

# Health Review

CHSN Review Project



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This review guide was written by Dara Adib and Paul Sieradzki.

This is a development version of the text that should be considered a work-in-progress.

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# Mental Illnesses

This chapter was designed for a test on mental illnesses administered by Randall Heidemann on January 10, 2008.

## Causes of Mental Illnesses

There are many causes to mental illnesses. Birth trauma and chemical imbalances in the brain as well as biological, environmental, social, and cultural factors are all contributors.

### Biological

These are mostly related to genetics, but they may also be caused by infections, defects, or biological damage. Mental illnesses may be common to certain families. Therefore, certain people may be more susceptible to the illness because of their genes.

### Psychological

- Trauma, including emotional, physical or sexual abuse as a child
- A loss of a relative or close friend
- Neglect
- Poor social and communication skills or abilities

### Environmental

- Death or divorce
- Family life
- Poverty
- Low self esteem, anger, and loneliness
- Major changes such as a new school or job
- Social and cultural experiences (i.e. beauty with thinness)
- Actions of parents and other role models

## Symptoms of Mental Illnesses

Mental illnesses have many signs, although the existence of several signs does not necessarily mean the person has a mental illness. Evaluation by a physician or other health expert may be necessary.

- Changes in personality
- Inability to cope with daily activities and other problems
- Strange or unusual ideas
- Excessive anxieties or phobias, including fear of unknown people or an attacker
- Prolonged depression or hatred
- Changes in eating or sleeping habits
- Thoughts about suicide
- Extreme mood swings
- Abuse of drugs and alcohol
- Excessive anger or violence
- Strange rituals
- Panic attacks

## Neuroses vs. Psychoses

**neuroses** in touch with reality, ego has some control, usually not hospitalized, over-use of defense mechanisms, mild delusions, nervous behavior problems

**psychoses** loses touch with reality, hospitalized, little or no control over self, insanity, extreme overuse of defense mechanisms, delusions, hallucinations

Symptoms are a matter of degree between neuroses and psychoses. Intensity is a main factor.

### Neuroses

- anxiety
- panic attacks
- phobias
- depression
- eating disorders
- obsessive compulsive disorder (OCD)

### Psychoses

- schizophrenia
- bi-polar disorder
- manic depression

## “State of Mental Health” Article

Unfortunately, we do not have the resources available to summarize the entire article. Key points may be present in other parts of this review report. However, here are two important points of the article.

- Anxiety is one of the most common mental illnesses in the U.S.
- Panic disorders and phobia are some of the most common anxiety disorders among children

## Depression

Depression is the persistent lowering of mood, loss of interest in usual activities and diminished ability to experience pleasure. Depression usually begins in a person’s late 20’s. It can last between 6-8 months. Severe depression is more common with women than men.

## Mood Disorders

**major depression** severe depression for a long period of time

**dysthymia** mild depression for several years

**bipolar disorder** extreme swings in mood

**seasonal affective disorder (SAD)** depression occurs during certain seasons, normal during other times of the year

## Causes

- environmental stressors
- personality development
- biological factors

## Symptoms

- fights
- rebel behavior
- breaking rules
- starting fires
- abusing drugs
- running away
- attempting suicide
- conducting dangerous activity
- excessive sexual activity

## **Suicide Prevention**

There are several warning signs to suicide. As before, the existence of several signs does not necessarily mean the person will attempt or commit suicide. Evaluation by a physician or other health expert may be necessary. Remember that it is not your fault if a person attempts or commits suicides.

- Depression
- Withdrawal from family and friends
- Loss of relatives, friends, or property
- Changes in behavior
- Giving away treasured possessions
- Thoughts on suicide, death, hopelessness, or worthlessness
- Neglect of oneself
- Strong positive change in mood after depression

## **Anxiety Disorders**

### **General Anxiety**

General anxiety is an excessive worry about everyday things that is disproportionate to the actual source of worry. They may be concerned about health issues, money, family problems, friend problems, or work difficulties.

