

Lung Mind Alliance

*A commercial tobacco-free future for Minnesotans with
mental illness or substance use disorders*

Who We Are

The Lung Mind Alliance is a statewide coalition with the goal of **reducing disparities related to the impact of commercial tobacco* on people with mental illness and/or substance use disorders.**

The Lung Mind Alliance is led by the American Lung Association in Minnesota and includes partners from mental health, substance use treatment, and public health organizations, as well as the Minnesota Department of Health and the Department of Human Services.

*The Lung Mind Alliance is funded by BCBS Center for Prevention and the Minnesota Department of Health.

Sacred / Traditional Tobacco



Tobacco in this presentation refers specifically to the use of manufactured, commercial tobacco products, and not to the sacred, medicinal and traditional use of tobacco by American Indians and other groups.



LOST IN A FOG:

THE NEW TRIANGULUM OF MARIJUANA, TOBACCO AND VAPING

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Nicotine Dependence Center
Mayo Clinic, Rochester, MN
March 27th, 2024

DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIP(S) WITH INDUSTRY

- Nothing to disclose

REFERENCES TO OFF-LABEL USAGE(S) OF PHARMACEUTICALS OR INSTRUMENTS

- Nothing to disclose

LEARNING OBJECTIVES

1. Explain the biological factors behind co-use of marijuana, tobacco, and vaping.
2. Recognize and distinguish the complicating factors of treating a person with co-use.
3. Construct specific strategies to treat the use of marijuana, tobacco, and vaping using both pharmacological and psychological models of treatment.

TRENDS OF TOBACCO AND MARIJUANA USE

43% of young people report current cannabis use in 2021

- 29% of young adults in past month (2021)
- 18% of Americans used at least once in 2019

13.0% adults currently smoke cigarettes (2022)

- 1.3. billion tobacco users worldwide

Each day, about 1,600 youth try their first cigarette.

Traditional tobacco use declining, E-cigarette use increasing

TRENDS OF TOBACCO AND MARIJUANA USE

Why is there an increase in cannabis use in US?

- Reduced perception of harm associated with cannabis use
- Advertisement/promotion of potential medical benefits
- Increase in **Recreational legalization**
- Increase in Medical Cannabis legalization
- Easier to obtain
- Relaxed cannabis legislation

CANNABIS

JOINTS, BLUNTS & SPLIFFS

What are joints and blunts?

- A **Joint** is marijuana flower wrapped in rolling paper
- A **Blunt** is marijuana flower wrapped in a thin paper made for rolling cigarettes
- **Spliffs** are cannabis flower and tobacco wrapped together in a thin paper

The numbers

- It takes 5-10 seconds for the THC to reach the brain and the effects can be felt within minutes
- The high lasts between 30 minutes to several hours
- The THC concentration varies depending on the marijuana flower used

What do they look like?



Nicotine + Cannabis

- There is about 1.2 to 6.0 mg of nicotine per cigar wrapper
- 70% of individuals who use cannabis also use tobacco
- Blunts and spliffs expose the user to harmful tobacco substances, including nicotine
- Blunt and spliff users get high and addicted from **BOTH the nicotine and THC in them**

Note

Inhaling smoke of any kind and from any form of cannabis or nicotine, damages the respiratory system

CANNABIS

PIPES AND BONGS

What are pipes and bongs?

- In pipes, cannabis flower is burned, and its smoke is inhaled
- In bongs, cannabis flower is burned, and its smoke is cooled through water before being inhaled

The numbers

- It takes 5-10 seconds for the THC to reach the brain and the effects can be felt within minutes
- The high lasts between 30 minutes and several hours
- The THC concentration in a pipe or bong depends on the amount of marijuana flower is used

What do they look like?



Pipes and bongs are typically made of glass and can come in various colors

Note:

- The water used in bongs DOES NOT make them a safer way to inhale marijuana. The water only cools and smoke
- Inhaling smoke of any kind causes damage to the respiratory system
- Sharing these devices puts users at risk of getting herpes, mono, and colds

CANNABIS

WAX VAPING OR DABBING

What do they look like?



Image Copyright Getty Images

What is a Dab?

- Extremely concentrated THC wax that is heated and the aerosol is then inhaled

The numbers

- It takes 5-10 seconds for the THC to reach the brain and the effects can be felt within minutes
- The high lasts between 30 minutes and several hours
- Dabs have about 80% THC concentration
- Dabbing is one of the methods most associated with emergency room visits due to higher THC levels
- High THC concentrations can lead to greater risk of addiction if frequently used

Note:

- Inhaling smoke of any kind causes damages to the respiratory system
- Sharing these devices puts users at risk of getting herpes, mono, and colds
- This method exposes the user to extremely high concentrations of THC up to 900°

CANNABIS

VAPING OILS



- Concentrated cannabis oil is heated and turned into an aerosol, not a vapor
- In a vape pen, cannabis oil is not “vaporized,” it is aerosolized
- It takes 5-10 seconds for the THC to reach the brain and the effects can be felt within minutes
- The high lasts about 30 minutes to several hours
- The THC concentration depends on the oil used, which is often mislabeled
- Vaping is NOT harmless

What do they look like?



They consist of concentrated cannabis oil, a battery, and a mouthpiece

Note

- Inhaling smoke of any kind causes damages to the respiratory system
- Using “vape” products is not a harmless alternative to smoking, it’s just another form of smoking
- Sharing these devices puts users at risk of getting herpes, mono, and colds

CANNABIS

TINCTURES, SPRAYS, PILLS, CAPSULES

What is a Tincture / Spray / Pill / Capsule?

- Tinctures and sprays are oil or alcohol-based liquids containing cannabis
- Pills and capsules contain cannabis, usually floating in an oil

The numbers

- Effects of using tinctures can be felt in 15 minutes or so
- The THC and/or CBD in these products is/are absorbed through the mucus membrane in the mouth or in the gastrointestinal system
- Typically, the effects of tinctures last about 4 hours

What do they look like?



