Dan Newman, PhD, DD, RRS, APS
Holistic Health Consultant and Senior Health Educator
4015 Cherry Street Suite #34
Cincinnati, OH 45223

www.ceucert.com (513) 542-1900 dan@ceucert.com

Addiction -The Foundation for HIV, HEP, and TB
Handout

HIV/AIDS Fast Facts (CDC Dec. 2013)
The Numbers - New HIV Infections in 2010
There were an estimated 38,000 new HIV infections among men in the United States. Seventy-eight percent (29,800) of these were among MSM.
Of the 38,000 total estimated new HIV infections in US men, 39% (14,700) were in blacks, 35% (13,200) were in whites, and 22% (8,500) were in Hispanics - Latinos.
The rate of estimated new HIV infections among black men (per 100,000) was 103.6—six and a half times that of white men (15.8) and more than twice the rate among Hispanic/Latino men (45.5).

HIV and AIDS Diagnoses and Deaths:
• The Centers for Disease Control and Prevention (CDC) estimates that 1 in 51 men will receive a diagnosis of HIV infection at some point in their lifetimes. Over the course of their lifetimes, 1 in 16 black men will be diagnosed with HIV infection, as will 1 in 33 Native Hawaiian/Other Pacific Islander men, 1 in 36 Hispanic/Latino men, 1 in 100 American Indian/Alaska Native men, 1 in 102 white men, and 1 in 145 Asian men.
• Overall, an estimated 16% of all adults and adolescents living with HIV infection in 2010 were undiagnosed. Among men, greater percentages of undiagnosed HIV infections were attributed to male-to-male sexual contact (19%) and heterosexual contact (19%)e compared to other transmission categories.
• In 2011, 79% (38,825) of the 49,273 estimated new diagnoses of HIV infection (including children) in the United States were among adult and adolescent men. Black/African American men (referred to as "black" in this fact sheet) had the highest rate of HIV diagnosis among all races/ethnicities.

In 2011, 75% (24,088) of the 32,052 estimated AIDS diagnoses in the United States (including children) were among men. Men represent 79% (913,368) of the estimated 1,155,792 people (including children) diagnosed with AIDS in the United States through the end of 2011.

HIV Among Older Americans:
Americans aged 50 and older have many of the same HIV risk factors as younger Americans.
• Persons aged 55 and older accounted for 19% (217,300) of the estimated 1.1 million people living with HIV infection
in the United States in 2010.
• Older Americans are more likely than younger Americans to be diagnosed with HIV infection later in the course of their disease.
HIV/AIDS Fast Facts

New HIV Infections (Aged 55 and Older)
Of an estimated 47,500 new HIV infections in 2010, 5% (2,500) were among Americans aged 55 and older. Of these older Americans:

- 36% (900) of new infections were in white men, and 4% (110) were in white women;
- 24% (590) of new infections were in black men, and 15% (370) were in black women;
- 12% (310) of new infections were in Hispanic/Latino men, and 4% (100) were in Hispanic/Latino women.

In 2010, 44% (1,100) of the estimated 2,500 new HIV infections among people aged 55 and older were among gay, bisexual, or other men who have sex with men (MSM). Among MSM aged 55 and older, white MSM accounted for an estimated 67% (740) of new HIV infections, Hispanic/Latino MSM 16% (180), and black MSM 15% (160).

In 2011, people aged 50-54 represented 47% (3,951) of the estimated 8,440 HIV diagnoses among people aged 50 and older in the United States. From 2008-2011, the estimated annual numbers and rates of HIV diagnoses in this aged group remained relatively stable.

In 2010, the estimated rate (per 100,000 people) of HIV diagnoses for older blacks was 41.6, which was nearly 11 times the estimated rate for whites (3.9) and nearly 3 times the estimated rate for Hispanics/Latinos (15.4) in 46 states with confidential, name-based reporting.

From 2007-2010, the estimated annual numbers of diagnosed HIV infections attributed to male-to-male sexual contact increased among men aged 50 and over (in 46 states with confidential, name-based HIV reporting).

In 2011, people aged 50 and older accounted for 24% (7,771) of the estimated 32,052 AIDS diagnoses in the United States.

Partner types among African Americans influence risk perceptions and behaviors
African Americans are disproportionately impacted by HIV infection. Rates of new HIV infection among African Americans are nearly 8 times higher than their White counterparts.
High-risk heterosexual contact as mode of HIV transmission is high among African Americans. For example, 80% of cases in women and 25% of cases in men are from heterosexual contact.

Vital Signs report & fact sheet
Nearly 1 in 5 people with HIV (or 240,000 people) don't know they are infected.
People who don't know are at higher risk of serious medical problems and early death.
Only 41% of people with HIV get ongoing HIV medical care.
Only 28% of people with HIV have viral suppression.
Viral suppression improves health, extends life, and can help to prevent people from transmitting the virus to others.

Why HIV/AIDS Statistical Update?
Estimated 56,300 new cases a year in the U.S.
More than 18,000 people die every year in the U.S.
1 person infected every 9 min's in the U.S.
Black account for 12% of the total U.S. population but make up roughly ½ of the new HIV infections in the U.S.

AIDS UPDATE:
A = Acquired = a virus received from someone else.
I = Immune = an individual's natural protection against disease-causing Microorganisms.
D = Deficiency = a deterioration of the immune system.
S = Syndrome = a group of signs and symptoms that together define AIDS as a human disease.

Cost of HAART estimates:
Seven Protease Inhibitors in Use and Cost.

Invirase	- $440.00 per month
Fortovase	- $250.00 per month
Norvir	- $750.00 per month
Crixivan	- $525.00 per month
Viracept	- $725.00 per month
Reyataz	- $830.00 per month
Lexiva	- $650.00 per month

HIV Transmission Category
In 2008, the largest estimated proportion of HIV/AIDS diagnoses among adults and adolescents were for men who have sex with men (MSM), followed by persons infected through heterosexual contact.

By Age
In 2008, persons aged 25–34 and persons aged 35–44 accounted for the largest proportions of newly diagnosed HIV/AIDS cases.
New estimates for yearly infection of HIV in the U.S. went from 40,000 per year to between 58,000 to 60,000 new cases per year.

HIV/AIDS in People over 50
Thirty years into the pandemic AIDS is increasingly a disease of older people who make up one of the fastest growing segments of the HIV positive population. Of the estimated 1.1 million Americans with HIV, some 407,000 are over 50: by 2017 half of the total HIV positive population will be over 50.

Shockingly, one in seven new diagnoses of HIV or AIDS is in a person over 50. The health care system will feel the impact since older people with HIV contract more disease of aging than their uninfected peers.
Though HIV is often transmitted by sharing needles, older American are more likely to get it through unprotected sex.

Many think condoms are only for preventing pregnancies.
Other's think a partner over 50 is less likely to have the disease.
There is a concern that improved treatments feed a sense of complacency about HIV, particularly among women.
Most women don't feel they are at risk???

HIV/AIDS Statistics
In 2009, there were an estimated 11,200 new HIV infections among women in the United States. That year, women comprised 51% of the US population and 23% of those newly infected with HIV.

Of the total number of new HIV infections in US women in 2009, 57% occurred in blacks, 21% were in whites, and 16% were in Hispanics/Latinas.

In 2009, the rate of new HIV infections among black women was 15 times that of white women, and over 3 times the rate among Hispanic/Latina women.

