

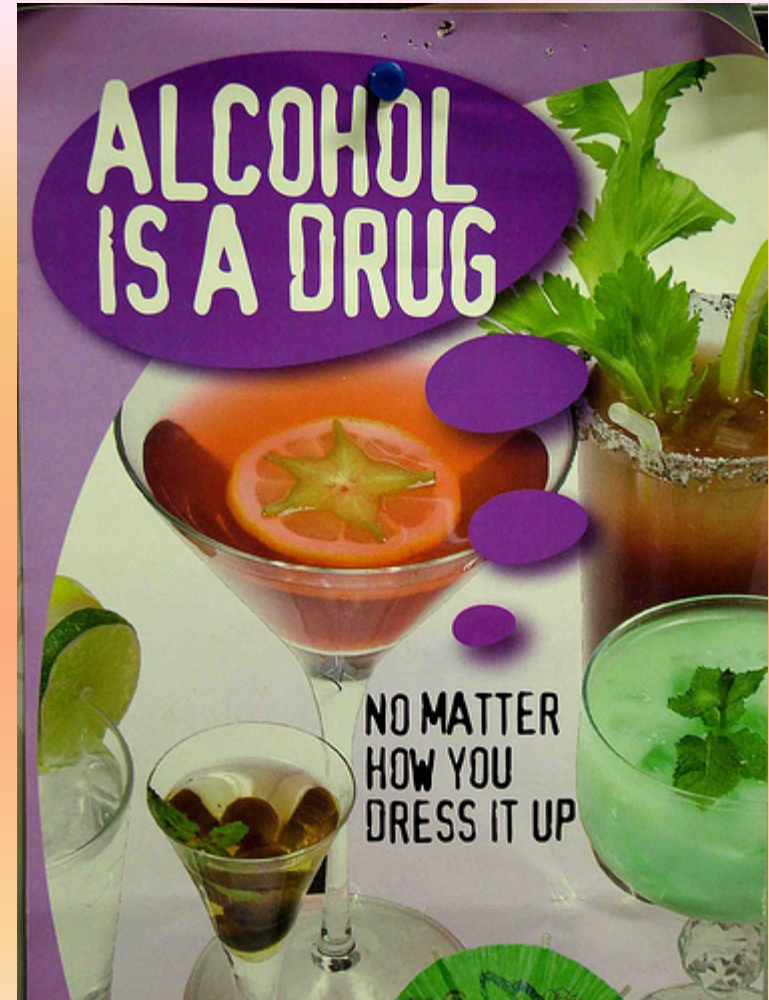
Alcohol



Chapter 19

Alcohol is a Drug

- Why use drugs:
 - Prevent/cure diseases
 - Relieve anxious feelings
 - Alter mental state
- Drug – any chemical that causes changes in a person's body or behavior
- Legal vs. Illegal
 - Legal: medicines – help maintain health
 - Illegal: chemicals forbidden by law; dangers outweigh useful purposes
- Drug Abuse – intentional misuse of drugs of any kind for nonmedical purposes; may be an attempt to escape life's pressures





Alcohol as a Drug



- Chemical that causes changes in a person or behavior
- Most widely abused drug among high school students
- Ethanol – produced when yeast changes sugar (from grapes, berries, malted grains) into carbon dioxide and alcohol.
 - Beer, wine, liquor





Alcohol as a Drug...

- Percent - 6%-50%
- Proof – a measure of the percentage of alcohol in the beverage; proof is 2x the % (100 proof = 50%)
- Depressant – a drug that slows the activity of the body's CNS.
 - Confusion,
 - decreased alertness,
 - poor coordination,
 - blurred vision,
 - drowsiness,
 - coma,
 - death

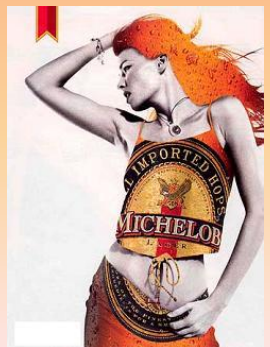
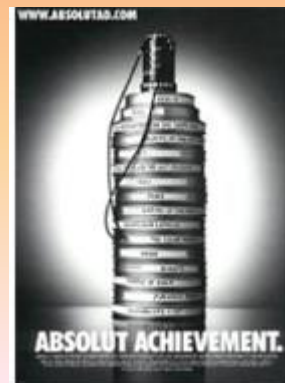
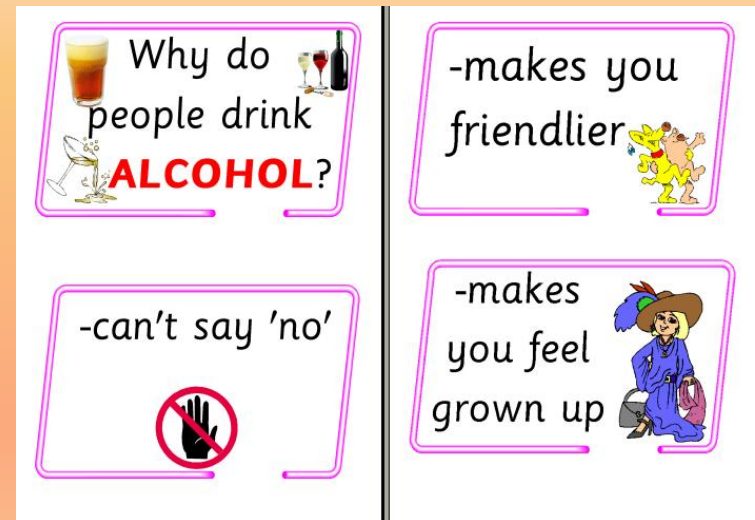
Who uses Alcohol; who doesn't?