Note:

- These products are sometimes labeled, but not always clearly
- These products are not closely regulated, so there is no way to really know what they really contain

CANNABIS

EDIBLES

What is an edible?

- Edibles are marijuana infused foods and drinks
- **The numbers**
- For most, it takes 1-2 hours to feel the effects of the marijuana
- The high typically lasts for hours
- The THC concentration varies greatly, even within the same batch of edibles
- Very easy to over consume because of the masking flavor of sugar

What do they look like?

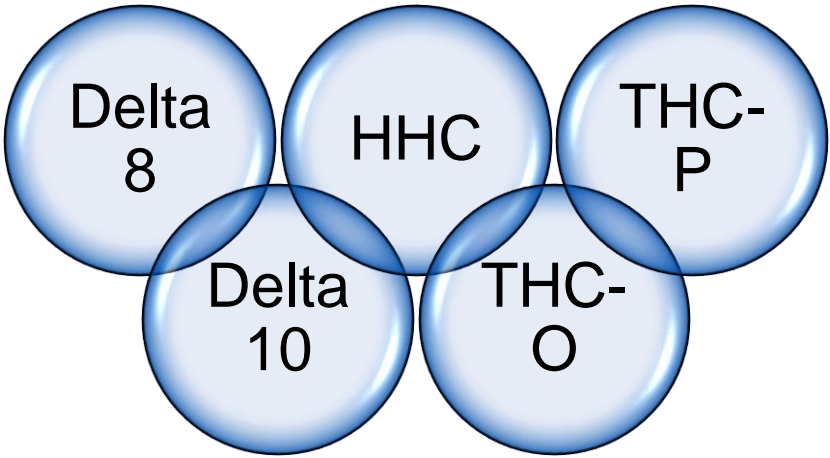


Brownies, cookies, candies, beverages, chocolates, baked goods, gummy bears

Note:

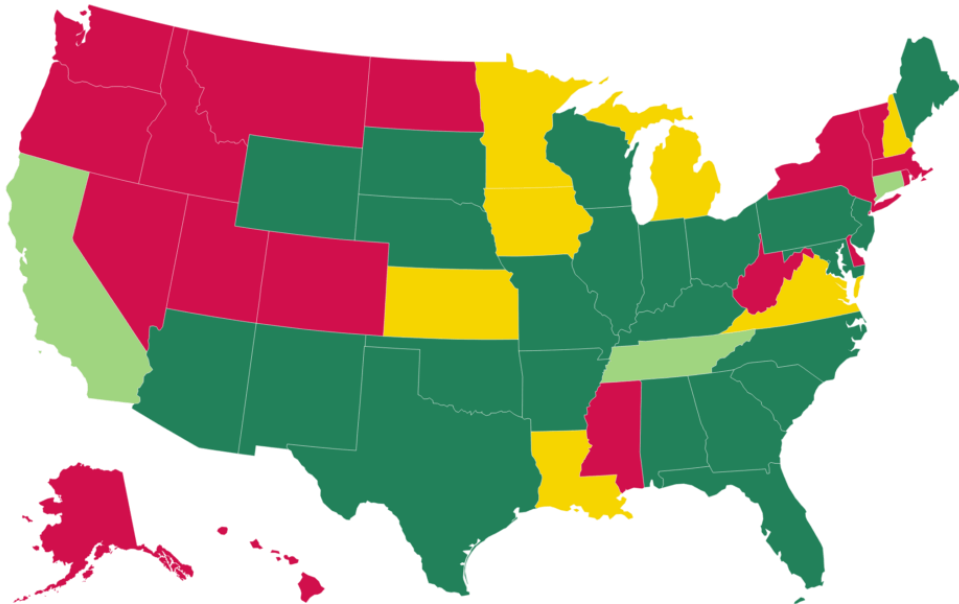
- Children and pets are at high risk for eating these by mistake
- Because it takes so long to feel the effects, people may take more and more until the high kicks in, so it is very easy to take way too much
- Edibles are sometimes labeled with their ingredients, but not always clearly
- The high from edibles is different from other forms of marijuana because it can have hallucinogenic and other effects throughout the body