At some point in her lifetime, 1 in 139 women will be diagnosed with HIV infection. Black and Hispanic/Latina women are at increased risk of being diagnosed with HIV infection (1 in 32 black women and 1 in 106 Hispanic/Latina women will be diagnosed with HIV, compared with 1 in 182 Native Hawaiian/other Pacific Is-

lander women; 1 in 217 American Indian/Alaska Native women; and 1 in 526 for both white and Asian women).
From 2006 through 2009, estimated diagnoses of HIV infection among women decreased from 10,851 to 9,973. It is unknown whether this decrease is due to an actual decrease in new HIV infections (incidence) or whether the decrease reflects HIV testing trends.

Women accounted for more than 25% of the estimated 34,247 AIDS diagnoses in 2009 and represent nearly 20% of cumulative AIDS diagnoses (including children) in the United States to date. There were 8,647 AIDS diagnoses among women in 2009 compared with 9,639 AIDS diagnoses among women in 2006.

For women living with a diagnosis of HIV infection, the most common methods of transmission was heterosexual contact and injection drug use.

In 2008, 4,796 (28%) of the estimated 17,374 persons with a diagnosis of HIV infection who died in the 40 states and 5 US dependent areas were women. Deaths attributed to HIV among women of color are disproportionately high: from 2000–2007, HIV infection was among the top 10 leading causes of death for black females aged 10–54 and Hispanic/Latina females aged 15–54.

Prevention Challenges
Like other affected populations, women face a number of risk factors that may contribute to their risk for HIV infection.

Most women are infected with HIV through heterosexual sex. Some women become infected because they may be unaware of a male partner's risk factors for HIV infection or have a lack of HIV knowledge and lower perception of risk. Relationship dynamics also play a role. For example, some women may not insist on condom use because they fear that their partner will physically abuse or leave them.

Both unprotected vaginal and anal sex pose a risk for HIV transmission. Unprotected anal sex presents an even greater risk for HIV transmission for women than unprotected vaginal sex.

Women who have experienced sexual abuse may be more likely than women with no abuse history to use drugs as a coping mechanism, have difficulty refusing unwanted sex, exchange sex for drugs, or engage in high-risk sexual activities.

Socioeconomic issues associated with poverty, including limited access to high-quality health care; the exchange of sex for drugs, money, or to meet other needs; and higher levels of substance use can directly or indirectly increase HIV risk factors.

Substance use in Patients with HIV/AIDS

Presented by:
Rev. Dan Newman, PhD, DD
www.ceucert.com - dan@ceucert.com

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INTRODUCTION

What are these drugs?
The following is some of the more commonly used substances with a brief explanation of how and why people use them and some of the negative consequences of people living with HIV/AIDS.

Benzodiazepines

What are they?
Sedatives often prescribed for anxiety, panic attacks and insomnia.
For illicit use, may be obtained on the streets or from physicians.
High potency formulations such as Alprazolam and Clonazepam are often most sought after.

Street names; Benzos – Downers – Sticks
How are they used? Orally

Why do people use them;
Reduce anxiety
Cause sedation
Enhance the effects of other depressants
Offset the side effects of stimulants

Acute effects;
Sedation – Ataxia – psychomotor retardation – drowsiness – memory impairment – disinhibition – respiratory depression

Chronic effects;
May worsen depression

Withdrawal;
Anxiety, insomnia, tremulousness, headache

Seizures and death can occur
In some cases, withdrawal is very similar to that seen in alcohol dependence
There may be a prolonged withdrawal syndrome characterized by insomnia, anxiety, and sensory hypersensitivity, which may contribute to inability to maintain abstinence

Pregnancy/Fetal issues;
Sedation
"Floppy baby syndrome"
Dependence with withdrawal signs, including hypertonia, restlessness, irritability, and possibly seizures

Comments:
Benzodiazepine misuse is common among methadone patients and contributes to the nodding observed in some patients.
Benzodiazepines are also frequently implicated in mixed-drug overdoses.

Cocaine
What is it?
Derived from the coca plant
Two principal forms: powder (cocaine hydrochloride) and solid ("crack" or "base")
Crack cocaine has a more rapid and intense effect, but both forms are the same drug with the same physiology.

Street Names:
Coke
Nose candy
Rock
Blow
Crack

How is it used?
"Powder" cocaine is usually sniffed or dissolved in water and injected
Crack cocaine is usually smoked. Some people inject it after first dissolving it in an acidic solution (like vitamin C or lemon juice)
When smoked or injected, the euphoria (rush) is rapid, intense, and short lived (3-10 minutes); may last up to 30 minutes when sniffed.

Why do people do it?
Euphoria
Increased sexual interest
Alertness
confidence

Acute Effects:
Increased heart rate and blood pressure
Loss of appetite
Anxiety with paranoid ideation
Lowered seizure threshold
Arrhythmias

Acute effects continued:
Vasospasm, which may lead to myocardial infarction or cerebral vascular accident
Hyperthermia, which can be fatal
Extreme dysphoria and despondency often follow the euphoria, leading users to binge

Chronic Effects:
Weight loss
Dysphoria
Depression
Nasal perforation
Accelerated HIV disease progression

Withdrawal:
No physical syndrome of withdrawal
Craving for more cocaine can be intense

Pregnancy/Fetal issues:
Risk of spontaneous abortion, premature labor, abruptio placenta (placental lining has separated from the uterus of the mother), and low birth weight
Debate in the literature over long-term effects on development, but most studies have not found a strong effect
Reduced placental blood flow
Intrauterine fetal growth restriction
Fetal cerebrovascular incident

Comments:
Under federal law, possession of >5 grams of crack cocaine of >500 grams of powder carries a mandatory penalty of 5 years in prison

Marijuana
What is it?
Derived from the flowers and leaves of the Cannabis sativa plant
Hashish is the concentrated resin
Primary active ingredient is ^9-THC, but a number of other chemicals are believed to have a role in its effects
Cannabinoids act on receptors that also respond to endogenous CNS ligands

Street names; Pot – Weed – Reefer – Dope – Joint – Blunt
How is it used?
Smoked or ingested orally buy mixing marijuana in brownie mix or sautéing in butter or oil before frying foods
Why do people use it?
Euphoria
Relaxation
Perceptual alterations
Intensification of sensory experiences

Acute effects;
Increased heart rate
Impairment of short-term memory and motor skills
Increased appetite
Sometimes anxiety and panic

Chronic effects;
Cannabis smokers may be at increased risk for chronic bronchitis and respiratory cancers
Most studies have not found any irreversible long-term effects on cognition, although debate continues
The possibility that use of marijuana at a young age raises the risk of schizophrenia is also under debate

Withdrawal
Sleep and appetite disorders
Irritability and anxiety sometimes accompany abrupt cessation of chronic marijuana use

Pregnancy/Fetal issues:
No evidence of fetal malformations
Various inconsistent results include associations with lower birth weight and childhood cancers
Placental vascular abnormalities
Intrauterine fetal growth restriction

Comments
Medically, marijuana has been found to increase appetite, reduce nausea, and relieve pain. Debate continues on efficacy and risk in comparison with other medications

MDMA (Ecstasy, Molly, Mollies)
What is it?
MDMA is a synthetic analogue of amphetamine

Street names: Ecstasy – E – X – Molly's

How is it used?
Ingested orally, intranasally, and sometime injected
Effects last 3 to 5 hours per dose
Why do people us it?
Euphoria
Sensory enhancement
Empathy
Energy
Sexual charge
Sexual conquest

Acute effects:
Increased heart rate, tremor, anorexia, anxiety, dry mouth
Rarely: seizures, hyperthermia leading to disseminated intravascular coagulation (DIC), and organ failure

Acute effects continued:
MDMA users are often advised to stay well hydrated; however, consuming large amounts of hypotonic fluids with MDMA has been documented to lead to hyponatremia (sodium (salt) in the blood is lower than normal) MDMA increases release of antidiuretic hormone)

Chronic effects:
Long-term damage to serotoninergic neurons in the animal studies, but this has not been clearly shown in humans
Anecdotal evidence that chronic use leads to depression

Withdrawal:
No withdrawal syndrome, but some people use it compulsively

Pregnancy/Fetal issues:
No data which controls for other variables

Comments:
MDMA was first synthesized in 1912 and was used in psychotherapy in the 1970's.
Recreational use began in the 1980's at which point it was classified as Schedule 1 drug
The FDA has approved a research protocol on the use of MDMA in post-traumatic stress disorder

Opiates
What are they?

