

SUPPORT Act Grant 101:17 Alcohol & Cannabis

PAUL BRASLER, M.A., M.S.W.

LICENSED CLINICAL SOCIAL WORKER



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Disclaimer

The information contained in this material can change as we learn more about the brain and the ways it is impacted by the environment, trauma, medications, substances of misuse, and other things

Always follow the guidelines of your agency, ethical and legal standards of your certifying Board, evidence-based practice methods; local, state and Federal laws as well as your judgement and commonsense when working with clients

Questions?

If you have any questions, please do not hesitate to
contact me

paul.brasler@dmas.Virginia.gov

SUPPORT Act Courses

1: ~~Tele Behavioral Health in the Time of COVID-19~~ (No longer available—Incorporated into all courses!)

2: Client Engagement

3: Suicide

4: Crisis & De-Escalation

5: Withdrawal Syndromes & Withdrawal Management

6: Trauma-Informed Care

7: Overview of SUD

8: Opioids & Stimulants

9: SUD Treatment Basics

10: Screening & Assessment

11: Co-Occurring Disorders

12: Individual Therapy Skills

13: Group Therapy Skills

14: Addressing SUD Bias & Building Provider Empathy

15: SUD & Cultural Humility

16: SUD Treatment & the Family

17: Alcohol & Cannabis

18: SUD & Legal System-Involved Clients

19: SUD & LGBTQ+ Communities

20: “Novel” Substances of Use

Program Content

- I. Neurobiology of Addiction Basics
- II. Alcohol and Benzodiazepines
- III. Cannabis
- IV. Tele-Behavioral Health Basics



Basic Neurobiology of Addiction

The 3 Laws of Psychopharmacology

(Grisel, 2019, p. 30)

The definition of an addictive drug is one that stimulates the mesolimbic pathway, but there are three general axioms in psychopharmacology that also apply to all drugs:

1. All drugs act by changing the rate of what is already going on
2. All drugs have side effects
3. The brain adapts to all drugs that effect it by counteracting the drug's effects

“The brain’s response to a drug is always to facilitate the opposite state; therefore, the only way for any regular user to feel normal is to take the drug.” (p. 32)

How Do Drugs Get to the Brain?

Pharmacodynamics: A drug's effect on the body

Pharmacokinetics: The body's effect on a drug; how a drug is absorbed, distributed, metabolized, eliminated and excreted by the body; all of which are influenced by:

Route of administration

Speed of transit to the brain

Rates of metabolism

Process of elimination

Affinity for nerve cells and neurotransmitters

Pharmacodynamics & pharmacokinetics co-occur

The more rapidly a drug reaches its target in the brain, the greater the reinforcing potential

Substance Use Disorder (APA, 2013)

Many plants and chemicals have properties that create an affinity for neuro-receptors, typically mimicking existing neuro-transmitters. Depending on the individual, their environment, and the chemical in question, this process can create a response called Substance Use Disorder (or addiction)

SUD Symptoms:

Taken in larger amounts and longer than desired

A lot of time is used to obtain, use and recover from the drug's effects

Unsuccessful attempts to stop

Failing to fulfill major responsibilities

Continued use despite many problems in nearly all areas of life

Continued use in dangerous situations

Continued use despite medical and mental health problems that the client admits are due to drug use

Cravings

Tolerance

Withdrawal symptoms

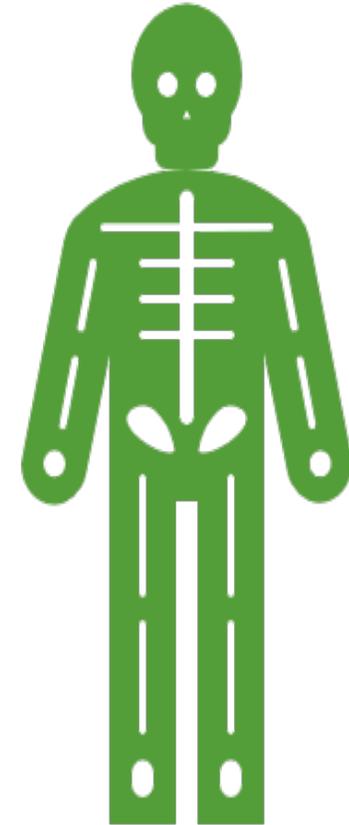
Substance Intoxication & Withdrawal Syndromes