CANNABIS



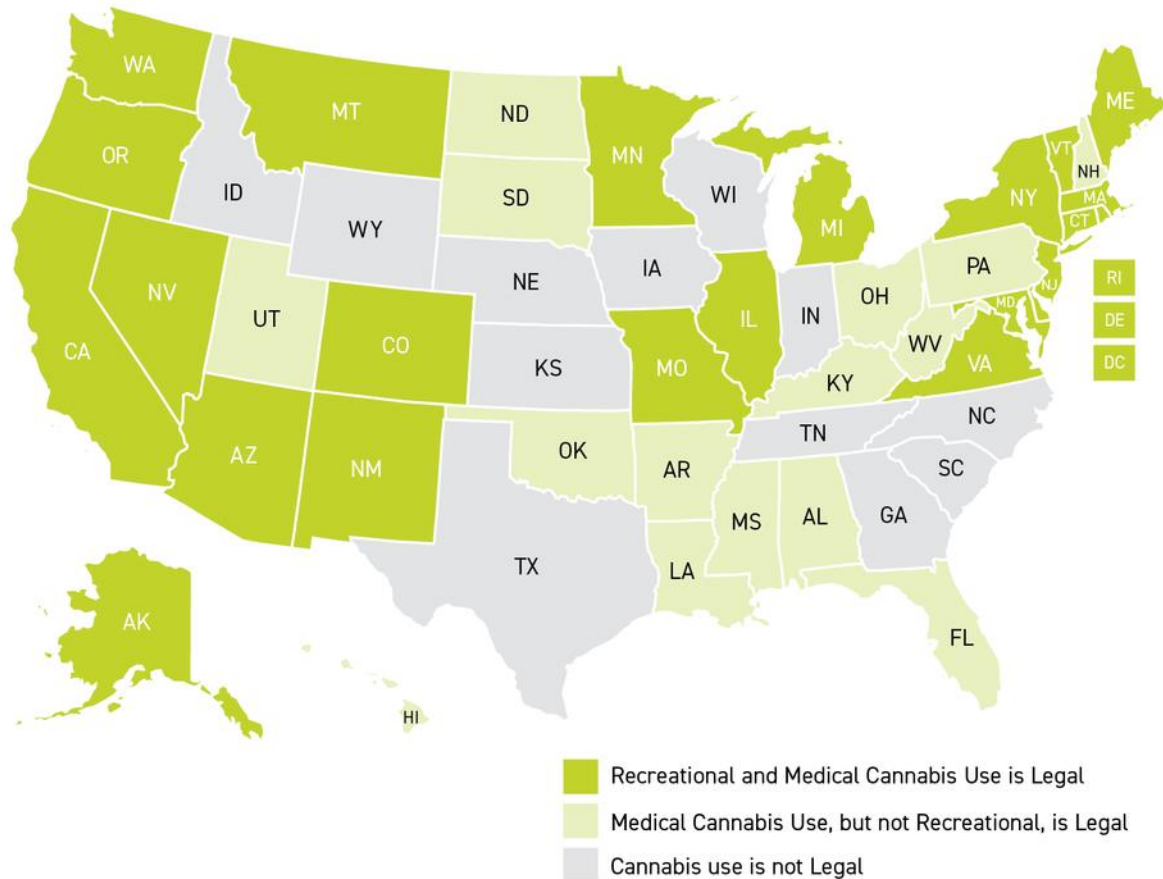
Delta-8 THC Legal Status by State

■ Banned ■ Legal ■ Restricted ■ Substantial Regulations



Last fact-checked on October 13, 2023, by Neil Willner, co-chair of the RCCB law firm's cannabis group.
Source: CBD Oracle • Created with Datawrapper

More than 40% of states have **legalized cannabis**



TOBACCO LINKS TO CANCERS AND DISEASES

Lung

Oral cavity

Esophagus

Pancreas

Bladder

Kidney

Stomach

Uterine cervix

Acute myeloid leukemia

COPD (Chronic Obstructive Pulmonary Disease)

Emphysema

Coronary Artery Disease

Cardiovascular Disease

Myocardial Infarction (heart attack)

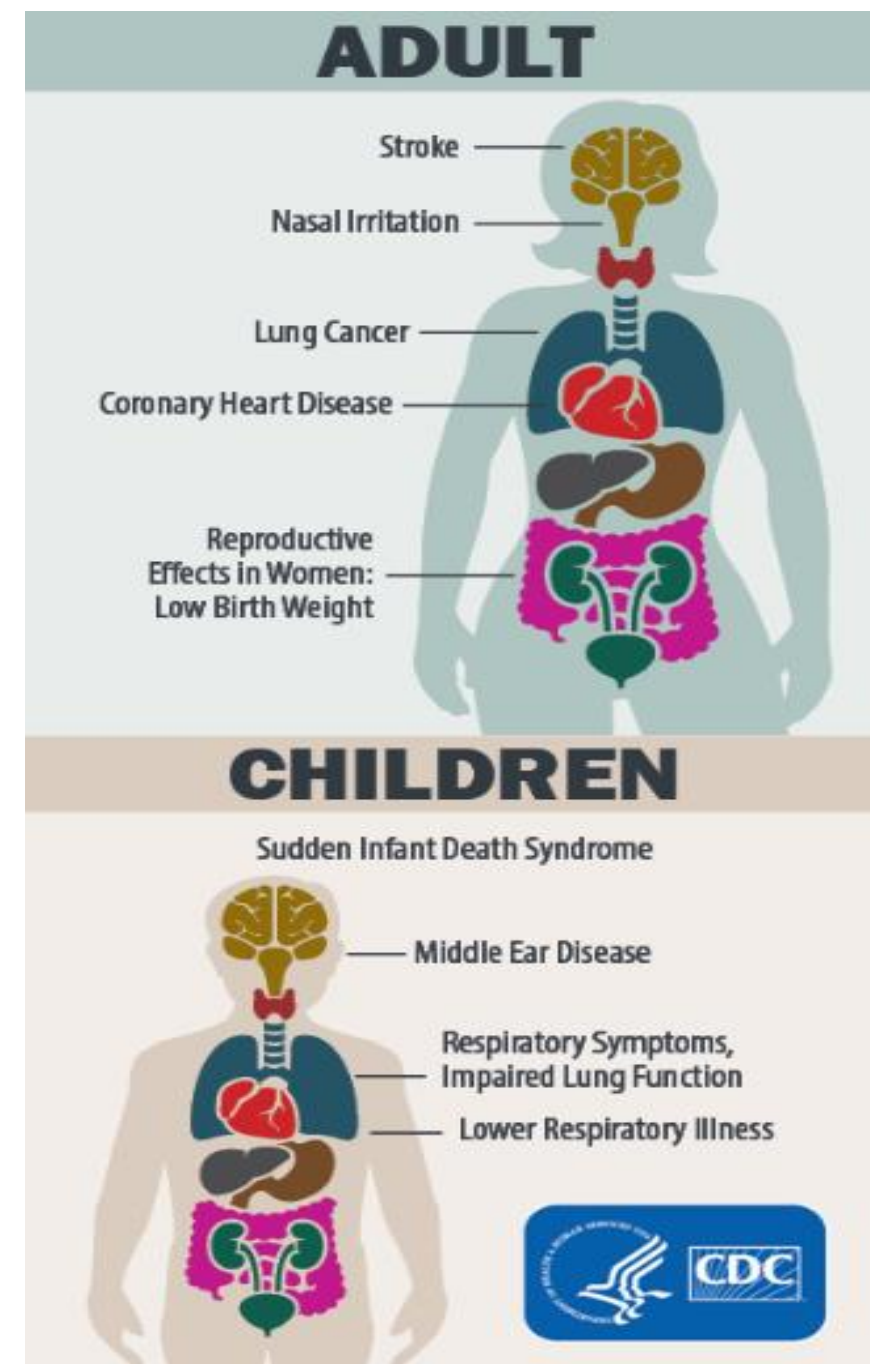
SECONDHAND SMOKE

Marijuana Secondhand Smoke Exposure

- Harmful chemicals
- Mold
- Anxiety, paranoia, burning itchy eyes, coughing, fatigue, headache, nausea, restlessness