Originally derived from the poppy plant although there are now also semi-synthetic (e.g. heroine) and synthetic (e.g. methadone) classes
Most commonly used to treat severe or chronic pain
For illicit use, may be obtained on the street or from physicians
High potency formulations such as OxyContin® are often most sought after Opiates

Street names

Dope – smack – junk – horse – Manteca
Generally sold in $10 bags, 10 of which make a bundle

How are they used?

Orally, nasally inhaled, smoked, injected intravenously or subcutaneously

Why do people use them?

Opiates reduce pain, but opiate abusers experience feelings of sedation, euphoria, analgesia, and a "rush"

Acute effects:

Sedation, euphoria
Respiratory depression
Decrease in blood pressure and heart rate
Noncardiogenic pulmonary edema has been associated with acute opiate use

Chronic effects:

Many of the medical consequences of opiate use are effects of the route of administration and not the drug itself
Injection can lead to endocarditis, abscess formation, clots, skin tracks, and scarring
Infected needles can transmit hepatitis B and C, and HIV infection.

Withdrawal:

Can be divided into early, middle, and late phases:
Early: yawning, sweating teary eyes, and runny nose.
Middle: restless sleep dilated pupils, goose-flesh, tremor, irritability
Late: an increase in all early and middle signs and symptoms with an increase in blood pressure, nausea, vomiting, diarrhea, abdominal cramps, labile mood, depression, muscle spasm, weakness, and bone pain.

Withdrawal continued:

Heroin withdrawal usually starts 8-12 hours after the last use and peaks at 48 hours, lasting from 5-10 days
Methadone withdrawal generally begins 24-48 hours after the last dose; it is somewhat more gradual in onset but lasts several weeks

Pregnancy:

If a woman who is dependent on opioids becomes pregnant, the clinician should discuss treatment options with her, informing her that methadone maintenance is preferred to detoxification with its attendant risks of withdrawal and relapse
Opiate withdrawal during pregnancy can lead to spontaneous abortion or premature labor

Alcohol
What is it?
Ethanol, derived from a variety of plant sources

How is it use?
Oral ingestion

Why do people do it?
To feel pleasure, relax, decrease anxiety and sexual inhibition
Among persons with alcohol dependence, alcohol is ingested to avert uncomfortable withdrawal symptoms.

Acute effects:
Signs and symptoms of alcohol intoxication (increased severity according to amount of alcohol consumed):
Diminished muscular coordination
Confusion, nystagmus, ataxia, dysarthria
Nausea, vomiting, diplopia, sluggish pupils
Hypothermia, cold sweats, stupor, amnesia
Risk of coma

Chronic effects:
Nervous system – insomnia, anxiety, cerebellar dysfunction, optic neuropathy, peripheral neuropathy, & seizures
Cardiac – arrhythmia, cardiomyopathy, worsening hypertension

Chronic effects continued:
Hepatic – fatty liver, hepatitis, cirrhosis with complications (e.g. gynecomastia, testicular atrophy, ascites, varices, encephalopathy
Gastrointestinal – gastritis, peptic ulcer disease, pancreatitis
Musculoskeletal – myopathy, osteoporosis
Metabolic – chronic malnutrition, vitamin deficiencies, including thiamine, folate, and vitamin B12
Dermatologic – spider angiomata, palmar erythema
Hematologic / Immunologic – anemia thrombocytopenia, decreased WBC function
Cancer – increased risk of cancer of the liver, pancreas, mouth, tongue, pharynx, larynx, and esophagus

Withdrawal:
Occurs 6-60 hours after last drink
Manifested by tremors, sweats, flush, anxiety, insomnia, anorexia, nightmares, diarrhea, nausea, vomiting, aches, abdominal cramps, restlessness, and elevated vital signs
Withdrawal can last 3-5 days
Major withdrawal (DT's) is manifested by confusion; markedly elevated vital signs; agitation, often with belligerence; pronounced tremor; diaphoresis; and hallucinations. Even if treated, mortality is between 1% and 3%.
Withdrawal seizures are usually isolated, although can be recurrent (25%)
Withdrawal can last 3-5 days
Persistent mild withdrawal consists of sleep disturbances, mild tremors, anxiety, and depression and can last for several weeks to months.
Treatment of withdrawal consists of bensodiazepine

Pregnancy/Fetal issues:
In the United States, 1 in 300-1000 births have fetal alcohol syndrome or fetal alcohol effect. Hallmarks of fetal alcohol syndrome include:
Fetal growth retardation
Facial dysmorphism
Central nervous system dysfunction

Comments:
Pharmacologic treatments for alcohol dependence and to help prevent relapse include:
Disulfiram: causes aversive symptoms if alcohol is ingested
Naltrexone (oral or injectable): opioid antagonist that blunts the pleasurable effects of craving for alcohol
Acamprosate: mechanism is unknown, can help sustain abstinence from alcohol

Ketamine
What is it?
Ketamine hydrochloride
Developed as an animal anesthetic
Dissociative anesthetic similar to PCP

Street names
K - Vitamin K – Special K – A K-hole is a deeply dissociated state

How is it used?
Smoked, intravenously, orally, inhaled

Why do people use it"
One of the ‘‘Club Drugs’’

Hallucinogen-like, visual illusions, distortion of body image

Acute Effects
Increase in blood pressure, hallucinations, anxiety, muscle rigidity, feelings of strength and special insights
Impaired motor skills, judgment, and speech

Chronic effects
Protracted psychosis similar to that seen with PCP

Withdrawal
None, craving can develop
Pregnancy/Fetal issues
Neuronal cell death in the fetus seen in experimental studies

Acute effects
Mild euphoria, relaxation; at high levels: loss of consciousness, seizures, vomiting

Chronic effects
Tolerance and dependency

Withdrawal
1-6 hours after use: anxiety, restlessness, insomnia, tremor, confusion, delirium, hallucinations, tachycardia, elevated BP, nausea, and vomiting

GHB
What is it?
Gamma hydroxy butyrate (similar to sedatives)
Developed as an anesthetic

Street names
Liquid ecstasy
Grievous bodily harm

How is it used?
Clear liquid, powder, or pill most often taken orally

Why do people use it?
Mild euphoria
Body builders use it to build muscles (growth hormone release)

Pregnancy/Fetal issues
Little known

Comments
Effects of any dose are very unpredictable

Number one of the top 4 drugs used in drug facilitated sexual assault in both gay and straight communities.
High risk for drug facilitated assault in bars, parties, proms, or home environment.