- 100 million Americans (1/3 of our population)
- Rural areas have lower rates of use than metropolitan.
- Men vs. women – gap in rate of use is closing
- Many cultures & religions
 - Who does NOT use alcohol?
 - _____million Americans (2/3 of our population)
 - Rural areas have _____rates of use than metropolitan
 - Many Cultures don't
 - Many Religions don't

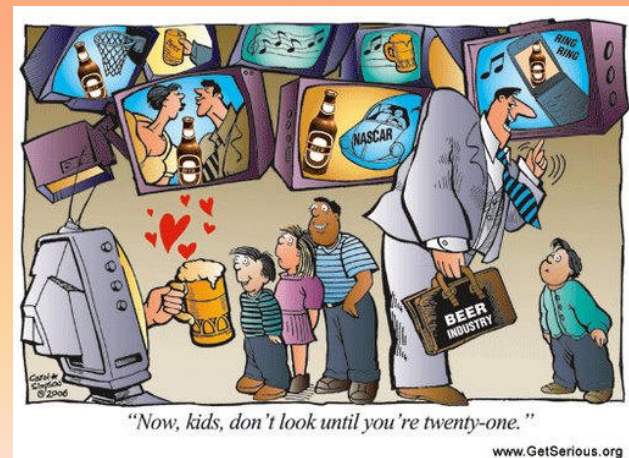
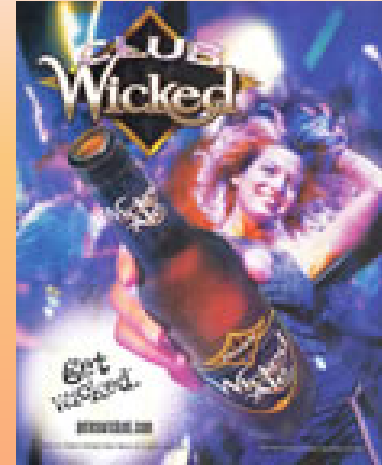


Why people drink...

- May begin w/ family use:
 - Celebrations, religious events, special occasions
- Wide availability
 - Media: advertisements –
 - tv,
 - magazines,
 - radio
 - Ads promote alcohol as
 - glamorous,
 - status symbol,
 - fun,
 - increases sex appeal,
 - popularity
 - Product not really promoted,
 - activities surrounded by the alcohol is promoted;
 - activities are seen as socially acceptable and worthwhile



Alcohol and advertising:



Legal Risks

- Zero Tolerance for under the age of 21
- Must be 21 to consume/purchase
- In Michigan legal limit for 21yrs. + = .08 BAC
- 40% of all fatal automobile crashes are alcohol related.
- Fines, suspended license, points, jail
- Repeat offender = prison, revocation of license





Legal Risks

- **Actions for Drivers Under Age 21: Zero Tolerance (under age 21)**
- First Offense
 - Up to \$250 fine and/or
 - Up to 360 hours of community service.
 - Driver license is restricted for 30 days.
 - Four points on driver record.
 - \$500 Driver Responsibility Fee for 2 consecutive years.
- Second Offense within seven years:
 - Up to \$500 fine and/or
 - Up to 60 days community service.
 - Up to 93 days in jail.
 - Driver license suspension 90 days. Any prior drunk driving conviction results in a minimum one-year driver license revocation.
 - Four points on driver record.
 - \$500 Driver Responsibility Fee for two consecutive years.
- **Person Under 21 purchase/consume/possess alcohol:**
- First offense-\$100 fine, no action is taken against driver license.
- Second offense-\$200 fine, driver license is suspended for 30 days/restricted for 60 days.
- Third offense-\$500 fine, driver license is suspended for 60 days/restricted for 305 days.
- Community service may be required.
- Alcohol screening may be required.

Person Under 21 transport or possess in a motor vehicle:

Up to a \$100 fine.

First offense-no action is taken against driver license.

Second offense-driver license is suspended for 30 days/restricted for 60 days.