Secondhand Cigarette Smoke Exposure

- Cardiovascular diseases, heart attack, stroke
- Increased risks of lung cancer, COPD, and cancers in the brain, bladder, stomach, breast and more.
- Coughing, sneezing, shortness of breath, or other breathing problems, asthma attacks, respiratory infections (bronchitis or pneumonia)
- Ear infections
- Learning and behavior problems
- SIDS



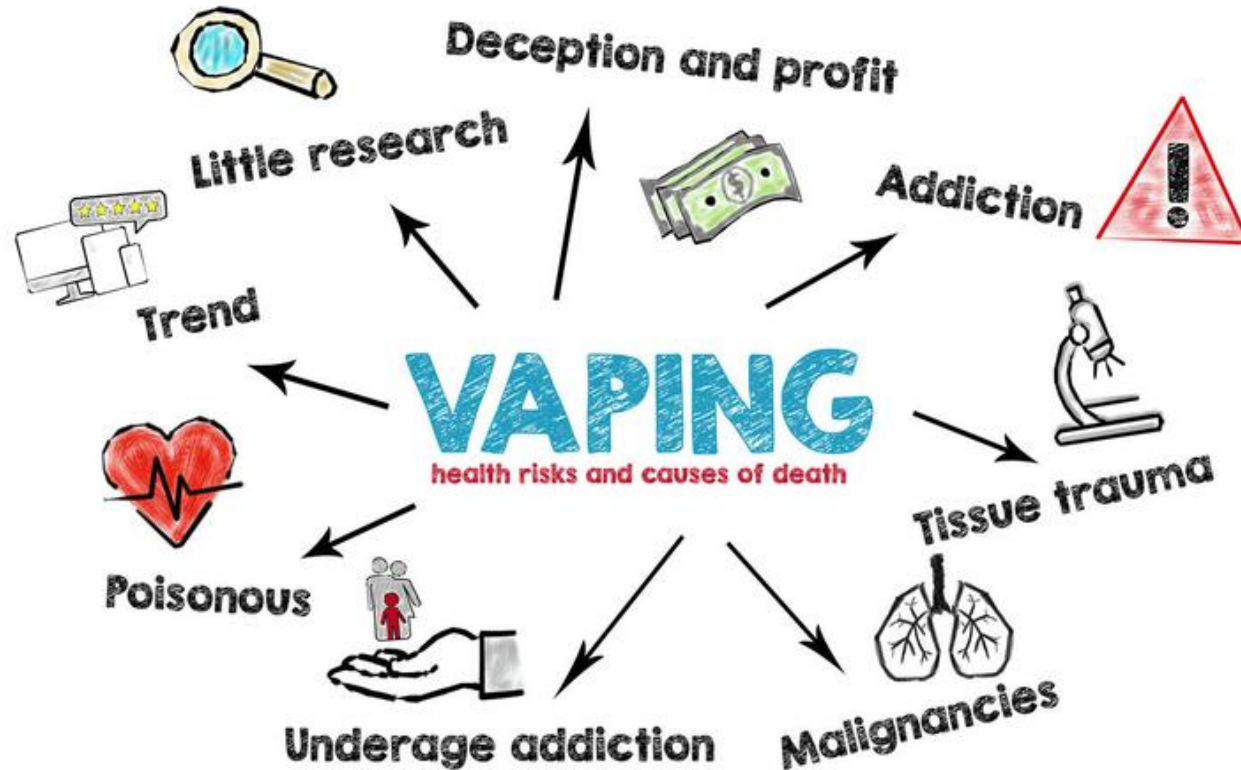
This photo by <https://www.cdc.gov/tobacco/secondhand-smoke/health.html>



SECONDHAND AEROSOL

- **Secondhand nicotine vape exposure was associated with increased risk:**
- Bronchitis symptoms and shortness of breath among young adults.
- Exacerbation of asthma symptoms and constriction of arteries
- **Short term exposure-** eye, throat and airway irritation
- **Long term exposure-** children can develop asthma.

HEALTH EFFECTS OF VAPING



- EVALI e-cigarette or vaping use-associated lung injury
- 82% hospitalized for EVALI reported THC vaping
- Breathing problems-wheezing, shortness of breath
- Potential for increase in cardiac sympathetic responses
- Increase HR and BP
- Increase anxiety and depression
- High amounts of nicotine
- Large numbers of chemicals



HEALTH EFFECTS OF SMOKING MARIJUANA

- Increased symptoms of chronic bronchitis and respiratory illnesses
- Consume higher amounts of soda and alcohol
- Less folate and carotenoids in blood
- Can cause anxiety, depression, and decreased motivation
- Cardiovascular risks
- Risk for Aspergillus
- Laced with other drugs

COMBINED USE OF MARIJUANA AND TOBACCO

Users of marijuana
are 5x more likely
than
non-users to smoke
cigarettes.