While substance dependence/addiction is a chronic condition, **substance intoxication syndromes** and **substance withdrawal syndromes** have their own symptom sets, and in some cases, require immediate attention

Substance Intoxication

“Intoxication refers to the immediate effects of the drug and occurs during consumption of a drug in a large enough dose to produce significant behavioral, physiological or cognitive impairments. It is these intoxicating effects that drive initial use. When drugs are consumed, a cascade or short- and long-term effects follows. Although some of the effects of intoxication are pleasant and desired, other effects can be aversive” (Filbey, 2019, p. 64)

Some forms of intoxication require immediate medical treatment



Substance Withdrawal



“Withdrawal is a negative state that occurs following cessation from use of a drug that has caused physical dependence. In other words, withdrawal most often occurs in those who have used a drug on a regular basis rather than occasionally” (Filbey, 2019, p. 81)

Some forms of substance withdrawal (specifically alcohol, and other central nervous system depressants) may require immediate and ongoing medical attention to prevent further illness or death



Alcohol & Benzodiazepines

Depressant Intoxication

Symptoms

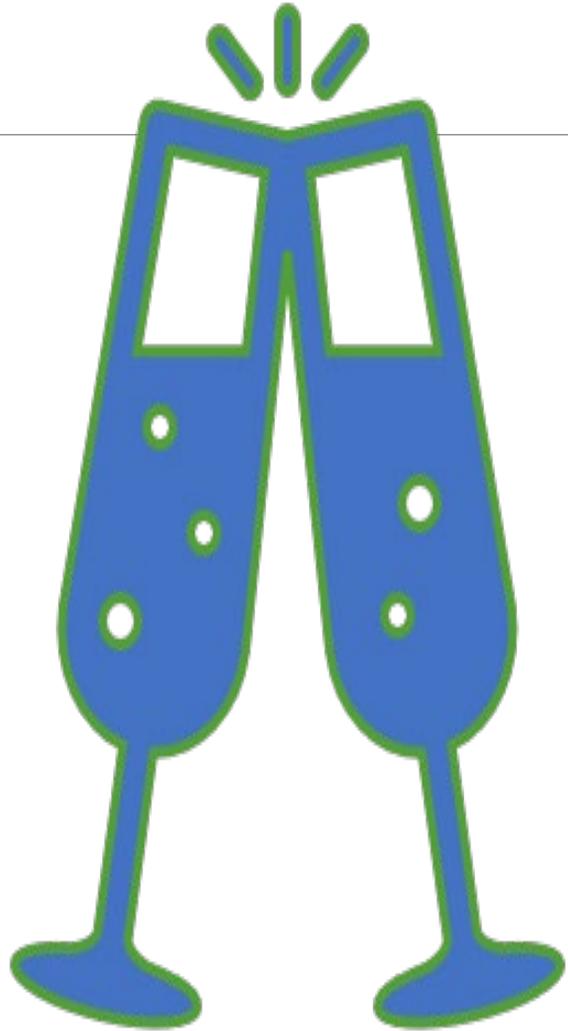
ALCOHOL

Lowered inhibitions
Mild euphoria
Depression, sedation and relaxation
Memory loss
Drowsiness, sleep induction
Reduced coordination and speech
Decreased respiration

BENZODIAZEPINES

Lowered inhibitions
Mild euphoria
Used to treat anxiety disorders
Depression, sedation and relaxation
Memory loss
Drowsiness, sleep induction
Reduced coordination and speech
Also used to help detoxify people from alcohol and to control seizures

Alcohol Equivalency



12 oz. of Beer (4.5% ALC)
=
10 oz. of Wine Cooler (6% ALC)
=
7 oz. of Malt Liquor (9% ALC)
=
5 oz. of Table Wine (12% ALC)
=
1.5 oz. of 80-Proof Liquor (40% ALC)