### **OCD**

Obsessive compulsive disorder (OCD) is an obsession with being fit, symmetry, and having aggressive feelings. It is mainly caused by biological and psychological reasons. Underparenting can result in children that depend too much on themselves and may look to OCD as a harmful way to reduce stress.

### **Panic Attacks**

Panic attacks are sudden and specific moments of intense anxiety. They may be sudden, and have no apparent causes. Most scientists attribute these attacks to out of context "flight or flight" mode that releases enormous amounts of hormones. Panics may or may not be cyclic and typically last for around ten minutes, although they can last for as little as a few minutes and extend for as long as several hours.

Panic disorder are repeated and persistent panic attacks, that are sudden and without apparent causes. It includes the fear of the repetition of such panic attacks.

### **Phobias**

Phobias are unrealistic and irrational fear of certain subjects, objects, situations, or persons. Like general anxiety disorders, phobias are disproportionate to the actual object of fear. A disorder occurs when the phobia is beyond a person's control or when it interferes with normal daily life.

## Manic Depression

**bi-polar disorder** swings in mood from deep, solemn lows, to soaring highs on a regular basis

### General Statistics

- 50% of the homeless are mentally ill
- 95% of mentally ill people are non-violent

## Schizophrenia

**simple** extremely withdrawn

**catatonic** disturbances in mobility

**paranoid** delusions of persecution or being watched

**hebephrenic:** complete breakdown; totally out, mumble, bizarre

### Statistics

- $\frac{1}{3}$  of the people in these cases commit suicide
- 1% of the population has schizophrenia
- One has a 10% chance of getting schizophrenia if a relative has it

The symptoms usually start between the early teens to the late 20's. Schizophrenia causes unusual thoughts, delusions, hallucinations, anti-social behaviors, incoherentness, withdrawal from society, and hospitalization.

## Stress

**eustress** enhance physically or mentally through challenges (good)

**distress** unresolved stress that may cause anxiety and depression (bad)

Many of the major symptoms of mental illness are due to our inability to deal with distress.

### Top Three Stressors for Adults

1. Loss of a child
2. Divorce
3. Loss of a job

## Defense Mechanisms

These are learned responses used to avoid and reduce stress. They include reactions to pressure, conflicts, and frustrations. These mechanisms usually are subconscious and distort reality.

Defense mechanisms are not always bad. When used in moderation, defense mechanisms can be helpful and okay. Some are more constructive than others. However, overuse of defense mechanisms is a symptom of a deep-rooted problem.

The types of defenses people use depend on past experience, the situation, or their personality. Often, several defense mechanisms are used together.

### Definitions

Next to the definitions, in the parentheses, there is a + or – to signify whether it is a positive or negative way to deal with stress. A +  $\Leftrightarrow$  – signifies that its positive or negative status depends on how the defense mechanism is used.

**repression** to forget what the problem is (+  $\Leftrightarrow$  –)

**withdrawal** to mentally or physically run away from the problem (–)

**undoing** OCD and other addictive behaviors such as smoking (–)

**attention getting** to draw attention to oneself, such as being the class clown (+  $\Leftrightarrow$  –)

**aggression** to confront the issue directly (+  $\Leftrightarrow$  –)

## Eating Disorders

### Types

**anorexia nervosa** self-starvation, excessive exercise, fear of becoming fat

**bulimia nervosa** bingeing and purging via self-induced vomiting, exercise, or fasting

**binge eating disorder** compulsive overeating

All three can cause severe, immediate and long-term health issues and can cause death.

### Causes

#### Lifestyle

We have less activity in our lives. Television, video games, personal computers, cars, riding lawn mowers, emphasis on academics in school, and fast food are all contributors. We need to exercise four times more per week and eat better to return to normal sized people.

#### Emotion

Often, we repress our negative feelings, then use food for comfort (use of comfort food)



## Genetics

Some people have imbalanced metabolisms. Others have imbalanced appetites (10%). 50% of the people in anorexia cases have genetic makeup factor to susceptibility.