Co-use in US
increased from 4.9%
in 2002
to 9.0% in 2014

60% of adult cannabis
users report current
tobacco in use in
comparison with 16%
of general population

COMBINED USE OF MARIJUANA AND TOBACCO



Marijuana enhances reinforcing effects of nicotine

More severe substance use disorder presentation

Directionality of risk is both directions

Route of administration

Withdrawal

Cognitive effects

Cessation interference

COMBINED USE OF MARIJUANA AND TOBACCO *WITHDRAWAL*

Co-use may serve to mitigate discomfort from withdrawal symptoms of the other substance

Withdrawal from both at same time can increase withdrawal effects



COMBINED USE OF MARIJUANA AND TOBACCO

COGNITIVE EFFECTS

- Opposite effects on cognition
- Cannabis users may use tobacco to attenuate cognitive impairment.
- Early exposure = ongoing changes in the brain



COMBINED USE OF MARIJUANA AND TOBACCO



Increased exposure to toxicants

Cigarette=acute bronchoconstriction
vs. Marijuana joint=bronchodilation

Contents of tobacco and marijuana
via smoking are similar

Increased HR and duration

Smoking cannabis=more puff and
inhaled volume



COMBINED USE OF MARIJUANA AND TOBACCO

MENTAL HEALTH

Prevalence self-reporting a
mental health disorder

Marijuana use and having
a mental health disorder
both **independently**
contribute to increased
likelihood of smoking
tobacco

Use to alleviate mental
health symptoms

Self-medication of
psychiatric symptoms with
marijuana is higher in
states with medical
legalization.

TREATMENT CONCERNS OF CO-USE

**Compensatory use
(one for another)**

**Outcomes of treatment
compromised by co-
use**

**Tobacco use to
manage cannabis
withdrawal symptoms**

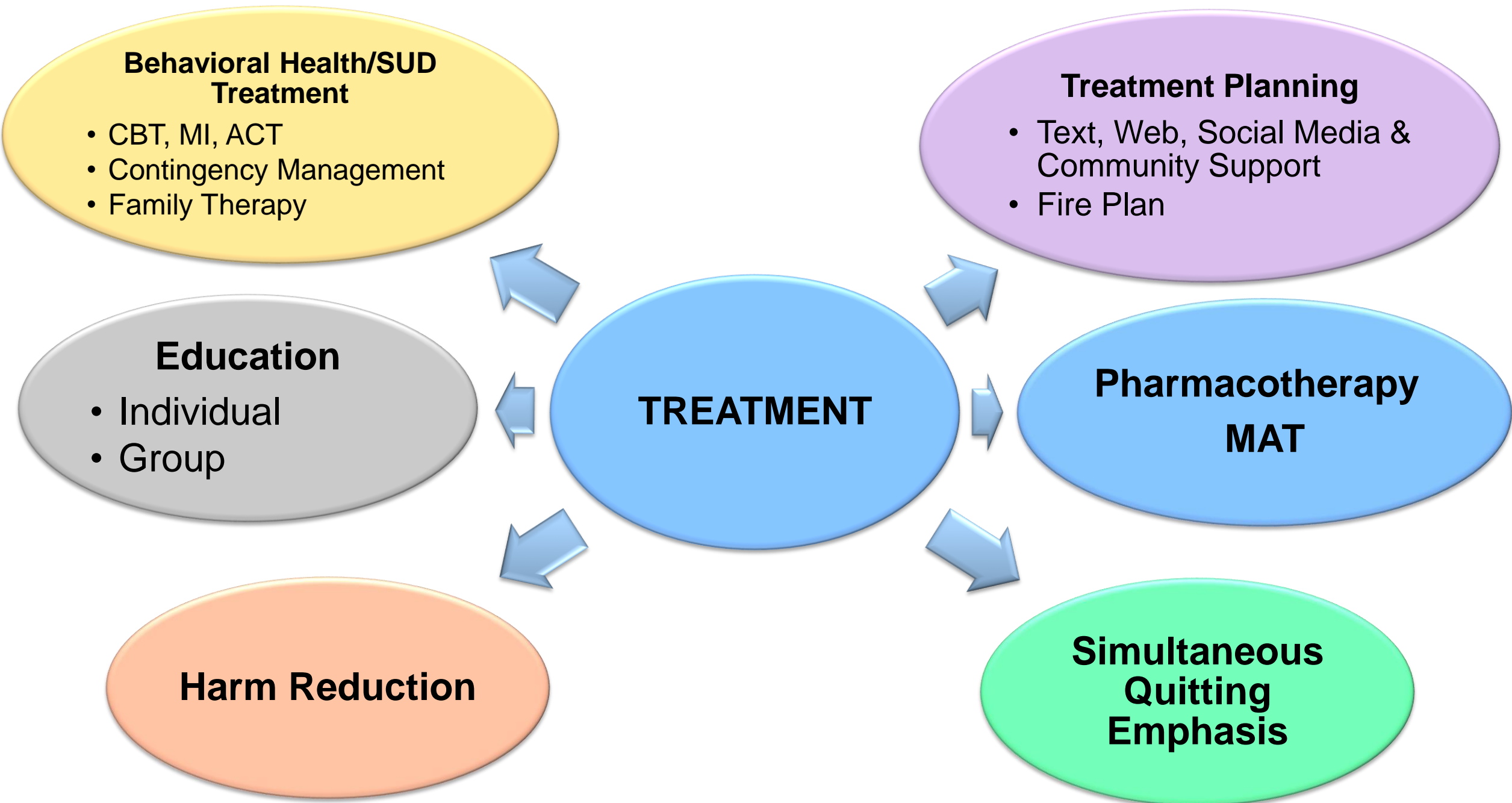
**62% report increase in
tobacco use during
cannabis cessation
attempt**

**50% report increase in
cannabis use during
tobacco cessation
attempt**

**Co-use studies-more likely
to start smoking tobacco,
continue smoking
tobacco, relapse after
quitting tobacco**

**Untreated Mental
Health disorders**

**Giving up both drugs (or
even more)**



TREATMENT STRATEGIES

COUNSELING/ BEHAVIORAL/ PSYCHOSOCIAL



Reward

- Focus on impulsivity and sensitivity to reward to modify use of both substances



Motive

- Discover motive



Relation

- Look for highly related substances to tailor strategies



Address

- Address relationship between substances

TREATMENT STRATEGIES

Counseling/Behavioral/Psychosocial

- Enhanced care
- Demographic
- Psychiatric characteristics
- Delivery method of intervention
- Education
- What is their interest in quitting?
- What is risk perception of use?