Alcohol Use Today

Over 16 million Americans meet the diagnosis of alcohol use disorder

25 – 30% of all U.S. hospital admissions are due to current or past alcohol use disorder

The lifespan of a chronic, heavy drinker is shortened by 15 years

Ethyl alcohol (ETOH) is the main ingredient

20% of drinkers consume 80% of all ETOH

Alcohol vaporization is becoming increasingly popular

The use of enemas to introduce alcohol rectally has also been reported

Alcohol Use Disorder

“Alcohol is a hard drug. Whatever criterion is used to define this. Its ratio of effective to fatal dose is low, it is highly addictive, and it causes serious physical and psychological harm when used frequently or long term in high doses.” (Trott, 2019, p. 156)



Alcohol Metabolism

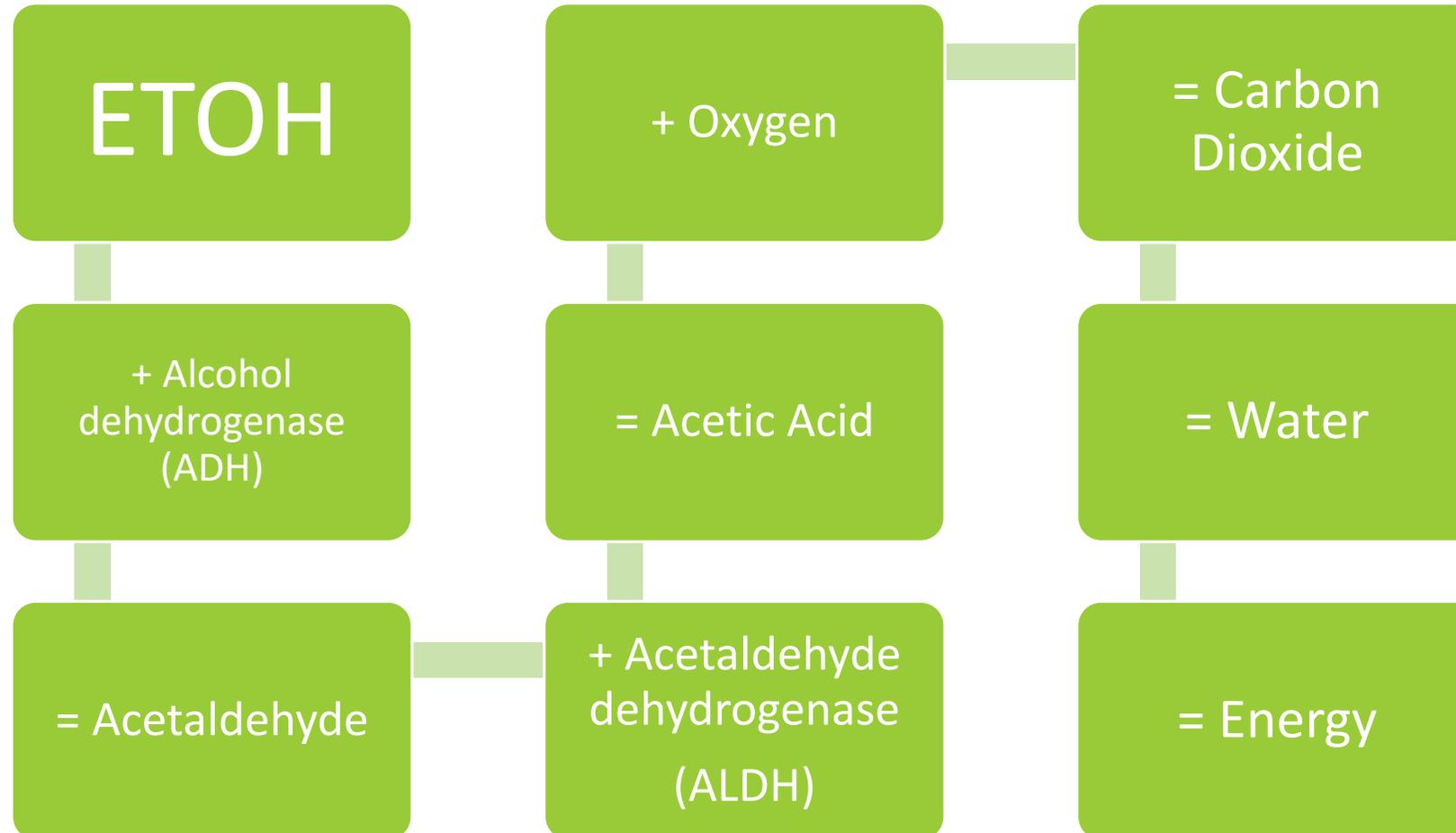
Alcohol is absorbed into the blood stream through the stomach and small intestine

