



IU Employee Assistance Program

# The Path from Substance Use to Addiction

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*The Program Director of the Chronic Pain and Chemical Dependence Programs at Indiana University Health Methodist Hospital. Jim decided almost immediately that his experience from the pain of over 50 surgeries might have value, so he left music to pursue his education. In this session, Jim shares his long term knowledge and expertise in the addiction field and how it impacts our workplaces. In the more recent past he had served Attorney General Greg Zoeller as an advisor for the AG's Prescription Drug Task Force. He is active with the DEA helping to reduce pill mills in the state of Indiana. His pain rehabilitation program focuses on helping his patient population learn to manage pain without mood altering medications, with a focus on the 12 steps. He has spoken nationally about the perils of addiction and chronic pain both clinically and as an entertainer, with a focus on recovery as a lifestyle.*



# Overview

- 1. Scope and Impact of Substance use**
- 2. Drugs of Abuse**
- 3. Behavioral Signs and Symptoms**
- 4. When to Talk to Someone**
- 5. How to Contact IU EAP**



# **Scope & Impact of Substance Abuse**

# Substance use impacts:

- Judgment
- Health and wellness
- Productivity
- Decision making
- Safety
- Image and relationships



# Substance use to addiction:

- Experimental and Misuse
- Prescription drug abuse
- Illicit drug use
- Binge use
- Tolerance
- Withdrawal

Note: Substances can be abused without addiction developing, but chronic use and abuse often develops into addiction



# What is the scope of addiction?

- Over 22 million Americans suffer from the disease of addiction
- Only 1 in 10 receive treatment
- Abuse of tobacco, alcohol, and drugs cost over \$600 billion related to crime, lost work productivity and healthcare
- Substance dependence is our most serious health issue. It exists in rich/poor, all regions, all ethnic and social groups
- 23.5 million Americans live in recovery



# Why be concerned?

- 1 in 13 adults abuse alcohol
- Several million adults engage in risky alcohol behaviors
- Approximately 535 report a close relative with a “drinking problem”
- Highest rate of non medical use of prescriptions drugs at works is 18 to 25 years of age
- Binge drinking is rampant on college campuses





# Disease of Addiction

- DNA and Links are unique to each person
- Addiction can be in your family (genetics)
- Similar to diabetes, addiction is a chronic disease according to the American Medical Association



# The brain develops slowly

At one time it was thought the brain was completely developed during childhood

- Research shows the brain is not fully developed until mid to late 20's
- Many employees are in this age range
- Addiction is a brain disease
  - Genetics, family history and environment all play a role



# Can addiction be prevented by delaying onset of use?

- Every year that the use of a substance is delayed, the risk of developing a substance use disorder is reduced.
- Scientific study of brain development can help us understand adolescent behavior.
  - Risk-taking and poor judgment
  - Vulnerability to drug abuse
- Relevance to parenting, prevention and treatment



# Other issues related to substance use...

- Co-morbidity
  - Brain damage
  - Hypertension
  - Liver and kidney functions
- Co-occurring
  - Depression
  - Anxiety
  - Grief and loss
  - Bi-polar
  - Personality issues



# How many people seek help?

The Substance Abuse and Mental Health Administration estimates that only 1 of 10 people needing alcohol and drug treatment receive the services they need due to:

- Denial
- Hopelessness
- Shame and guilt
- Lack of knowledge





# Drugs of Abuse

# Drugs of abuse

- Alcohol
- Marijuana
- Pain meds, Opioids and Heroin
- Methamphetamines
- Hallucinogens
- Sedatives
- Synthetics
- Inhalants
- Tobacco, Vape and JUULing
- Over the counter drugs



# Alcohol: What is a standard drink?

12 fl oz of  
regular beer

=

8–9 fl oz of  
malt liquor  
(shown in a  
12 oz glass)

=

5 fl oz of  
table wine

=

1.5 fl oz shot of  
80-proof spirits  
("hard liquor"—  
whiskey, gin, rum,  
vodka, tequila, etc.)



about 5%  
alcohol



about 7%  
alcohol



about 12%  
alcohol



about 40%  
alcohol

The percent of "pure" alcohol, expressed here as alcohol by volume (alc/vol), varies by beverage.





# Alcohol use: Heavy drinking

Defined differently for men and women by the Centers for Disease Control and Prevention

- For adult men, it is defined as having more than **four** drinks per day
- For adult women, having more than **three** drinks per day



# Marijuana

(also called pot, dope, weed, herb, grass, hash, joint, blunt, etc....)