Third offense-driver license is suspended for 60 days/restricted for 305 days.

Alcohol screening may be required.

Community service may be required.

Two points on driver record.

Vehicle can be impounded up to 30 days.



Legal Risks

- Michigan has experienced a fairly steady decline in the number of [drunk driving deaths](#) and in the percentage of [traffic fatalities](#) that are alcohol related. The highest number of alcohol related deaths occurred in 1984, with 897, while the lowest number was reported in 2008, with 331. The percentage of traffic fatalities that were alcohol related peaked in 1982 at 63% and dropped to 28% in 2007.



**MAZE
LEGAL
GROUP**

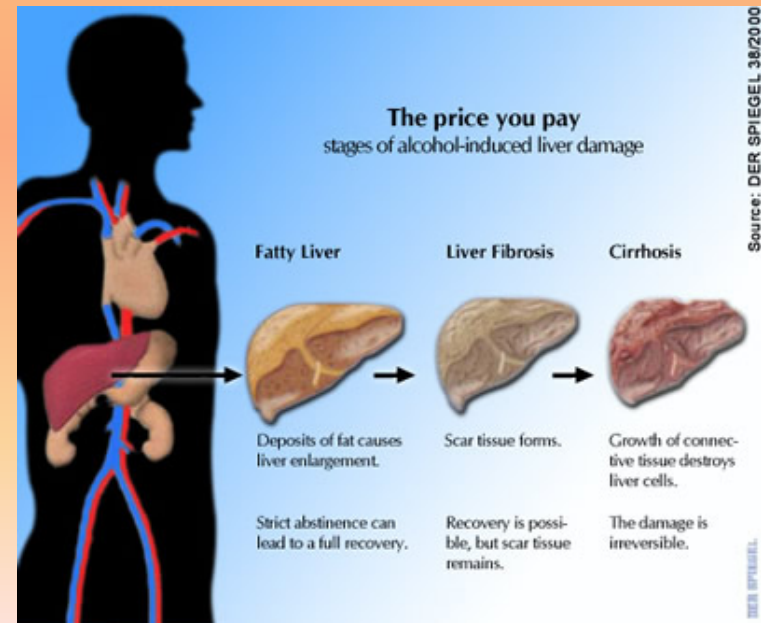
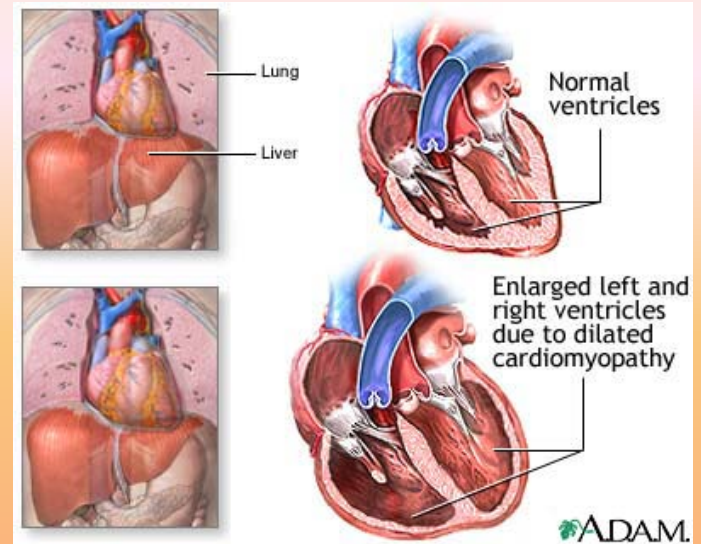
Michigan OWI Laws and Procedures