Alcohol is partially metabolized in the liver (first pass) before passing into the blood stream

About 80 – 90% of ETOH is metabolized and the rest is excreted in breath, urine or sweat

Alcohol is more easily metabolized by the liver compared to other substances (e.g., Benzodiazepines), therefore if a person uses another drug in addition to ETOH, the liver will first break down the ETOH while passing the other drug into the blood stream with minimal or no change

Alcohol Metabolism



Alcohol Metabolism

Women have less of the ADH enzyme than men and therefore tend to metabolize ETOH slower

Many people of Asian descent have a genetic profile that limits the speed at which they metabolize ETOH

Metabolization occurs at a continuous rate; about one drink is eliminated from the body every three hours

A blood alcohol level (BAC) of 0.08 is considered legally intoxicated

Benzodiazepines

Prescribed for: Anxiety, seizures, sedation, and as a muscle relaxant

Examples:

- Xanax[®] (alprazolam)
- Valium[®] (diazepam)
- Ativan[®] (lorazepam)
- Klonopin[®] (clonazepam)
- Librium[®] (chlordiazepoxide)
- Restoril[®] (temazepam)



Benzodiazepines

Quick-acting benzodiazepines are used to address panic attacks or anxiety reactions

Certain benzodiazepines (often called “Z-hypnotics:” Zaleplon, Zolpidem and EsZopiclone) are structurally different from other benzos, and are mainly sedative without any muscle-relaxing effects, so these are mostly used to treat insomnia

Benzodiazepines are sometimes used in conjunction with anti-depressants to treat depression

Benzodiazepines are often used to help detoxify people off alcohol

Also used to treat Neuroleptic Malignant Syndrome

Alcohol/Depressant Withdrawal Symptoms

Nausea/vomiting

Cravings

Malaise & weakness

Tachycardia

Delirium, including
hallucinations

Anxiety rebound and agitation

Sweating

Irritability

Orthostatic Hypotension

Tremors

Insomnia

Seizures possible

Depersonalization

High fever

Depression

Withdrawal Management: Alcohol (CIWA-AR)

Measures signs (objective findings) and symptoms (subjective reports) to determine the number and intensity of withdrawal symptoms and the need for medication (diazepam or lorazepam) to address symptoms **OR** the need to transfer the patient to an Intensive Care Unit

CIWA is used in inpatient and outpatient settings

Medication can be administered on a schedule or as a PRN

Signs: Pulse, Resting Heart Rate, O2 Saturation & Blood Pressure

Symptoms cover 10 areas and are scored on an 8-point scale (except for “Orientation and clouding of sensorium” which is a 4-point scale); with higher numbers describing severe symptoms and 0 meaning no symptoms

CIWA-AR Symptoms

Nausea/Vomiting

Anxiety

Paroxysmal Sweats

Tactile Disturbances

- “Have you experienced any itching, pins & needles sensation, burning or numbness, or a feeling of bugs crawling on or under your skin?”

Visual Disturbances

- “Does the light appear to be too bright? Is its color different than normal? Does it hurt your eyes? Are you seeing anything that disturbs you or that you know isn’t there?”

Tremors

- Have patient extend arms and spread fingers

Agitation

Orientation

- “What day is this? Where are you? Who am I?”