## Treating Mental Illnesses

There are multiple ways to treat mental illnesses. Most times, multiple treatments are combined, and alternatives most always be sought since treatment does not always work. It is also important to note that the original problem causing the illness should be identified and solved if possible as a permanent solution to the mental illness.

**medication** examples include Risperdal (schizophrenia and manic disorders) and Depakote (bipolar disorder)

**psychotherapy** interpersonal intervention by psychotherapists to help clients

**electroconvulsive therapy (ECT)** induce seizures by electricity which may treat manic disorders and schizophrenia

**surgery**

## Mental Health Doctors

**Psychologist** study human mind and human behavior

**Psychiatrist** same as psychologist, but is a license doctor and certified to treat mental disorders; they can issue prescriptions

## Violence

Violence is a learned verbal or physical behavior.

**oppression** violence at a non-power group from a power group

**displacement of oppression** "taking out our hurt on others"

### "Isms"

**racism** a certain race is superior or inferior to other races

**sexism** hatred or discrimination based on gender

**adulthoodism** predisposition towards adults; discrimination against young people

We support ourselves against enemies through allies, which are usually friends.

# Drugs

This chapter was designed for a test on drugs administered by Randall Heidemann on April 15, 2008.

## Classes of Drugs

This review report covers several different types of drugs.

### Illegal Drugs

The law does not allow possession or distribution of any of these substances. These drugs have been proven to have harmful effects on the human body.

### Legal Drugs

The law does allow the possession, distribution, and purchasing of these substances, but a permit or other kind of authorization (such as a prescription) may be required. These drugs may still be harmful as specified below.

### Not Meant for the Body

These drugs are derived from substances not meant for the body, such as many kinds of inhalants and can be abused.

### Specific Purposes

Finally, some drugs may be legal, but are meant for specific purposes. These include prescription and over-the-counter drugs, which can be harmful when taken excessively or for non-medical use.

### Other Abuse

Other kinds of drugs that can be abused include alcohol and cigarettes (nicotine), but these are not covered to a great extent in this review report.

## **Depressants**

Depressants are drugs that depress (slow down) the Central Nervous System (CNS), slowing down most body functions. They calm a person down, causing drowsiness or sleep. Side effects include headaches, rashes, irritability, and confusion. More serious side effects include physical addiction (withdrawal extremely difficult), blood disease, liver disease (especially alcohol), and coma if overdosed. Additionally, sexually transmitted diseases (STD's) can be transmitted by the use of syringes.

The use of several depressants together (namely alcohol and barbiturates) can cause a serious multiplying effect (synergism).

### **Common Drugs**

Common drugs include alcohol, barbiturates, tranquilizers (including Valium), and GHB.

### **Source**

Depressants can be made by a number of ways. Ethyl alcohol (drinking alcohol) comes from molasses, grapes, potatoes, and barley. These drugs are made in breweries and pharmacies.

### **Appearance**

These drugs are drunk as beverages (alcohol), swallowed (pills), or injected (syringes).

### **“High”**

Highs last for a relatively short period of time, typically about 1-2 hours. However, the effects of depressants can last from 4 to 12 hours.

## **Stimulants**

Stimulants stimulate (speed up) the Central Nervous System (CNS). Due to the overactivity of the Central Nervous System (CNS), one has excessive activity, an irritable mood, wide awareness, and anxiety. The associated risks includes predominantly cancer, as well as loss of appetite, paranoia, and serious damage to heart and blood vessels. Depression after the high is a result of the drug's ability to “steal” energy from the body's reserves.

### **Common Drugs**

Common drugs include amphetamines (including methamphetamine), cocaine (its purer form is known as crack), caffeine, nicotine, and Ritalin.

## Source

Stimulants mostly come from plants. Cocaine comes from the coca plant (South America), caffeine comes from the cola bean, and tobacco from the leaves of the tobacco plant. They can be made by drug and pharmaceutical companies for medical uses. However, more powerful and dangerous stimulants are made in illegal underground labs.