According to the 2016 National Survey on Drug Use and Health (NSDUH), an estimated 8.8% (95% Confidence Interval) of Indiana residents ages 12 and older reported current (past-month) marijuana use



# Short term impacts of use

Use of marijuana can result in adverse physical, mental, emotional, and behavioral changes

Short-term effects:

- memory impairment
- learning problems
- distorted perception
- difficulty thinking and solving problems
- loss of coordination
- increased heart rate



# Long term use of Marijuana

- Long-term use has been linked to respiratory illnesses
- increased risk of heart attack and cancer prolonged marijuana use can lead to mental health problems
- depression, anxiety,
- suicidal thoughts,
- personality disturbances



# Marijuana

Look for:

- Altered perceptions, red eyes, dry mouth, sweet burnt odor, neglect of self, loss of motivation, slowed reactions, memory lapses, euphoria, laughing, hunger
- Rolling papers, pipes, dried plants, roach clips, baggies, incense
- Anxiety, memory and learning impairment, slowed thinking
- Heightened sense of visual, auditory and taste perceptions
- Poor memory, increased blood pressure, red eyes, decreased coordination, difficulty concentrating, increased appetite, slow reactions, paranoid thinking



# Prescription Drugs

- Prescription drugs are painkillers which are Vicodin, Oxycodone, OxyContin, hydromorphone, codeine, fentanyl, Lortabs etc.
- In 2015, Indiana providers wrote 109.1 opioid prescriptions per 100 persons (approximately 5.8 million prescriptions) according The National Institute of Drug Abuse (NIDA)
- New prescribing laws limit the number of pills that can be dispensed per prescription and this has decreased the number of pills in circulation overall
- Now we see increased first opioid use and addiction to Heroin



# Heroin

- An illegal, highly addictive drug processed from morphine
- Extracted from the seed pod of certain varieties of poppy plants.
- Typically sold as a white or brownish powder that is "cut" with sugars, starch, powdered milk, or quinine.
- Pure heroin is a white powder with a bitter taste that predominantly originates in South America and, to a lesser extent, from Southeast Asia, and dominates U.S. markets east of the Mississippi River



# Opioids

In 2016, there were 794 opioid-related overdose deaths in Indiana—a rate of 12.6 deaths per 100,000 persons compared to the national rate of 13.3 deaths per 100,000 persons. A large increase in heroin-related overdose deaths occurred from 2012 to 2016—from 114 to 297 deaths.





# Opioids and Heroin

Look for:

- Euphoria, drowsiness, insensitivity to pain, nausea, vomiting, watery eyes, runny nose, lethargy
- Needle marks, needles, syringes, spoons, pipes, pinpoint pupils, cold moist skin
- Dangers: lethargy, weight loss, AIDS, hepatitis, accidental overdose



# Methamphetamines

(also known as meth, crystal, chalk, and ice)

- An extremely addictive stimulant drug that is chemically similar to **amphetamine**.
- It takes the form of a white, odorless, bitter-tasting crystalline powder



# Cocaine or Amphetamines

(also known as speed, uppers, meth, coke, rock, crack, crank, crystal, ecstasy)

Look for:

- Dilated pupils, restlessness, HBP, high heart rate, brief euphoria, talkativeness, high and then low, loss of appetite, weight loss, nervousness, mood swings
- Glass vials, razor blades, straws, glass pipes, white powders, syringes, needle marks, pseudoephedrine packages
- Dangers: severe depressions, paranoia, heart attacks, seizures, lung damage



# Hallucinogens

(also known as LSD, PCP, acid, mushrooms)

Look for:

- Altered mood, anxiety, panic, nausea, slurred speech, blurred vision, and lack of coordination
- Capsules, tablets, micro dots, dried mushrooms, dilated pupils, hallucinations, disorientation, mood swings, nausea
- Dangers for: unpredictable behavior, emotional instability, violent behavior



# Sedatives

(also known as Valium, Xanax, Ativan)

Look for:

- Depressed breathing and heartbeat, intoxication, drowsiness, uncoordinated movements
- Capsules, tablets, long periods of sleep, pill bottles, both marked and unmarked, other names
- Dangers: muscle rigidity, withdrawal, overdose



# Steroids

Look for:

- Strength and endurance, increase in muscle mass
- Needle marks, syringes, bubble packs
- Dangers: hormonal changes in both men and women, sexual dysfunction and decreased sperm counts in men, skin break outs, strokes, heart attacks, liver disease, depression and aggression



# Synthetic “drugs”

## K2

- “Synthetic marijuana”
- Perceived as natural, not dangerous
- Psychoactive (mind-altering) effects: hallucinogenic
- Not for human consumption
- Sold as incense products to mask intended use to get high

## Bath Salts

- Not common bathing salts rather very dangerous and deadly
- Hallucinatory effects often reported are consistent with other drugs such as acid or LSD
- Causes agitation, paranoia, hallucinations, chest pain and suicidality, high blood pressure



# Inhalants

(also known as gas, aerosols, glue, nitrates, correction fluids, computer cleaners, paint)

Look for:

- Nausea, dizziness, headaches, poor coordination, bad breath, high voice, impaired vision, violent behavior, memory and thought problems
- Cleaning rags, empty spray cans like whipped cream, glue, baggies, sacks, soaked socks
- Dangers: unconsciousness, suffocation, nausea, vomiting, damage to the brain, central nervous system damage and sudden death





# What is an inhalant?

- Glue
- Computer cleaner
- Markers
- Hair spray/aerosol
- Gasoline/Butane/Propane
- Freon/Helium
- Nitrous Oxide



# Resources

- IU Employee Assistance Program
  - Free confidential counseling services for full-time IU employees and household members.
    - Call 888-234-8327 for more information.
- Work + Life Substance & Alcohol Use Treatment Resource Webpage
  - <http://go.iu.edu/2aO4>



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