Toll Free: (888) 941-1122 or 24 hours (734) 740-1900



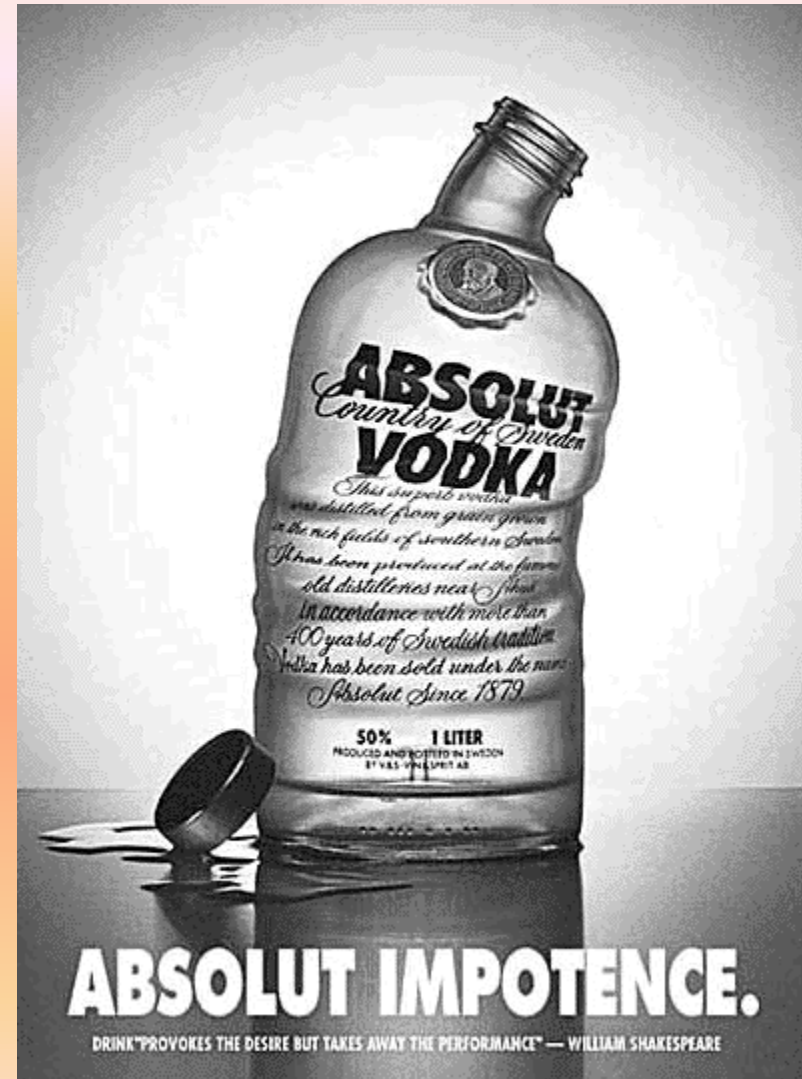
Alcohol's Effects on the Body

- When a person drinks alcohol, it follows the same pathway as food through the digestive system. However, unlike food, alcohol does not have to be digested by the **stomach** in order to be absorbed into the blood.
- Once alcohol reaches the **blood**, it is circulated throughout the body and affects **every part**, including the **brain** and the rest of the nervous system



Short Term

- **Intoxication** – the many negative effects alcohol has on a drinker's body and behavior
- **Bloodstream**
 - blood vessels **widen**
 - More blood flows to **skin's surface** (warm feeling = loss of heat)
 - Core body temp **decreases**
- **Brain**
 - Immediate **depressant** effect (slows neuron activity)
 - Feels **relaxing** – actually loss of sensation and decrease in sharpness of vision, hearing and other senses
 - Loss of muscle **coordination**
 - Breathing , heartbeat, blood pressure **depressed**
 - **Blackouts** – periods of time that the drinker cannot recall, but are conscious and physically able to walk and talk
 - Loss of **consciousness**
 - **Coma**
 - **Death**





Short-Term

- **Liver**

- chemically breaks down alcohol into energy and the waste products carbon dioxide and water
- **CO** is released from the body in the lungs (breathalyzer can detect alcohol content)
- Water passes out of the body as
 - **breath vapor,**
 - **perspiration and/or**
 - **urine**
- Liver can only work so fast...too much for liver = **intoxication**


- **Kidneys**

- prevents the release of body chemicals that regulate how much urine the kidneys make = **dehydration**
- Drinker becomes **very thirsty**
- In extreme cases body loses water necessary for bodily function = severe dehydration = **death**

Alcohol Poisoning

The beers were cheap...

A cab ride would have been cheap too...



WOULD YOU LIKE THE RECEIPT
IN THE BAG OR ON YOUR TOE?



- Amount of **ethanol** in a person's blood is expressed by BAC
- Measures the number of milligrams of ethanol per 100 milliliters of blood
- 0.1 percent means that 1/10 of 1 percent of the fluid in the blood is ethanol; legal limit for those 21 and older = **0.08**
- Factors can affect BAC:
 - **Gender, age, weight and height**
 - Amount of **food** in stomach
 - **Concentration** of alcohol in beverages consumed
 - **Volume** of alcohol consumed
 - Rate of **consumption** and absorption

Blood Alcohol Concentration (BAC)

AlcoholEdu™ for College

Chapter 2 : Knowing the Facts

MEDIA SETTINGS

COURSE REVIEW

Standard drink



One 12 oz. **beer** (5% alcohol) = One 5 oz. **glass of wine** (12% alcohol) = 1.5 oz. of **distilled spirits** (40% or 80 proof)