## Appearance

Stimulants have a particularly wide selection of appearances. Common forms include powder (cocaine is white powder), pebbles (crack), leaves (ground or bunched up), liquid, and pills (typically amphetamines).

## “High”

Highs last for a short period of time, typically about a half hour.

## Mind-Altering

These drugs are also known as hallucinogens and club drugs. They are the most powerful, potent, dangerous, and riskiest of all categories of drugs. Mind-altering drugs are relatively hard to find, and are mostly produced abroad and imported. They alter your perception of reality, through hallucinations or altered senses.

“Trips” (associated with LSD) can recur (flashback), and there can be “bad trips.” Other long lasting effects include paranoia, depression, extreme unpredictability, and seizures. Short term effects include dilation of pupils, nausea, and dehydration.

Most of these drugs have a nickname that accompanies its scientific abbreviation.

## Common Drugs

Common drugs include LSD (“acid”), PCP (“angel dust”), Ecstasy (MDMA- Methylendioxyamphetamine), mushrooms (dubbed ‘shrooms), nutmeg, and toad venom. Toad venom is often used to lace other drugs.

## Source

Mind-altering drugs can come from “plants” (nutmeg and mushrooms), animals (toad venom), and can also be completely synthetically produced (Ecstasy and other designer drugs).

## Appearance

Mind-altering drugs have a particularly wide selection of appearances. They can be liquid, solid cubes (acid is taken as liquid in sugar cubes), pills, powder, and their original “plant” form (mushrooms are the tops of the mushroom).

## **“High”**

Due to the the potency of these drugs, the high lasts for a longer period of time.

## **Inhalants**

The use of inhalants is in general the abuse of substances that are generally benign as a drug, especially by inhaling the drug.

Side effects include dizziness, drowsiness, and a multitude of other problems. Respiratory problems, bone marrow damage, “sudden sniffing death” syndrome, loss of hearing, limb spasms, and brain damage are caused by inhalants.

## **Common Drugs**

Common drugs include nitrous oxide (laughing gas), fluorocarbons, ethyl chloride, helium, and butane.

## **Source**

Inhalants can come from almost any household or industrial product that produces fumes or vapors. Products include gasoline, aerosols, nail polish removers, cleaning agents, paint thinner, and glues.

## **Appearance**

Inhalants can be in a liquid (vaporous), gas, or gel (similar to glue) form.

## **“High”**

The high is short lasting, about a half hour to an hour.

## **Anabolic Steroids**

Anabolic steroids have many legal uses. Their strength building power is useful for recovering patients. However, steroids can be abused to build extra performance in sports or to increase self-esteem. The strength, unfortunately, does come at a hard price. Side effects include aggressive behavior, mood swings, anger outbursts, severe acne, yellowing of the eyes, headaches, nosebleeds, bad breath, cancer, heart disease, heart attacks, and shrunken testes (high-pitched voice in males). Additionally, sexually transmitted diseases (STD’s) can be transmitted by the use of syringes.

## **Common Drugs**

Common drugs include oxandrolone, oxymetholene, and stanzobol.

## **Source**

Anabolic steroids can be legally made by pharmaceutical companies for recovery from surgery. More dangerous steroids can be distributed on the black market.

## **Appearance**

Anabolic steroids take the appearance of pills, liquid injections, and a cream that is absorbed through the skin.

## **Narcotics**

Narcotics are a widely abused type of drugs. They can relieve pain, cause drowsiness, impair physical action, and induce vomiting. Opium abuse can lower sex drive to an almost non-existent level after a period of time. Other common effects are various diseases, coma, and death. The average lifespan of a heroin addict is no more than a few years, many times even shorter.

## **Common Drugs**

Common drugs include opium, heroin, morphine, oxycotin (a prescription, synthetic heroin).

## **Source**

More than 90% of the opium in the world is grown in Afghanistan. It is also grown in the "Golden Triangle" (Southeast Asia- Thailand, Laos, and Burma). Three-quarters of the world's cocaine is produced in Colombia, and grown in Colombia, Peru, and Bolivia.