Auditory Disturbances

- “Are you more aware of sounds around you? Are they harsh? Do they startle you? Do you hear anything that disturbs you or that you know isn’t there?”

Headache

- “Does your head feel different than usual? Does it feel like there is a band around your head?”

Alcohol Withdrawal Course

Begins within 4 – 24 hours after the last drink

In mild forms of withdrawal, the symptoms resolve after 48 hours

Tremulousness is the earliest symptom and many people with AUD know that this indicates a need to drink again to avoid more pronounced symptoms

- This appears within hours after drinking stops and peaks in 1 – 2 days but can persist for weeks

In more severe forms, visual hallucinations can occur within 24 hours of cessation—to the patient these are real

Alcohol Withdrawal Course

Between 6 – 48 hours after stopping ETOH use, 3 – 4% of untreated patients will have a seizure

30 – 40% of patients who have a seizure will progress into Delirium-Tremens if they are left untreated

Delirium-Tremens are fatal in up to 25% of people who are not treated

D-Ts can precede or follow a seizure

Repeated withdrawal episodes seem to “kindle” more serious withdrawal episodes



Cannabinoids

Cannabis Intoxication Symptoms

Euphoria, followed by relaxation

Laughing; giddiness

Dilated pupils

Problems tracking with eyes

Slowed thinking

Deep relaxation

Dry mouth

Bloodshot eyes

Paranoia in some cases

Possible hallucinations in high doses or in susceptible individuals

Increased heart rate

Impaired memory, judgment and learning

Increased appetite

Decreased anxiety

Hyperemesis (“Cyclical Vomiting Syndrome”) in some individuals

Cannabis (Marijuana)

The most-abused illegal drug in the world

Ten times the number of marijuana users than cocaine or heroin users

Cannabis contains at least 489 chemicals, at 100 of which are Cannabinoids; **Tetrahydrocannabinol (THC) is the primary psychoactive ingredient**

Can be smoked or eaten (when eaten, less THC gets into the body, so more marijuana needs to be consumed, but the effects are stronger and longer since the cannabis is metabolized by the liver into other, more potent, chemicals)

The brain contains receptor sites for Cannabinoids that help regulate mood, appetite, sleep, and many other functions

Cannabis (Marijuana)

Two primary types of cannabis:

Cannabis sativa (grows in tropical/semitropical regions [or indoors]); tall plants that tend to have more THC content

- Primary psychoactive ingredient in cannabis is delta-9-tetrahydrocannabinol [THC]

Cannabis indica (grows in more temperate climates); smaller, bushy plants that tend to have less THC and more CBD

- Cannabidiol [CBD] is not psychoactive and tends to be more relaxing
- Research has demonstrated a number of medical uses for this chemical

THC Concentrates

Hash oil, “Dab,” “Amber,” “Shatter,” “Shattered glass”

Cannabinoids are extracted from plant material using solvents (ex. the plants are boiled in alcohol) or pressurized butane

This produces a concentrated viscous liquid (which can be dried into a solid form and smoked) or is mixed with marijuana or tobacco and smoked

Typically used in the Middle East, now seeing Butane Hash Oil (BHO) being used in the U.S.

THC content can be from 20 – 90%

CANNABIS WITHDRAWAL SYMPTOMS

This is a longer process than stimulants or opioids (and quitting at first usually feels easy to the chronic user)

Most heavy users may not experience all the following when withdrawing, but symptoms can include:

- Restlessness, hyperactivity, sweating, tremors
- Irritability, **anxiety**, anger
- Stomach pain, nausea, loss of appetite
- **Insomnia**, cravings
- Inability to concentrate, **depression**

Cannabis & Psychosis

Some evidence suggests that cannabis is associated with increased risk of psychosis when it is used frequently, particularly when use starts in adolescence (Lynch et al, 2012)

THC also seems to negatively impact the treatment of schizophrenia; whereas CBD may be helpful in treating it

Whether the use of cannabis is a cause of schizophrenia, or its use exacerbates psychosis in those who are otherwise pre-dispositioned is still under study