Methamphetamine
What is it?
Synthetic stimulant similar to cocaine but with longer period of effect

Street names
Crystal
Tina
Speed
Crank

How is it used?
Orally, intravenously, smoked intranasally, rectally

Why do people use it?
Weight loss
Reduced fatigue, sustained alertness
"Rush" and energy
Increased interest in sex

Acute effects
Smoking can produce a high of 7-24 hours in duration
Increased energy and alertness, elevated mood, dilated pupils, increased heart rate and blood pressure, decreased appetite, tremors, sweats, headache

Chronic effects
Psychosis, depression
Memory loss
Dependence
Insomnia
Tolerance (develops in several weeks)
Damage to dopamine- and serotonin-containing neuron terminals

Withdrawal
Extreme fatigue ("crash effect")
Depression
paranoia

Pregnancy/Fetal issues
Neonatal behavior problems (hyper-irritable, poor feeding, lethargy)
Increased in placental abruptions
Reduced gestational age
Low birth weight, length, and head circumference
Reduced placental blood flow
Intrauterine fetal growth restriction
Fetal cerebrovascular incident

Comments
Use has spread from the west coast to the US to the east, particularly among MSM where it is associated with high-risk sexual activity

Anabolic-Androgenic Steroids
What are they?
A class of steroid hormones related to testosterone
Street names – Arnolds – stackers – gym candy – weight trainers – pumpers – juice – roids – sticks

How are they used?
Orally, injected, or transdermally
(relating to, being, or supplying a medication in a form for absorption through un-broken skin into the bloodstream)

Why do people use them?
Legally prescribed to treat body wasting and endocrine disorders
Athletes misuse for enhanced performance
Others misuse for improved physical appearance

Short-term effects
Increased muscle mass and strength when combined with training

Chronic effects
For men:
Testicular atrophy, reduced sperm count
For women:
Changes in menstrual cycle

Cronic effects for both men and women
Severe acne
Mood swings, association with aggression
Potential liver damage, increases in LDL and decreases in HDL
High blood pressure

Withdrawal

Rare
Mood swings, depression, fatigue, restlessness, loss of appetite, insomnia, reduced sex drive and steroid cravings

Pregnancy/Fetal issues
Can cause development of male features in the female fetus and female features in the male fetus.
Can cause physical stunt growth in both male and female youth

Comments
Prevalence of adverse effects unclear

HIV and HEPATITIS
THE ALPHABET SOUP OF HEPATITIS

Hepatitis is a broad term referring to inflammation of the liver. Hepatitis can be caused by a variety of things, including toxins, certain drugs, heavy alcohol use, and bacterial infections—but most hepatitis infections are caused by viruses. Viral hepatitis is the leading cause of liver cancer and the most common reason for liver transplantation.

Different types of hepatitis are labeled with letters from the alphabet. These include hepatitis A, B, C, D, E, F, G, and possibly H. The most common types in the United States are A, B, and C.

You can get some forms of viral hepatitis the same way you get HIV—through unprotected sexual contact and injection drug use. Hepatitis B and Hepatitis C are common forms of hepatitis among people who are at risk for, or living with, HIV/AIDS. When someone is infected with both HIV and hepatitis B or C, we say that they are coinfected.

Another common form of hepatitis - Hepatitis A - is an acute liver disease, which is spread through contact with the feces of an infected person. HAV does not lead to chronic infection in the way that hepatitis B and C do, but it can cause serious illness that can last for months.

There is a vaccine that can prevent hepatitis A infection. CDC encourages people at high risk for HIV infection—including men who have sex with men and injection drug users—to be vaccinated.
For more information, see CDC's Viral Hepatitis.

HEPATITIS B AND COINFECTION
Hepatitis B is caused by the hepatitis B Virus (HBV). HBV is the world's leading cause of chronic liver disease. It is typically transmitted through sexual intercourse, injection drug use, and from mother to baby during pregnancy. You can

have HBV without having any symptoms, and sometimes it will clear up naturally without progressing to a chronic infection. People who have chronic HBV infection, however, can develop hepatitis or even liver cancer.

There is a vaccine that will protect you from HBV. The CDC recommends universal HBV vaccination of susceptible patients with HIV/AIDS.
Treatment for HBV infection involves using medications similar to those that treat HIV. HBV treatment is complex—if you have HBV, a properly trained healthcare provider will need to monitor your treatment closely.
For more information, see CDC's Hepatitis B, and HIV/AIDS and Viral Hepatitis: Hepatitis B Testing and Vaccination.
If you are coinfected with HIV and HBV, you have a higher risk for developing chronic Hepatitis B infection. In addition, HIV infection can increase the amount of HBV virus that is circulated in your body. For these reasons, if you have HIV/HBV coinfection, you should be evaluated for liver disease and talk with your healthcare provider about treatment options.
For more information, see the University of California, San Francisco's HIVInsite: Hepatitis B and HIV Coinfection .

HEPATITIS C AND COINFECTION
Hepatitis C (HCV) is one of the most common coinfections associated with HIV. According to CDC, about 25% of HIV-infected persons in the United States are also infected with HCV.

If you have HCV, you may not have any symptoms. In order to diagnose HCV, you will need to have tests to check the amount of HCV in your blood. In addition, you may need to have imaging studies and a liver biopsy to determine whether you have liver damage and how serious it is.

HIV infection can increase the amount of HCV virus that is circulated in your body, so if you are coinfected, you will be at higher risk for progressing to liver disease, cirrhosis, and liver cancer. You will also have an increased risk of hepatotoxicity, or general liver damage, which can be caused by your HIV medications.

There is no vaccine for HCV, but treatment is available. Not everyone is a good candidate for this treatment, so you will need to talk with your healthcare provider to find out whether you will benefit. HCV treatment has significant side effects, so it's important to learn about them before you consent to therapy.

If you have HIV/HCV coinfection, you should also ask your healthcare provider if you need to be immunized against Hepatitis A (which causes acute, but not chronic, infection) and hepatitis B to prevent further infections and liver damage.
For more information, see the Health Resources and Services Administration's HIV/HCV Coinfection or CDC's Coinfection with HIV and Hepatitis C Virus.

HEPATITIS B
Hepatitis B
Caused by hepatitis B virus (HBV)
Transmitted by blood and OPIM
Found in all body fluids
Blood and semen are the most infectious
Major cause of liver damage, cirrhosis, and liver cancer
Infections are declining
Still infects about 60,000 people yearly
About 3,000-5,000 people die of liver problems associated with HBV infection every year

HEPATITIS B
Incubation period averages 12 weeks

Infection can cause acute hepatitis or A chronic (long-term) infection

Chronic HBV can be infectious for decades

How HBV is spread:
Injection
Needlesticks
Puncture wounds
Mucous membranes
Eyes and mouth
Nonintact skin (abrasions)
Sexual activity
Infected mother to newborn at birth

HBV Transmission
Contaminated environmental surfaces
At room temperature HBV may survive for several days in dried body fluids on surfaces
HBV more easily transmitted than HIV:
- Lives longer outside the body
- Little blood needed to cause infection

100 more infectious than HIV
10 more infectious than HCV

HBV is NOT transmitted:
Food or water
Fecal matter
Through the air
sneeze or cough
Casual contact
shaking hands, hugging,

kissing, or sharing a meal,
utensils, or a drinking glass

HEPATITIS B
About 30% have no symptoms at all
Flu-like symptoms may appear gradually
Loss of appetite
Nausea, vomiting
Fatigue
Muscle or joint aches
Mild fever
Stomach pain
Occasionally jaundice

How Do You Know If You Have HBV:
Only certain way to know is to have a blood test
Blood test may not indicate the virus shortly after being infected

Hepatitis B Vaccine
Best protection
No risk of developing hepatitis
Three doses given by injection on three different dates
Most common reaction is soreness at the injection site