TREATMENT STRATEGIES

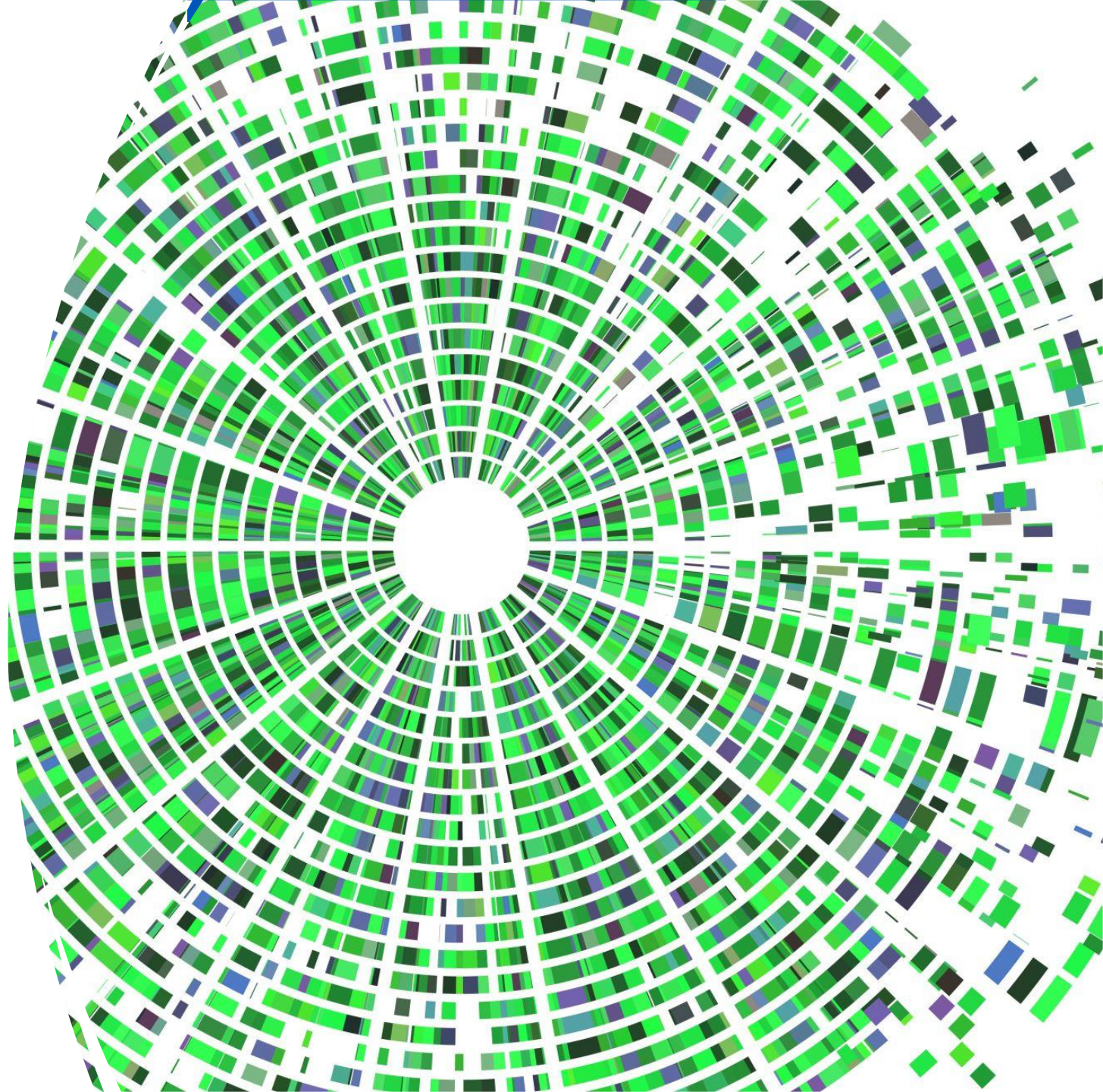
Counseling/Behavioral/Psychosocial

- **Encourage lower risk cannabis use**
- **Expanded access to behavioral health services**
- **Simultaneous Quitting Emphasis**
- **Contingency Management**

TREATMENT STRATEGIES

PHARMACOTHERAPY

- Nicotine Replacement: Nicotine Patch, Gum, Lozenges, Inhaler, Nasal Spray
- Medications for Tobacco: Bupropion, Chantix



TREATMENT STRATEGIES

COUNSELING/BEHAVIORAL

- TIME SPENT
- INDIVIDUALIZE TREATMENT
- TREAT THE WHOLE PERSON



Intellectual Wellness
The ability to open our minds to new ideas and experiences that can be applied to personal decisions, group interaction and community betterment.



Financial Wellness
The ability to identify your relationship with money and skills in managing resources. An intricate balance of the mental, spiritual, and physical aspects of money.



Emotional Wellness
The ability to understand ourselves and cope with the challenges life can bring.



Spiritual Wellness
The ability to establish peace and harmony in our lives.



Occupational Wellness
The ability to get personal fulfillment from our jobs or chosen career fields while still maintaining balance in our lives.



Physical Wellness
The ability to maintain a healthy quality of life without undue fatigue or physical stress.



Environmental Wellness
The ability to recognize our own responsibility for the quality of the environment that surrounds us.



Social Wellness
The ability to relate to and connect with other people in our world.