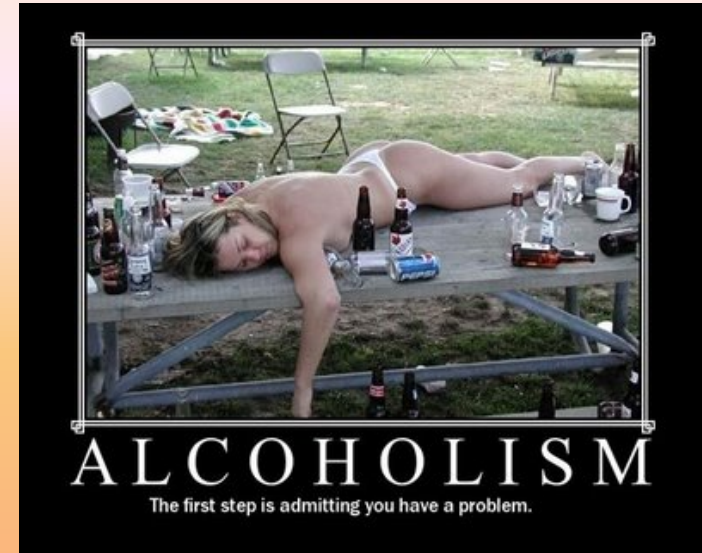
Blood Alcohol Concentration

- In one hour the liver can break down the amount of ethanol in a can of beer, a shot of liquor, or a glass of wine; anything beyond that causes **intoxication**
- Binge Drinking
 - A person drinking **five or more drinks in a 24-hour period** is considered binge drinking



Behavioral Effects

- A person's **mood** and reason for drinking can alter the effects of alcohol.
 - May make the person's mood stronger or weaker
- The **environment** they are in can affect behavior: quiet family dinner vs. loud party
- **Inhibitions** (the controls that people put on their emotions and behavior in order to behave in socially acceptable ways) are affected
- Loss of **judgment** and **self-control**
- May express anger in **violent** or **destructive** ways
- Introverted may become extroverted
- Serious people may act foolish



<http://www.youtube.com/watch?v=N05UVP2lbHI&feature=related>

Life Threatening Short-Term Effects

- Motor-Vehicle Crashes
- **Synergism** – some drugs can interact to produce effects that are many times greater than either drug would produce by itself. When drugs increase each other's effects when taken together the interaction is called synergism (prescriptions: WARNING: DO NOT USE ALCOHOL WHILE TAKING THIS DRUG)
- Overdose – taking an excessive amount of a drug that leads to coma or death
 - Many drinkers assume that they will pass out before drinking a fatal amount. This is not necessarily true. Alcohol continues to be absorbed into the blood for 30-90 minutes after the last drink. BAC can increase even if the drinker becomes unconscious; this can lead to death.



Not everyone who gets hit by a drunk driver dies.



Jacqueline Saburido was 20 years old when the car she was riding in was hit by a drunk driver. Today, at 23, she is still working to put her life back together.

Learn more at www.TexasDWI.org

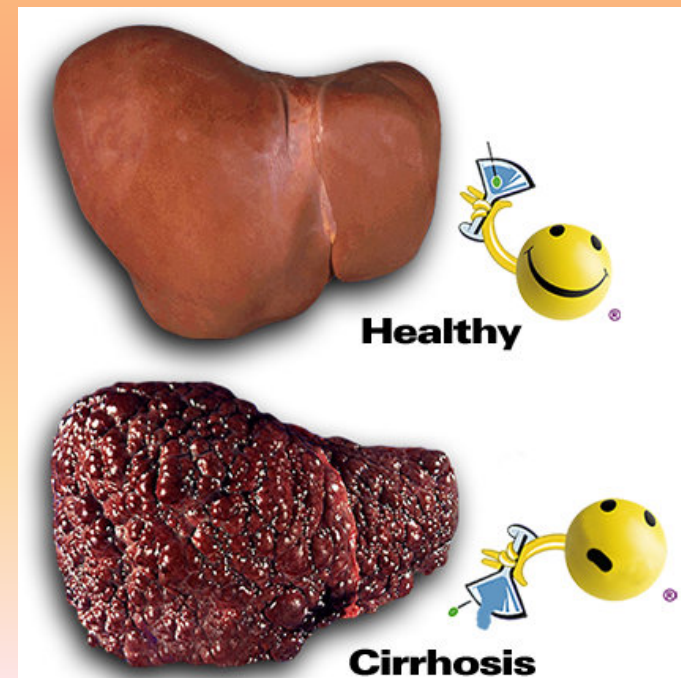
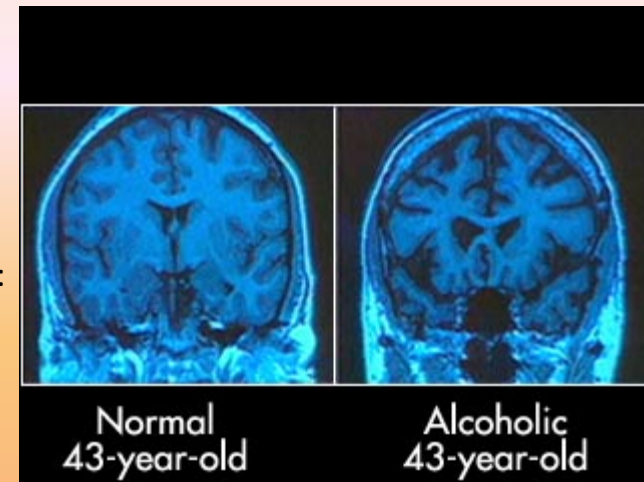
DON'T DRINK & DRIVE