HBV Vaccine Recommended:
Employees at risk
Those who have unprotected sex with a partner who has HBV or have sex with more than one partner
People who have anal sex

HEPATITIS B
HBV Vaccine Recommended:
Those who use intravenous recreational drugs
People with hemophilia
Those who frequently travel to or live in countries where HBV is common
Those who live with someone with lifelong HBV

HBV Vaccine Effectiveness
Prevents hepatitis B in ~ 95% of people
After receiving the three shots, you can be tested to make certain you are protected
Important if you have a compromised immune system or your job frequently exposes you to human blood

Prevention of HBV Infection
Get the HBV vaccine

Use barrier devices to prevent contact with any blood and OPIM
Handle sharps carefully
Avoid recreational IV drugs, tattooing, and body piercing tools by non-professionals.
Do not share personal items

HEPATITIS C
Liver disease caused by the hepatitis C virus (HCV)
Lives in the blood of people with the disease
Spread via the blood
Incubation period averages 7 weeks
3.2 million people in the U.S. have chronic HCV infection
About 26,000 new infections occur each year
Many people who carry HCV have some liver damage but do not get sick from it
Other people develop cirrhosis of the liver, resulting in eventual liver failure

How is HCV Spread?
Most often through drug injections with contaminated needles
Unclean tattoo or body piercing tools
Sharing contaminated toothbrushes, razors or other personal items
From a pregnant woman to the fetus
Rarely, though sexual contact but is possible if blood is present in semen, vaginal fluids, or bleeding due to anal or vaginal penetration.
In healthcare, via direct contact with infectious blood through an accidental needlestick or sharps injury

Symptoms of HCV
Most infected people do not have symptoms but so may have:
Fatigue, loss of appetite, nausea, anxiety, weight loss, alcohol intolerance, abdominal pain, loss of concentration, and jaundice.

How Do I Know If I Have HCV?
Blood test
A false positive test can occur with HCV tests
Positive tests should have a follow-up test
False negative test results may also occur with HCV usually shortly after infection when antibodies have not yet developed

HEPATITIS C HCV Testing
Anyone who has:
Been exposed to HCV-positive blood
Used intravenous recreational drugs
Received a blood transfusion or organ transplant
Been on kidney dialysis prior to 1992
Been treated with a blood product prior to 1987
Signs of liver disease

HCV Testing Is Important
Treatment can be given to protect the liver from additional damage
HCV carriers can take preventive measures to avoid spreading HCV to others

Preventive Measures
Handle needles and other sharps with caution
Use barriers to prevent contact with blood and OPIM (wear gloves)
Avoid recreational intravenous drug use
Never reuse or share syringes, or drug paraphernalia
Preventative Measures
Don't share toothbrushes, razors, personal care items
Get vaccinated against HBV
Remember the health risks associated with tattoos and body piercing if tools are not sterile or sanitary practices are not followed

TUBERCULOSIS AND HIV
Tuberculosis (TB) is a disease that is caused by a specific type of bacterial infection called Mycobacterium tuberculosis. TB usually affects the lungs, but it can also affect the brain, kidneys, spine or other organ systems. TB can cause serious health problems, including death, if left untreated.

According to the Centers for Disease Control and Prevention (CDC), fewer people in the U.S. have TB disease than in past years. However, despite a decrease in reported TB cases, the disease remains a serious threat, especially for people living with HIV/AIDS. That's because TB infection and HIV infection can work together to make you very sick. Worldwide, TB is the leading cause of death among people living with HIV.

TB is an issue for people living with HIV/AIDS in the U.S. because:
- It is estimated that about 4.2% of Americans (13 million individuals) are infected with TB bacteria.
- As of 2011, CDC estimated 6% of all TB cases and 10% of TB cases among people aged 25–44 occurred among people who were HIV-positive.

Because of the serious health risks for coinfection with TB and HIV, the CDC recommends that all HIV-positive people should be tested for TB. Those who test positive for TB should begin treatment immediately.
For more information, see CDC's TB and HIV/AIDS.

TB is primarily an airborne disease. When a person with active TB disease coughs, sneezes, speaks, or sings, TB germs spread through the air. These germs can float in the air for several hours. If you breathe in the air containing these TB germs, you can become infected.

TB is NOT spread by:

- Shaking someone's hand
- Sharing food or drink
- Touching bed linens or toilet seats
- Sharing toothbrushes
- Kissing

For more information, see CDC's Get the Facts about TB Disease.

TWO TYPES OF TB INFECTION

There are two types of TB infection latent and active. People with latent TB infection (LTBI) don't have any signs or symptoms of the disease and don't feel sick. They are not infectious and cannot spread TB infection to others. However, these people could develop TB disease in the future, especially if they have HIV infection. That's because people with TB infection and HIV infection have a very high risk of developing TB disease. Fortunately, people with LTBI can take medicine to prevent them from developing active, severe TB disease.

When people are clinically ill with TB, they are said to have "active" TB disease. People with active TB disease can spread the illness to others. Medicines which can cure TB are usually given to these people.
For more information, see CDC's Tuberculosis: The Connection Between TB and HIV.

HOW OFTEN SHOULD I BE TESTED?

In general, CDC recommends that all people who are newly diagnosed with HIV infection should be tested for TB as soon as possible. In addition, people living with HIV and at risk for TB exposure should be tested annually to find out if they have LTBI. You should also be retested for TB if you are just beginning antiretroviral therapy for your HIV disease.
For additional TB testing guidelines, see CDC's Guidelines for Prevention and Treatment of Opportunistic Infections in HIV-Infected Adults and Adolescents.

TREATMENT

There are a number of treatment options for people living with HIV who have either LTBI or active TB disease. Treatment consists of long-term (9–12 months) antibiotic therapy for both LTBI and active disease. If you are taking antiretrovirals for your HIV disease, the treatment period may be even longer.

Treatment for TB can be as challenging as treatment for HIV. There are some risks involved, mainly because the treatments can cause liver damage in some people. If you have both HIV and TB, it is important to be closely monitored by a healthcare provider during your treatment to make sure you are not hurt by side effects from taking TB and HIV medicines together.

Also, if you begin antibiotic therapy for TB, it's important to take ALL your medication, on time and in the way your healthcare provider recommends. Like HIV, TB can become resistant to medications quickly if you miss doses of your meds. For more information, see CDC's National Prevention Information Network: TB and HIV Coinfection.

DRUG-RESISTANT TB

Unfortunately, some strains of TB bacteria have stopped responding to medications regularly used to treat TB disease. Drug resistance is more common in people who:

- Do not take their TB medicine regularly
- Do not take all of their TB medicine as directed by their healthcare provider
- Develop active TB disease again, after having taken TB medicine in the past
- Come from areas of the world where drug-resistant TB is common
- Have spent time with someone known to have drug-resistant TB disease

Multidrug-resistant TB (MDR TB) is TB that is resistant to at least two of the best anti-TB drugs—isoniazid and rifampin. MDR TB is extremely difficult to treat and can be fatal.

Although the number of cases in the United States remained steady since 1998, MDR TB has now been reported in nearly all states and the District of Columbia.

Extensively Drug-Resistant Tuberculosis (XDR TB) is resistant to the most powerful first-line and second-line drugs. Patients with XDR TB have fewer, less-effective treatment options and often have worse treatment outcomes.

People living with HIV infection or with AIDS are at greater risk of dying of MDR TB and XDR TB. For more information, see CDC's Fact Sheet: Multidrug-Resistant Tuberculosis (MDR TB), and Fact Sheet: Extensively Drug-Resistant Tuberculosis (XDR TB).