- Given that cannabis use has dramatically increased over the past 50 years, we should see a corresponding increase in schizophrenia, **but we do not**; this continues to be monitored

Current trends are leaning toward the hypothesis that cannabis does not cause psychosis, but may trigger psychosis in people already pre-dispositioned toward a psychotic disorder

Cannabinimimetics (“Synthetic Cannabis”)

“Spice”/“K2”/JWH-018 (1-pentyl-3-(1-naphthoyl)indole)—and other JWH series

Synthetic chemicals that mimic delta-9-tetrahydrocannabinol (THC) but bind more readily (full agonist) to endocannabinoid receptors (specifically CB-1), creating a stronger response

Typically dissolved and applied to inert plant material, which is dried and then crushed and smoked

Sold as incense or potpourri at “Head Shops” and even convenience stores (now illegal in most localities)

Typically does not show up as + for THC on drug screens

Tends to create sensations like marijuana, but can create more anxiety, aggression, elevated heart rates, vomiting, psychosis, paranoia, seizures, and excited delirium; all of which are uncommon with marijuana

Tele-Behavioral Health Basics

Tele-Behavioral Health

We first need to admit that most of us do not enjoy “connecting” with clients this way; “I didn’t go to school for this!”

We also need to acknowledge that not all clients have access to technology to participate in tele-behavioral health and so we have to improvise

Therefore practitioners and clients are using phones, Skype and FaceTime to conduct sessions; and getting creative in other ways

Clinicians do not have to use HIPAA-compliant video conferencing technology during the current National Emergency; Health & Human Services will waive any penalties for HIPAA violations related to the platform used during this emergency

Tele-Behavioral Health: Clinician

Have a space set up where you can connect with your client without being disturbed

Your work-space should provide some privacy for your client

Internet connectivity and/or phone signal strength should be tested prior to engaging in tele-behavioral health

If conducting a group therapy session, educate clients on muting themselves unless they are speaking

I recommend against using your personal phone, but sometimes this cannot be avoided

- If using a personal device, I would set firm boundaries with clients regarding when they can and cannot contact you

Tele- Behavioral Health: Clinician

You'll likely notice that the flow of clinical sessions will be slower than in-person

Be aware that you will likely need to speak slower than in person

Try to express empathy with your voice, especially when not connecting via video

Tele-Behavioral Health: Client

Try to have a private space where you can connect with your counselor that is also free from interruptions and distractions

Test out your communications system (connectivity) prior to meeting with your counselor

Most of us (counselors especially) don't like meeting this way, so remember this is temporary and we (like you) look forward to meeting face-to-face again

Informed Consent to Tele-Behavioral Health Treatment—Essential Elements

A statement explaining what tele-behavioral health will look like for you and the client (methods to be utilized: FaceTime, phone, etc.)

A statement discussing the risks of tele-behavioral health (technology limitations and failures; possible/unintentional breaches of confidentiality)

A statement agreeing that the sessions will not be recorded by either party

A statement emphasizing that the content of the session is confidential and that a written release is required from the client to release information

A statement noting the limits of confidentiality, including having to report suspected child abuse, vulnerable adult abuse, danger to self or others

Informed Consent to Tele-Behavioral Health Treatment—Essential Elements

A statement explaining what steps must be taken should the clinician believe that the client is a danger to themselves, a danger to others or is unable to care for themselves

- This could include a statement that participation in tele-behavioral health may not be appropriate and a higher level of care could be required

A statement describing how you will handle technical problems should they arise

A statement explaining that the client must disclose their physical location during the session and an individual the clinician can contact in case of an emergency

A statement that you are continuing to maintain treatment records during this time

Documentation

If you don't write it down, it never happened

Record, in detail, all aspects of client interactions, including any known precipitating events, interventions, outcomes, staff members involved and all contacts with outside agencies

Record where the client says they are contacting you from

Do this as quickly as possible following the session

Stick to the facts; do not presuppose or assume anything

See documentation as a necessary means to protect yourself, the people you serve, and your organization

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