Sober and Tobacco Free : Steps to Changing the Paradigm of Substance Abuse Treatment

INTRODUCTION

In the United States, tobacco control efforts have reduced smoking prevalence from 40% in 1964 to 13.7% in 2020 (CDC, 2018). However, 53-88% of adult individuals and more than 80% of adolescents who have substance use disorders (SUD) report using tobacco (Weinberger et al., 2018, Hall & Prochaska, 2009). This data is similar for those persons entering SUD treatment (Guydish et al., 2016). In 2016, fewer than half of mental health and SUD facilities in the United States offered evidence-based tobacco cessation treatments (SAMHSA, 2017). Historically tobacco use has been overlooked and even stoppage of use discouraged at times. Research shows that individuals are more likely to die from tobacco addiction than primary addiction. Evidence has shown that by stopping tobacco use while in treatment, there is a 25-50% increase in long term abstinence from alcohol and illicit drugs (Prochaska, Delucci, & Hall, 2004; Stuyt, 1997).

OBJECTIVES

The purpose of the study is to understand whether a one-hour educational presentation would influence client's knowledge and attitudes regarding the importance of tobacco cessation

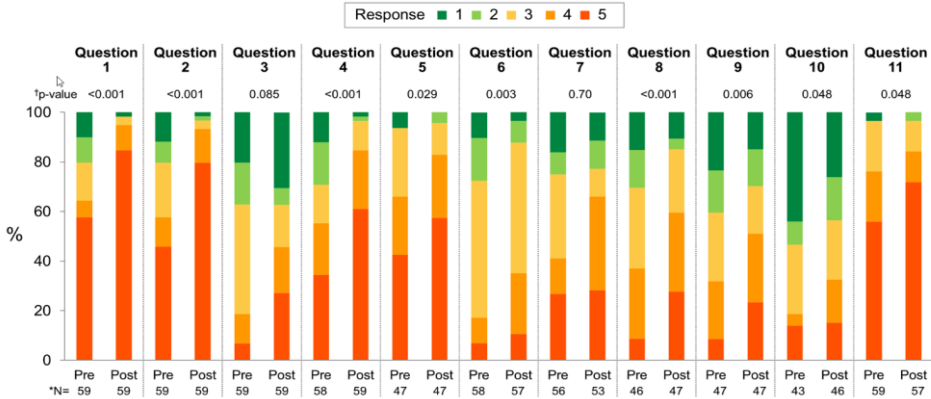
METHODS

An abbreviated version of a previously developed survey, Smoking Knowledge Attitudes and Services (S-KAS) (Guydish, Tajima, Chan, Delucchi, and Ziedonis, 2010) was used to assess clients' knowledge and attitudes about tobacco treatment. The survey consisted of 11 questions using a 5-point Likert scale (1=Strongly Disagree, 5=Strongly Agree), along with a 12th multiple choice question. The initial surveys were completed with patients currently in a 28-day residential addiction unit or enrolled in a community-based outpatient addiction treatment program. 59 patients in 6 different sessions participated in a one-hour educational presentation titled "Substance Use and Tobacco", which included information on health risks, impact on mental health, substance abuse recovery, and tools for cessation. The surveys were distributed to and completed by all patients (tobacco users and non-tobacco users) before the presentation (pre-survey) and again after the presentation (post-survey).

Characteristic	n (%)
Session attended	
IAP	
Community	28 (47.5)
Tobacco status	
Tobacco user	39 (66.1)
Not tobacco user	

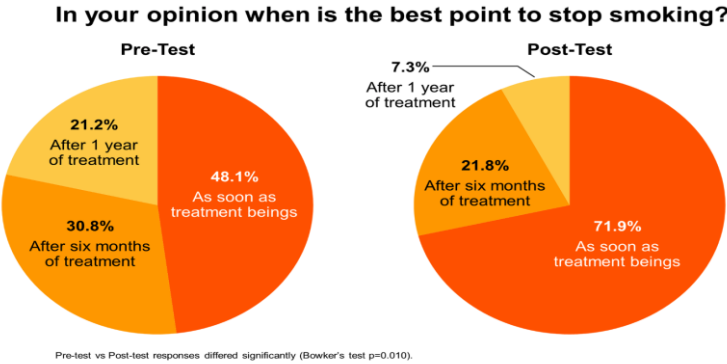
Table 1. Participant Characteristics (N=59*)
*Participants are from 2 community sessions (1/17/2020 and 2/17/2020) and 4 IAP sessions (12/27/2019, 1/20/2020, 2/20/2020 and 3/12/2020).

DATA



*Number of participants who answered the given question
†Responses from the pre and post survey were compared using the signed rank test.
Additional analyses:
For each of the 11 questions the rank sum test was used to compare the change from pre survey to post survey between session types (IAP vs community); and between tobacco users and non-tobacco users. In all cases no significant differences were detected (all p>0.083 for IAP vs Community; all p>0.072 for tobacco user vs non-tobacco user).

- Smoking Knowledge, Attitudes, Services Survey
- What is your level of agreement or disagreement with the following statements?
- (Please circle 1=Strongly disagree, 5= Strongly agree)
- The hazards of smoking have been clearly demonstrated
 - The hazards of secondhand smoke have been clearly demonstrated
 - If someone has been in recovery from alcoholism/addiction for less than 6 months, quitting smoking would threaten their sobriety.
 - I am aware of community/treatment resources to help people quit smoking.
 - I have the required skills to quit smoking.
 - Clients that smoke in this program want to quit.
 - I am concerned about smoking.
 - Counseling by a clinician in this program would help me to quit smoking
 - I think it would be helpful for clinicians at this program to make appointments specifically to help me quit smoking.
 - In the program where you are now, did you want help with quitting smoking?
 - Should tobacco cessation or treatment to quit smoking be offered to people who smoke in this program?
 - In your opinion when is the best point to stop smoking?
A) As soon as treatment begins B) After six months of treatment C) After 1 year of treatment D) Never



DISCUSSION AND RESULTS

- Data shows significant positive differences in 10 of 12 areas with p-value of less than .05. There did not seem to be a difference statistically between nontobacco users and tobacco users as far as attitudes and knowledge of tobacco use. Research states that people in SUD treatment want to quit just as much as the general population. In each of the 12 survey questions that were given to patients, there was an increase in knowledge and change in attitudes regarding smoking cessation during treatment.
- For question 3, data is flipped, 5 is undesired answer (Agree) and 1 is most desired answer (disagree). Because the other questions are worded favorably, it may have thrown off participants who didn't read it carefully. The answer to this question comes out somewhat favorably, but not significant when compared to a similar question 12, with a 23% increase of people feeling that stopping smoking should start as soon as treatment begins. The question may need to be worded differently in order to ensure maximum chance for understanding.
- Questions 8 and 9 showed significant positive differences in clients showing interest in getting help for stopping smoking.