Save a Life

Texas Department of Public Safety • Texas Alcoholic Beverage Commission • Texas Hunting/Full • Partnership for a Drug Free Texas • Texas Commission on Alcohol and Drug Abuse

Long Term Health Risks

- **Tolerance**
 - body becomes accustomed to or builds up **resistance**
 - Causes drinker's body to need **increasingly larger** amounts for same effect
- **Dependence**
 - Body develops **resistance** to drug and requires drug to function normally
 - Chemical dependence = **addiction**
 - **Withdrawal** – when dependent person stops taking a drug symptoms include:
 - Shakiness, sleep problems, irritability, rapid heartbeat, sweating, hallucinations
- **Brain Damage**
 - Destroyed nerve cells usually **cannot grow again**
 - Forgetfulness, inability to concentrate, poor judgment
- **Digestive Problems**
 - Irritates lining of mouth, throat, esophagus, and stomach
 - Increased risk of **cancers** of the mouth, tongue, esophagus, and stomach
 - Recurring **diarrhea**
 - Indigestion, heartburn, ulcers
- **Liver Damage**
 - Interferes with liver's ability to **break down fats**
 - Begins to fill with fat
 - Excess fat blocks **the flow of blood** in liver
 - Fat-filled liver cells **die**
 - Useless **scar tissue** replaces normal liver tissue
 - Liver **failure = death**
- **Heart Disease**
 - **Increased** blood pressure and heart rate, and irregular heartbeat
 - Causes **fat** to be deposited in heart muscle
 - Fatty heart muscle causes heart to pump blood throughout body **less efficiently**

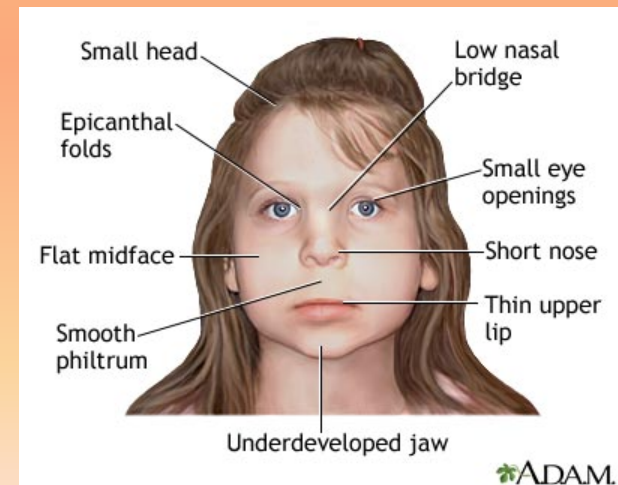
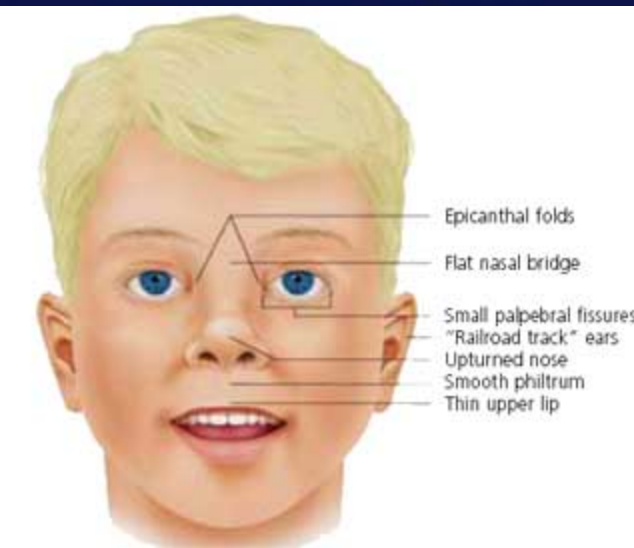
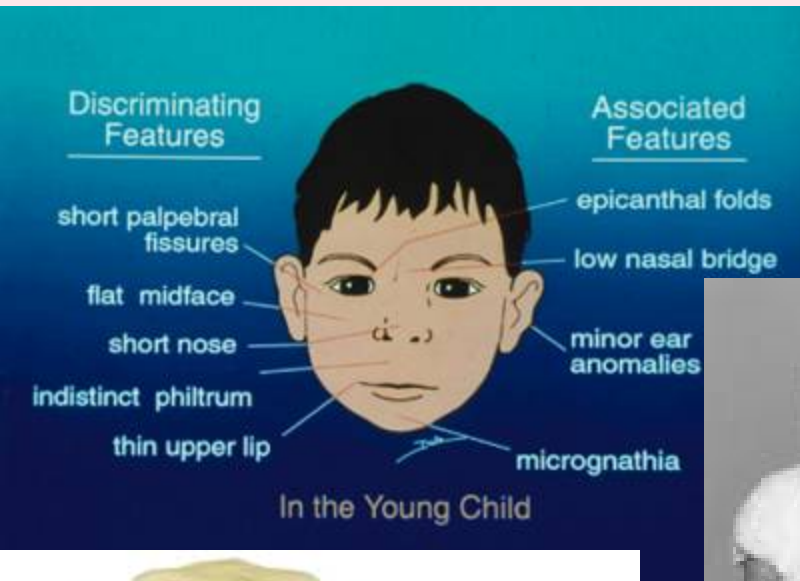