## **Appearance**

Narcotics take the forms of a liquid, powder, pill (which can be cut or diluted for injection or digestion).

## **Marijuana**

Since marijuana is commonly abused and unique, this review report explains it in further detail than any other drug.

## **Common Names**

Common names include grass, pot, weed, reefer, joint, and roach.

## Source

Marijuana is derived from the Cannabis Sativa plant (Indian Hemp). It is a green-brown mixture of dried, shredded flowers, leaves and buds. The principle active ingredient is THC, a mind-altering ingredient. Over time, we have seen that the strength (measured by the amount of THC in the plant) has dramatically increased. It currently has 10X more than a couple of decades ago.

## Appearance

Marijuana can be either smoke or ingested. The smoking has a faster effect (feeling the effect in minutes).

## Effects

Marijuana (more specifically, THC), is fat-soluble. As a result, it is can be stored in one's body for longer period of time, unlike alcohol which takes one hour to digest per drink. THC can be stored in body organs where there is high fat content including the lungs, brain, and reproductive organs.

While and shortly after smoking, appetite increases, and the appearance of time is distorted. Short term effects on the brain include problems with memory and learning, distorted perception, and problems with problem solving. After prolonged use, the loss of memory and coordination can become permanent. Other short term effects include loss of coordination, bloodshot eyes, and panic attacks.

Long term effects include higher chances of cancer, breathing problems, immune system problems, and possible reproductive and hormonal problems. Weight gain due to the temporary hunger and facial hair is seen in females. In males, muscle development is poor.

A prominent long-term effect is amotivational syndrome. People with this after smoking Marijuana are dubbed "burn-outs" because they lose all motivation for life, and just stop trying.

## Society

According to a nationwide survey, 1 in 6 tenth graders report that they have used Marijuana in the past month. Most teenagers do not smoke Marijuana. Most teenagers that use Marijuana quit after a relatively short period of time, but some may become addicted or move on to more potent drugs. Marijuana is therefore considered a "gateway drug."

## Difference

Since Marijuana is illegal, there is no quality control. Each dose is different, especially as a result of lacing. Lacing is the intertwining of another drug for more "enjoyment." The effects can also be altered by the amount and strength of the Marijuana (specifically THC), the social setting, and mood of the user.

## Facts

- A single Marijuana cigarette (joint) can contain as much tar or cause the same health-related problems as 14 cigarettes.

- Marijuana can be detected in the body for up to 28 days of use (due to the fat-soluble THC).
- The THC level of an average joint is between 5% and 14% today, while it was 0.2% in 1960.
- In all 50 states, it is illegal to use, buy, sell, or carry Marijuana.

## Vocabulary

**addiction** state of being physically or mentally dependent on something

**anabolic steroid** steroids related to the hormone testosterone that promote growth of tissue

**barbiturate** depressants that induce sleep

**caffeine** most common benign stimulant

**crack** purer form of cocaine (in granule form)

**depressant** drug that slows down the Central Nervous System (CNS)

**designer drug** mind-altering drug that is altered in varying degrees to create a new drug (i.e. Ecstasy) for circumventing drugs laws; many, including Ecstasy, are now banned

**drug** substance that alters the structure or function of a human organ

**ethyl alcohol** type of alcohol in drinks (beer, wine, etc.)

**euphoria** "high" feeling

**flashback** recurrence of a previous "trip" (can be good or bad trips)

**hallucinogen** mind-altering drug that forces the brain to discard reality and work with a false image

**inhalant** drug that is an abused every-day item

**narcotic** drug derived from the opium poppy

**nicotine** primary active ingredient (stimulant) found in cigarettes

**prescription** note for a doctor-approved drug or treatment

**stimulant** drug that speeds up the Central Nervous System (CNS)

**synergism** multiplying effect of combining drugs

**tolerance** ability of body to reduce effects of a drug after prolonged use, requiring more of the drug to give the same effect

**toxication** metabolism of a drug which produces a substance that may be stored in the human body

**withdrawal** shock the body undergoes when an addicted substance is withheld