TUBERCULOSIS

22,000 cases reported every year in the U.S.
Caused by a specific bacteria
Affects the lungs but it can also affect:
brain
spine
kidneys
Many people with TB infection are not sick (the body effectively fighting the bacteria) and are not contagious

Those with active TB disease are contagious

5%-10% of people develop the disease at some point
Risk is higher for people with HIV, diabetes mellitus, severe kidney disease, low body weight, or certain types of cancer
Inhaling the TB pathogen after an infected person coughs or sneezes

The TB pathogen can live up to 1½ hours outside the body
Infection detectable 2-12 weeks after infection
Some bacteria lay dormant for years

Symptoms of TB
Many people with TB infection have no symptoms!
With TB disease:
Weight loss
Fever
Night sweats
Weakness

Symptoms of TB
If TB affects the lungs, the common symptoms include:
Coughing
Production of sputum
Chest pain
Coughing up blood

Generally recommended for employees at risk because of being near people who may have TB:
Certain healthcare facilities
Drug treatment facilties
Homeless shelters
Nursing homes
Prison and jails

TUBERCULOSIS
Testing recommended for at-risk employees
Pregnant employees should be tested via TST, not GFT-G
Consider booster effect
Those with other disease or illness more likely to develop TB
Use 2-step testing for those who will take TST periodically
Treatment of TB Depends on:
Age
Overall health
Lifestyle
Occupation
TB disease can be cured with antibiotics

HIV & SEXUAL ADDICTION
Sexual Addiction
Sexual Compulsivity
Sexual Dependency

Sexual Drive Disorder
Sexual Impulse Control Disorder
Male Sex Trade Workers
Female Sex Trade Workers

NO MATTER WHAT YOU CALL IT IT'S A PROBLEM!
HIV & SEXUAL ADDICTION
BIOCHEMISTRY OF SEX ADDICTION

Sexual behavior releases endorphins in the brain that resemble opiates in that they numb pain and produce a feeling of well-being. This endorphin release is compulsively pursued by the sex addict. The reward of this endorphin release is so powerful for the sex addict that he finds himself willing to pursue his activity in spite of the negative consequences he knows he will experience as well.

It also appears that the release of chemicals begins when the addict's ritual begins. That is, when the sex addict starts to fantasize about his behavior, or even brings to mind some of his past behavior, a chemical process is triggered in the brain which entails the release of those pleasurable endorphins. This is the euphoric recall referred to by so many recovering addicts.

Our brains are organized in complex neuropathway systems. In the brain, the reward pathways associated with compulsive sexual behavior look structurally similar to the reward pathways of those addicted to substances. The more each pathway is utilized, the stronger that pathway becomes. When an individual repeatedly participates in any pleasurable behavior, the corresponding pathway in the brain is strengthened.1

For the sex addict, the power of memory is so great and the addiction pathway so well honed, that the physiological obstacles to developing and maintaining sexual sobriety are experienced as overwhelming.

Repetition is the key to developing new pathways in the brain. The recovering sex addict must create new pathways in the brain through the repetition of positive behaviors. This is why physical exercise and meditation are so important in the development and maintenance of sobriety. Both exercise and meditation release endorphins and create a physical sensation of wellbeing which mitigate the physical sensations of withdrawal and provide alternate mechanisms through which the newly recovering addict can experience pleasure.

Mere abstinence from a particular sexual behavior without the development of new behaviors is not maintainable because that alone is experienced as extremely tortuous deprivation. Most assuredly, the recovering addict will not again experience the same intense high experienced through sexual acting-out. That loss must be acknowledged and the addict supported in having his/her grief about that.

Many addicts will be willing to make the changes necessary to maintain a sober life when they experience recovery not as deprivation but as full living which includes a sense of wellbeing undoubtedly deeper, more subtle and less intense than the high of sexual acting-out but without negative, devastating consequences.

Foot Note - Recent studies of the brain have suggested that something is different in the brain of the alcoholic than in the brain of the person who is able to enjoy alcohol but who does not develop a dependency on it. The chemical processes and neurological functioning and structure of the alcoholic's brain are qualitatively and quantitatively different than those of the non-alcoholic. Something similar may be at work in the brains of those who are addicted to sex.

Consequences of Sex Addiction and Compulsivity

Sexual addiction and compulsive sexual thoughts and behavior lead to increasingly serious consequences, both in the mind of the addict and in his or her life. These consequences can include profound depression (sometimes with suicidal thoughts), chronic low self-esteem, shame, self-hatred, hopelessness, despair, helplessness, intense anxiety, loneliness, moral conflict, contradictions between ethical values and behaviors, fear of abandonment, spiritual bankruptcy, distorted thinking, remorse, and self-deceit. Sometimes sex addicts will engage in multiple behaviors with the risk of addiction; for example, combining drinking and drug use or gambling with their sexual behaviors to help ease the pain of their emotional struggles.

Research shows that 70 to 75 percent of sexual addicts report having had suicidal thoughts related to their sexual behavior patterns. Often, sex addicts suffer from broken and distant relationships. Forty percent of sex addicts report severe marital and other relationship problems, and sexual activities outside their primary relationship resulted in severe stress to the relationship and loss of self-esteem for both partners.

The sex addict is frequently absent (physically and/or emotionally), resulting in a lack of parental role modeling. Pressure is placed on the spouse to do ‘‘double duty’’ as partner and primary parent. Spouses of sex addicts can develop their own addictions and compulsions to drugs, food, and spending (for example), in addition to psychosomatic problems, depression, and other emotional difficulties.

Health consequences of sex addiction may include HIV infection, genital herpes, HPV, syphilis, gonorrhea, and other sexually transmitted diseases (STDs). Sex addicts have a highly increased risk of contracting an STD and of passing it along to unknowing spouses or loved ones. Genital injury can result from sexual acting out, addictive sadomasochistic sex can cause physical damage to the body, and automobile accidents can result when the driver’s attention strays from

the road due to sexual texting, downloading porn, or sexually cruising other drivers.

Some sex addicts go to jail, lose their jobs, get sued, or have other financial and legal consequences because of their compulsive sexual behavior. Financial difficulties from the purchase of porn, use of prostitutes, and travel for the purpose of sexual hook-ups and related activities can tax the addict's financial resources and those of his or her family, as do the expenses of legal representation in divorce cases.

Sixty percent of sex addicts report that they have faced financial difficulties, 58% report having engaged in some form of illegal activity, and 83% of sex addicts also had concurrent addictions such as alcoholism, marijuana or other drug abuses, eating disorders, and compulsive gambling. Many sex addicts are also addicted to alcohol and other drugs. When multiple addictions coexist, untreated sex addiction complicates recovery from chemical dependency and makes relapse to drug use more likely.

Serious legal consequences of sexual addiction can result if the sex addict's behavior escalates into sexual offenses such as voyeurism, exhibitionism, or inappropriate touching and/or the use of child porn. Sexual harassment in the workplace can be part of a sex addict's repertoire, and may result in legal difficulties.

Male street workers and internet escorts having sex with men reported high HIV risk.
Research has found that over four of ten seropositive sex workers were unaware of their infection. Men engaging in sex work with other men were more likely to engage in unprotected sex with male and female nonsex work partners. Hence, these men may be an important "bridge" of HIV/STI to nonsex work partners. Journal of Urban Health, 86, 54-66. (2009)

Sexual addiction can be subdivided it into two classifications:
Satyriasis for males
Nymphomania for females

Methodology:
Two groups of sex workers (street
workers, n=19; internet escorts n=13 were
Recruited in the Boston, MA area,
for a three month period.

