuals who have this problem. However, there are some theories that help explain some of the more common reason why people have alcohol problems.

- Genetics: There is very strong evidence that it is possible to inherit a tendency to abuse alcohol. However, despite years of searching, researchers have not found a gene responsible for alcoholism. Also, people do not abuse alcohol in isolation. People who have parents who abuse alcohol and go on to develop an alcohol abuse problem themselves may have learned their drinking habits and patterns from the parents. There are also many people who are the sons and daughter of alcoholic parents who do not develop alcohol dependency.

- Environmental: There is good evidence that drinking habits can be learned. In societies where alcohol is used regularly and in relatively large amounts, there are more people with alcohol abuse problems.

- Psychiatric: Psychiatric trauma, abuse, neglect, emotional stress, and serious life issues (loss of a spouse, developing a serious illness, loss of a job, etc.) can all contribute to the development of alcohol abuse. Psychiatric disorders such as depression, schizophrenia, and bi-polar disorder can also contribute.

More men abuse alcohol than women. People who start using alcohol at a young age are more likely to develop alcohol dependency. Younger people are more prone to abuse alcohol. Alcohol abuse affects every ethnic group and is found in every socio-economic class. The exact cause of alcohol abuse is not known, but it is definitely a combination of genetic, environmental, and psychiatric factors.
WHAT DOES CHRONIC ALCOHOL CONSUMPTION DO TO THE BODY?

When someone drinks occasionally, he/she will have some degree of intoxication. If the alcohol is consumed slowly in small to moderate amounts, these effects will be mild or even absent. A glass or two of wine taken over the course of the evening is something many people enjoy and they will not show any signs or symptoms of intoxication. There is even some strong evidence that alcohol taken in moderation has some health benefits. But there is also no doubt that when alcohol is ingested in large amounts, day after day, it causes terrible damage to the body.

- Liver damage: The liver is responsible for metabolizing alcohol. Chronic, excessive alcohol ingestion overwhelms the liver’s ability to do this. If alcohol cannot be metabolized, it causes serious damage to the liver. The liver is responsible for metabolizing drugs, making compounds that help the blood to clot, and if it is permanently damaged, this can cause death.

- Brain damage: Long-term alcohol abuse can cause a variety of neurological problems. Alcohol abuse is the second leading cause of dementia (permanent damage to the brain), and it can also cause other types of brain damage.

- Fetal alcohol syndrome is the number one cause of mental retardation associated with pregnancy.

- Cancer: People who abuse alcohol have a higher risk of developing esophageal cancer, breast cancer, cancer of the mouth, and liver cancer.

- Pancreatitis: Pancreatitis is a very serious inflammation of the pancreas. The pancreas is an organ that produces insulin, a hormone that is essential for controlling blood sugar.

- Cardiac problems: Many people who chronically abuse alcohol have a high incidence of hypertension and heart disease.

- Gastrointestinal bleeding.

- Anemia: Chronic alcohol abusers are often anemic.

- Malnutrition: Chronic alcohol abusers often have very poor nutrition.

- Reproductive disorders: Impotence in men and infertility in women.
ALCOHOL WITHDRAWAL: THE DTS

Many people who chronically drink large amounts of alcohol become psychologically addicted to the drug, and they also become *physically* addicted to alcohol. If the chronic drinker tries to stop drinking or cannot obtain alcohol, he/she may develop the *alcohol withdrawal syndrome*. This is commonly known as the *DTs*. DT stands for delirium tremens: the patient is delirious and very shaky (tremens = trembling).

Delirium tremens is a very dangerous condition. People who are experiencing delirium tremens are often completely disoriented, they develop visual hallucinations, they develop a fever, they have uncontrollable shaking, and their pulse and blood pressure can become dangerously high. In the worst cases, people can have seizures and die.

Delirium tremens is not the same as a *hangover*. Many people have experienced hangovers and it is a well known and not unusual effect caused by drinking too much alcohol. Shortly after stopping drinking, people will develop nausea, vomiting, stomach pain, and a headache. These signs and symptoms can last for many, many hours. A hangover can be a very miserable and uncomfortable experience, but it is not dangerous. Delirium tremens is potentially life threatening.