Fetal Alcohol Syndrome



Heavy use of alcohol during pregnancy can result in fetal alcohol syndrome. Babies with this condition typically have **low** birth weights, physical **deformities** of the face and head, and varying degrees of mental **retardation**. They may also have **behavioral** problems and learning **difficulties** later in life.

Fetal Alcohol Syndrome



Alcoholism

- Can't control their drinking
- Major goal in drinking is to get drunk
- Consider drinking a regular, essential part of coping with daily life
- Body requires alcohol to function
- Drinking patterns eventually control every aspect of life
- Anyone who drinks – even one – is at risk for becoming an alcoholic
- Some genetic basis
- Environment plays a big role too



The Institute of Medicine of the National Academy of Sciences estimates that alcoholism and alcohol abuse in the United States cost society from \$40 to \$60 billion annually, due to the lost production, health and medical care, motor vehicle accidents, violent crime, and social programs that respond to alcohol problems

Stages of Alcoholism

Early Stage

(Problem Drinking):

- Social drinkers
- Consume alcohol to try to relieve stress
- Gradually begins to drink more and more
- Tends to be preoccupied with drinking
- May drink excessive amounts



Study: Heavy social drinkers show brain damage

Heavy social drinkers show the same pattern of brain damage as hospitalized alcoholics -- enough to impair day-to-day functioning, U.S. researchers said. Brain scans show clear damage, and tests of reading, balance and other function show people who drink more than 100 drinks a month have some problems, the researchers

said.

"Socially functioning heavy drinkers often do not recognize that their level of drinking constitutes a problem that warrants treatment," the researchers, at Vanderbilt University in Tennessee and the University of California

San Francisco, wrote in their report.

> from cnn.com / Reuters article April 15, 2004 /

> photo : Kim Cattrall, Kristin Davis, Cynthia Nixon in Sex and the City [\[DVD\]](#)

Stages of Alcoholism

Early Stage

(Problem Drinking):

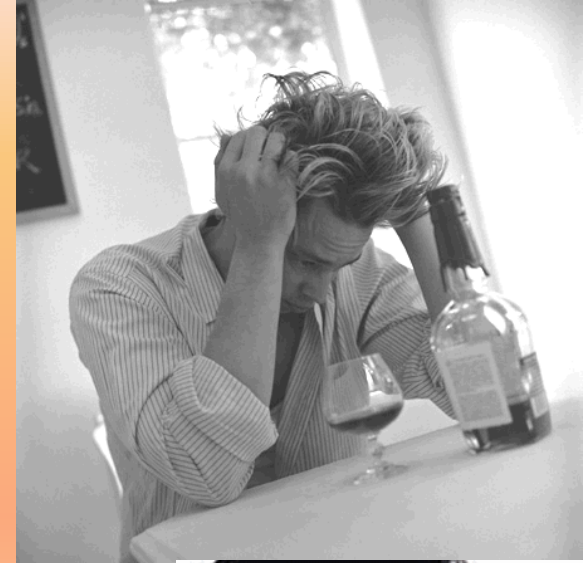
- Occurs when drinking becomes a person's **routine** way of dealing w/ stress
- Drinking is used as an **escape** from problems
 - Called “problem drinking” because of all the problems associated w/ the heavy alcohol consumption
 - Alcohol becomes a “**crutch**”
 - Drink **alone**
 - Drink solely **to get drunk**
 - Make **excuses** for their drinking behavior
- Often involved in **vehicular crashes**
- More prone to unintentional **injuries**
 - Falls, drowning, fires, burns
- Contributes to many violent crimes
 - Fights, spousal and child abuse, rape, suicide and murder



Stages of Alcoholism

Middle Stage

- The need and desire to drink gradually becomes more **intense**.
- Drinking **larger** amounts and more **often**; as well as drinking **earlier** in the day.
- Loss of **control** over drinking, and the body is losing its ability to **process** alcohol like it did in the early stages of alcoholism.
- Tolerance **decreases** as they become intoxicated more easily.
- Withdrawal symptoms become **more severe** if alcohol is reduced.
- The person may now **secretly** recognize there is a drinking problem, and others may begin to notice as well.
- The alcoholic **no longer** can judge how much alcohol their body can handle.
- Drinker **denies** to themselves and others that alcohol is a problem so they won't have to deal with their inner turmoil.
- Hangovers, blackouts and stomach problems can now be physical symptoms that occur **on a regular basis**.