Outcomes of the Study:
63% white
16% Black/African American
19% Hispanic/Latino

21% Other
Mean age was 28 for internet escorts and
43 for street workers. Street workers had less
education.

Major findings include:
31% HIV infected
69% reported at least one episode of unprotected serodiscordant anal sex (either insertive or receptive) with a mean of 11 male sex partners of unknown or different HIV serostatus in past 12 months.

Substance abuse used during sex:

75% marijuana	53% cocaine
31% crack	22% crystal meth
22% Viagra (nonprescribed)	22% painkillers
19% poppers	16% ecstasy
16% downers	09% GHB
06% ketamine	03% hallucinogens
03% heroin	

33% had a history of depression and 41% reported a history of child sexual abuse.
Inconsistent condom use, unprotected sex, low rates of HIV status disclosure were found for both groups.
Offers of money for unprotected sex were made

25% of both groups had never been tested for STI's.
There was a lack of trust on the part of sex work partners
Internet sex workers reported that they were more likely to engage in sexual risk taking with nonsex workers partners than sex partners who pay.

Sex and the Internet:
Women are now on-line more than men.
50% of the people on-line lie about their age, weight, job, marital status and gender.
20% of the people going on-line will experience clear negative impacts to their life.
Use of the Internet is a contributing factor in nearly 50% of all family, relationship, and family problems.
11% of the people going on-line are becoming compulsive or addicted to porn.

Unique Internet Aspects that might Fuel Addiction:
The Sextruple A Engine – Anonymous – Accessible -
Accelerated – Acceptance – Approximation

Additional Factors that Contribute to Addiction,
Use, Abuse
Disinhibition – Intensity – Stimulating – Hypnotic – One-Stop shopping – Effective and FAST stress and boredom relief – Fantasy replaces reality.

CYBERSEX: The crack cocaine of sex addiction (Carnes)
Types of cybersex activities:

Chatting about sexual fantasies, self-stimulation and masturbation, real time viewing of each other's bodies using web cams, watching live sex shows broadcast online in real time, viewing online pornographic images, pain exchange as part of activity, phone sex with people met through the internet, subscriptions to adult newsgroups, going to meet a person they met online to further the cyber affair, buying sex on the internet, grooming and exploiting victims.

Cycle of Addiction
1. Obsession - The addict loses the ability to concentrate on daily life as his mind becomes saturated on how he or she will obtain relief. The trigger can be anger, shame, pain, anxiety, poor-me obsession with hurts, or a form of pornography."
2. The Hunt - The addictive craving is driven to action.
3. Recruitment - Identify and obtaining a "victim"-pornographic magazines, peep show, enticing unsuspecting person.
4. Gratification - Finding the right kind of pornography, or the right kind of partner, or the right brand of perverse sexual behavior is what fuels the addictive process from one level to the next.
5. Return to "Normal" - Usually the relief/release is only temporary. Relapses are almost certain to occur.
6. Self-Justification - Self-talk such as "No one was hurt, it was really OK, and everyone does it."
7. Blame - Scapegoats someone (parents, society, God, etc.) for the dreadful feelings instead of accepting responsibility
8. Shame - Recognition of the shame of the addiction
9. Despair - Finally, the pain of acting out the addiction is greater than the despair.
10. Resort to other addictions - Healthy or unhealthy
11. Promises - Never to do it again.

SEXUAL ADDICTION
It builds tolerances to ever-growing quantities which produce ever-diminishing returns of relief.
It produces withdrawal symptoms.

It is an obsessive-compulsive response to trauma, loss of control, failure of coping mechanisms, etc.

As the obsession turns to compulsion, the addict finds himself, as in any other addiction, in the act of doing things he doesn't want to do, things he promised never to do again. It is as though he is standing outside himself, pleading with himself not to go on, but acts by the draw of the addiction.

Characteristics of Sexual Addiction
Done in isolation
Secretive
Impersonalizes sex
Detachment
Double Life-A "public" and "private" self
Addict devoid of authentic interaction
May have victims (children and/or adults)
Leaves addict with greater guilt, emptiness, shame and despair.

Levels of HIV & SEXUAL ADDICTION
Level I: The self-deceiving "not that bad" things--fantasy, pornography (magazines, video, cable TV, Internet, etc.), masturbation.
Level II: Satisfying the obsessive craving-live pornography, nude dancing, affairs, fetishes, phone sex, inappropriate "accidentally on purpose" touching.
Level III: Criminal Activities-prostitution, "casual" and "intentional" voyeurism and exhibitionism.
Level IV: Severe Criminal Consequences-child molestation, sexual assault, rape.

FAMILY OF ORIGIN:
1. Come from severely dysfunctional families.
2. 87% have another addiction of some type in the family.
3. Were confused about family roles, rules and boundaries.
4. Experienced abandonment ‘‘events,’’ such as divorce, death or being orphaned.
5. Were discredited or judged as a child by a family member.
6. Experienced a fundamental failure to bond.
7. Come from rigid disengaged families.

VICTIMIZATION:
1. Are victims of some form of abuse:
    - 97% emotionally abused
    - 81% sexually abused
    - 73% physically abused
2. Deny and repress their abuse experiences.
3. Have developed high tolerance for pain.
4. See humiliation, degradation and shame (especially as related to sexual behavior) as normal due to their victimization.

SELF:
Perceive themselves as flawed, bad or evil, often as a conclusion of family messages.
2. 83% have more than one addiction.
3. Have characteristics of Adult Children of Alcoholics.
4. 71% contemplated suicide or faced severe depression.
5. Are super-achievers or underachievers -- live in the extremes.

TRAITS:
Studies reveal that sexual addicts often possess many of the following behavior traits.
1. Use sexual humor.
2. Dress inappropriately.
3. Possess seductively or charm.
4. Have patterns of short-term relationships.
5. Are not accountable for time or money.
6. Moralize or express religiosity.
7. Live on the edge/in the extremes.
8. Are emotionally remote/distant.
9. Are super-achievers or under achievers
10. Are compulsively busy.
11. Have physical problems with sex.
12. Abuse self especially with sex and the dangers involved.

MOOD ALTERATION:
1. Found sex as a solution early in life.
2. Use sexual obsession and fantasy as a primary coping strategy.
3. Use sex as a medication for sleep disorders, anxiety, physical pain, family, and life problems.
4. Use medical language to describe sexual behavior as a pain or tension reliever.
5. Escalate their sexual behavior during most stressful moments of work and family life.
6. 89% experience pain and sadness alternating with sexual highs to the point of emotional exhaustion.

CONSEQUENCES:
1. Recall near death experiences from violence, jeopardy situations, accidents or rape.
2. Recognize AIDS as the most lethal form of complication to their illness.
3. 40% lose a partner or spouse.
4. 70% experience sever marital or relationship problems.
5. 13% lose rights to their children.
6. 8% can no longer be with their family of origin.
7. 58% face severe financial consequences to their addition.

8. 27% report loss of opportunity to work in the career of their choice.
9. Speak of serious losses of job, productivity or position.

EFFORTS TO CONTROL:

1. Use excessive religiosity to control behavior.
2. Move or change jobs to start over.
3. Sought therapy but were ridiculed, disbelieved or sexually abused before finding competent help.
4. 71% experience periods of sexual ‘‘anorexia’’ where all sexual urges and behaviors are tightly controlled.
5. Self-mutilate or otherwise abuse self to prevent further sexual behavior.
6. Make promises to self to quit addictive sexual behavior.
7. Attempt to slow down their sexual behavior.