Late Stage

- Alcoholic has become obsessed with drinking to the exclusion of nearly everything else.
- Everyone can tell there's a major problem.
- Mental and physical health of the alcoholic are seriously deteriorating.
- Many of the body's organs have been damaged which lowers resistance to disease.
- Relationships at home or socially may have been severely damaged, and there can be mounting financial and legal problems due to the alcoholic's powerlessness over alcohol.
- Every alcoholic will suffer from malnutrition.
 - Alcohol in large amounts interferes with the digestion process and the passage of nutrients from the intestines into the bloodstream.
 - Liver function has been damaged, further limiting the conversion of nutrients into a usable form that the body can assimilate.
 - The damaged cells are not receiving the needed nutrients, they cannot repair themselves and the damage continues.
 - Nutritional deficiencies cause a host of related problems to become worse. For example, vitamin B-1 deficiency common in alcoholics can result in loss of mental alertness and appetite, fatigue, confusion and emotional instability.
- If the alcoholic continues drinking, alcohol will cause the death of the alcoholic in one way or another.
 - From suicide, accidents and related injuries to direct damage to the body's organs and systems, death will likely be the final outcome of end stage alcoholism.

Stages of Alcoholism

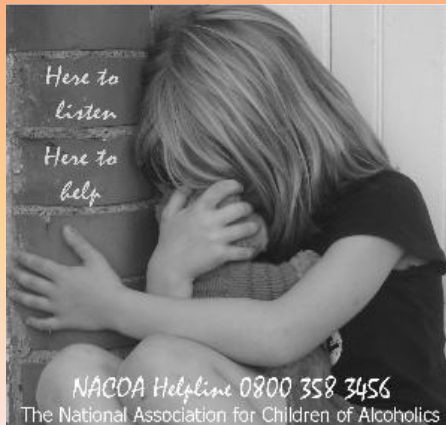


Alcoholism and Others

Alcoholism causes costly problems for society and causes an emotional ordeal for everyone involved – family members, friends, and co-workers.

- Family:

- 1/8 Americans grows up in an alcoholic family
- Stressful lifestyle
 - Uncertainty, embarrassment
 - Verbal/physical abuse
 - Family needs ignored



- Society:

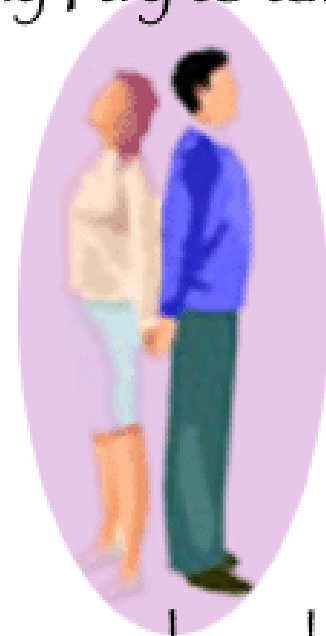
- 40% of all traffic fatalities
- \$100,000,000,000-200 billion per year
 - Alcohol-related crimes
 - Medical expenses
 - Injuries
 - Lost productivity on the job
 - Treatment programs
- 100,000 premature **deaths** per year
 - Violence and automobile crashes



- People who assume responsibility for an alcoholic's needs, feelings, and happiness are called codependents.
 - Don't acknowledge needs of their own
 - Focus on taking care of others
 - Lose the sense of their own identity
- Enablers are people who unintentionally protect addicts from the consequences of their behavior
 - Alcoholics don't know there's a problem; don't seek help.

Codependency/ Enablers

Is that why I try to take care of



people too much and
can't say NO?



Treatment

TRAVERSE CITY - Northern Michigan AIS/LDC
(989) 590-7289, PO BOX 872, Mio 48647

Northern Michigan AIS 989-590-7289
(Northeastern Michigan)
Northwestern Michigan 231-675-7044
(Charlevoix and Emmett Counties)

- Detoxification – removing all alcohol from a person's body
 - Withdrawl
 - Hospitalization
- Rehabilitation – after detox...placement for care and counseling
 - Learn to cope
- Support Groups
 - AA – Alcoholics Anonymous
 - Al-Anon – helps adult friends and family of alcoholics learn how they can contribute to the recovery process
 - Alateen – help for teens who live w/ alcoholics
 - Intervention – planned confrontation w/ alcoholic



<http://www.al-anon.alateen.org/english.html>