SEXUALITY:

1. Experience extreme sexual shame, believing they are bad for having sexual feelings.
2. Operate with the rule that ‘‘for sex to be good, it has to be bad,’’ making sinful or illicit activities supercharged.
3. Experienced negative religious messages which intensely reinforced their negative sexual self-image.
4. Have significant distortions, myths and dysfunctional beliefs about sex and are in desperate need of basic sex information.
5. Connect sex with survival, believing sex is their most important need.
6. Tend to sexualize all nurturing and have few or no non-sexual relationships.
7. Experience some degree of gender hatred, either for the same or opposite sex.
8. Never experienced themselves sexually as a whole person despite incredible amounts of sexual behavior.

CURRENT RELATIONSHIPS:

1. Have stormy and unsuccessful long-term relationships.
2. Have patterns of short-term relationships, both personal and professional.
3. Leave interpersonal transactions unfinished and relationships upended.
4. Search for people who will take care of their neediness and to be vulnerable and dependent on them.
5. Are unaccountable for money or time in any relationships.
6. Are emotionally absent, especially at critical times, due to shame surrounding their double life.
7. Have little or no history of successful intimacy.
8. Have characteristics of a co-dependent personality disorder.

OUT OF CONTROL BEHAVIOR:

1. Identify immediately with the term ‘‘sexual addiction.’’

2. Go through a painful process to acknowledge their behavior.
3. Spend extreme amounts of time obtaining sex, being sexual, or recovering from sexual experiences.
4. Exceed their intent in the amount, type, extent and duration of sexual behavior.
5. Experience escalating patterns of sexual behavior when level of activity no longer sufficient.
6. Sacrifice important social, occupation and recreational activities because of sexual behavior.
7. Pursue sexual behavior despite obvious risk and danger.
8. Pursue their behaviors repetitively to the point of physical injury (38%) or exhaustion (59%).
9. Lead a secret or double life.
10. 65% run the risk of venereal infections, HIV, and AIDS because of no precautions.
11. 85% have engaged in activities for which they could have been arrested.
12. 29% is the average for arrest.

Sexual addicts jeopardize their marriage and family relationships, allow their job performance to deteriorate, and endanger themselves and their partner through multiple sexual exposures. Even though they realize the consequences, they cannot control their compulsions without appropriate treatment.

- It is estimated that 3% to 6% of Americans have sexual addiction.
- Through their addiction, they may injure themselves physically, experience psychological distress, lose their livelihood, and ruin meaningful relationships.
- Sexual addiction often coexists with chemical dependency, and untreated sexual addiction contributes to relapse to alcohol and drug abuse.
- The concept of sexual addiction was introduced less than 20 years ago.

Criteria for addictive disorder

1. Frequent engaging in the behavior to a greater extent or over a longer period than intended. Example: sexual chat rooms.
2. Persistent desire for the behavior or one of more unsuccessful efforts to reduce or control the behavior.
3. Much time spent in activities necessary for the behavior, engaging in the behavior, or recovering from its effects.
4. Frequent preoccupation with the behavior or preparatory activities.
5. Frequent engaging in the behavior when expected to fulfill occupational, academic, domestic, or social obligations.
6. Giving up or limiting important social, occupational, or recreational activities because of the behavior.

Adapted from American Psychiatric Association:
1. At least three criteria must be met for diagnosis, and some symptoms of the disturbance must have persisted for at least 1 month or have occurred repeatedly over a longer period.
2. Adapted from Goodman:
The great majority of sex addicts (82% of almost 900 addicts in Carnes' survey had been sexually abused in childhood. Among the male addicts, 3% were forced to have sex by their fathers and 11% by their mothers.
3. Other's (41%) were abused by neighbors, business associates of their parents, or strangers, while 8% were molested by other adults in authority.

In some families, there was no overt incest, but a heightened sense of sexuality was present. Sexually explicit materials may have been available, or sexual comments were made repeatedly. Privacy in the bathroom or bedroom may have been lacking.

More than half of sex addicts surveyed came from rigid, emotionally disengaged family. In such families discussion of sex may be taboo or sex may be considered disgusting. As a result, children grow up lacking accurate information about sex and believing that sex is powerful and dangerous.

Multiple Addictions:
HIV & sexual addiction often coexists with chemical dependency and is frequently an unrecognized cause of relapse.
One study about 70% of cocaine addicts were found to be addicted to sex as well.
Many patients had become trapped in a "reciprocal-relapse" patten in which compulsive sexual behavior precipitates relapse to cocaine use and vice versa.

- In an anonymous written survey of 75 recovering sex addicts, 29% were also recovering from chemical dependence.
- 38% were workaholics
- 32% had an eating disorder
- 13% characterized themselves as compulsive spenders
- 5% were compulsive gamblers.
- 17% believed they had no other addictions.

HIV & Sexual Addiction - MALE
Men that have Sex with Men (MSM) do not always identify as being bisexual or homosexual.

- It's **gratification** -NOT **orientation!**
- Male-to-Male Rape is not about gratification or sexual orientation…it's all about one thing "POWER over the victim."

90% to 95% of men arresting in Public Sex Environments (PSE) are married, college educated, professionals between appointments.

1. Homelessness, alcohol, drug, HIV & SEXUAL ADDICTION is the main reason behind male to male prostitution putting these men and their partners at very high risk of HIV and STI's.
2. Male hustlers/prostitutes usually have a history of criminal incarceration, earlier alcohol/drug use, and approximately 95% have been sexually abused by a trusted male friend or a trusted male family member.
3. 77% (white) - 88% (AA) women infected with HIV in 2009 were infected by heterosexual contact.

DENILE
I'm married, I have kids! I can't be gay!
It's not with a woman so I'm not cheating!
It's not my lifestyle!
I only do this once in awhile.
What she doesn't know won't hurt her.
The need for cash.
Free alcohol or drugs.
The excitement of the chase and/or contact.
The need for sexual conquest.
The risk of not getting caught.
The rush of breaking the law.
Just getting off!

Many men that have same sex encounters and never understand that they are risking themselves, their wives, children, career, finances, future, their health, and most important, their LIFE!

Most male hustlers and female prostitute's work in Public Sex Environments (PSE) are busiest during long periods of bad weather.
Rain, snow, cold or hot, they're out there.

Some men are curious about specific sexual activities.
Activities that their female partner will not participate in or can not provide.
Activities they are too embarrassed to ask their partner to participate in.
Counselor's and outreach worker's need to look more at the mans risk behavior than trying to analyze the mans orientation.

SEXUAL ADDICTION - WOMEN
Same goes for working with the female population in understanding sexual addiction versus prostitution.
It is not a majority concept that women can suffer from sexual addiction.
Women find it more difficult to find recovery from sexual addiction due to the misconception that it is a male problem.
Stating that you're a recovering sex addict means experiencing enormous amounts of shame and very little understanding.
Women that suffer from sexual addiction, such as prostitution, usually are

victims of childhood sexual abuse.
They may experience the same chemical dependency that men experience leading to sexual addiction:

1. HIV/STI infections
2. Passing infections to wife, husband, partner(s), or an unborn child.
3. Arrest, loss of family, job, career, finances, freedom.
4. Loss of their life due to HIV/AIDS, domestic violence, or murder.

Dan Newman, PhD, DD, RRS, APS
Holistic Health Consultant and Senior Health Educator
4015 Cherry Street Suite #34
Cincinnati, OH 45223

www.ceucert.com (513) 542-1900 dan@ceucert.com