CONCLUSIONS

- Data reveals that the one-hour educational presentation given to patients currently in SUD treatment made an impact and significantly influenced patients' knowledge and attitudes toward smoking cessation in treatment. The goal of this study was to first, see what knowledge and attitudes were present, and second, to see if presenting information would make a difference in their knowledge. Some clients were ready to begin steps toward tobacco cessation, and this presentation may have been a catalyst in that decision, as evidenced by the significant increase in clients reporting that counseling by a clinician would help (Q. 8,9,) and a significant decrease in responses that indicated they did not want help (Q.10)
- Although many may not quit at this point, many participants after this presentation made comments such as:
"I've been through 7 treatments, why haven't I ever heard about this?"
"I never knew you could use combination therapy"
"Could I talk more about this with you?" These statements speak directly to affirming the importance of education in treatment to give people the knowledge to make an informed decision about their care.

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LungMindAlliance.org

Education / Technical Assistance
Action Teams
Resources

For mental health and substance use disorder professionals



Tobacco-Free Grounds Provide Healthy Facilities

Myths and facts about commercial tobacco-free grounds for your mental health and substance use disorder program.

Myth	Facts
"Clients will go elsewhere if we go tobacco-free."	<ul style="list-style-type: none">There is a growing movement within mental health and substance use disorder (SUD) treatment programs to address the whole health of staff and clients by making their facilities tobacco-free.Data and experience show that census numbers do not drop when a site goes tobacco-free. In fact, clients and staff have used the implementation of a tobacco-free policy as a motivation to quit smoking themselves.
"There is no benefit for our organization to address tobacco right now."	<ul style="list-style-type: none">Adopting tobacco-free grounds policies for staff and clients increases their chance at quitting tobacco use, increases productivity, and saves your organization money.Tobacco-free grounds promote a cleaner and healthier environment for staff members and people that receive services at your organization.Tobacco-free policies help clients integrate into other community tobacco-free spaces like housing, worksites, and social gathering venues.
"As a staff person, smoking is the only thing that can help me cope with stressful work situations."	<ul style="list-style-type: none">It's part of our job to model appropriate coping skills in our work environment and using tobacco is not a healthy coping skill.Positive coping mechanisms can include a walk break, meditation, or talking to a co-worker.Mental health improves after quitting smoking and anxiety, depression, and stress significantly decrease in those who stop using tobacco.

For mental health and substance use disorder professionals



Tobacco Treatment Help Your Clients Get Healthy

Myths and facts about offering commercial tobacco treatment as part of your mental health and substance use disorder program.

Myth	Facts
"If someone is struggling with mental health issues and substance use disorders, quitting tobacco is the least of their worries."	<ul style="list-style-type: none">Addressing tobacco at the same time as other substances actually improves the odds of success. People who receive tobacco treatment while engaged in substance use treatment have a 25% greater likelihood of long-term recovery from alcohol and other drugs.Tobacco-related illnesses claim more than eight times as many lives as alcohol, legal, and illegal drug use combined.Treating tobacco dependence not only helps improve overall health but mental health as well. When people quit tobacco, their mental health improves, including significant decreases in anxiety, depression, and stress.Tobacco dependence is in the DSM-V.
"Our clients don't want to quit."	<ul style="list-style-type: none">Most clients do want to quit, and you can provide them the resources they need to be successful in treating their tobacco addiction.89% of people seeking services who smoke said they want staff to ask them about quitting.92% of people felt that avoiding tobacco was very important for them to be healthy.* These surveys done in MN are consistent with surveys in other states.
"People with mental health or substance use disorders can't quit smoking on top of everything else they are going through."	<ul style="list-style-type: none">Yes they can! People can and do address smoking in addition to other treatment efforts.They may need more intensive support and a longer period of treatment.Quitting smoking can help participants remain abstinent from other substances and improve mental health.

For leaders of mental health and substance use disorder programs



Tobacco-Free Grounds And Tobacco Treatment Services Are Right For Your Program

Fulfill Your Mission | Be A Leader | It's A Win-Win

	Fulfill Your Mission As a provider of mental health or substance use disorder (SUD) treatment services, offering treatment for tobacco dependence is aligned with your mission.
	Be A Leader The widespread inclusion of tobacco treatment and tobacco-free grounds into mental health and SUD treatment programs will soon be the norm.

- Tobacco use disorder is an addiction with serious consequences. Your staff are in the perfect position to talk with clients about making the changes needed to live a healthy life.
- Tobacco treatment strategies work, and people with mental illnesses and substance use disorders can successfully quit using tobacco.
- Quitting tobacco helps improve mental health and significantly reduce anxiety, depression, and stress.
- Providing tobacco treatment enhances recovery from other substances.
- Offering tobacco treatment services as a part of SUD treatment can increase long-term recovery from other substances by 25%.

- Offering tobacco treatment services firmly positions your agency as a leader in your field.
- Many organizations in Minnesota have gone tobacco-free and are integrating tobacco treatment into their existing services.
- The more you stand out as a leader the more successful you will be in not only creating a client base but also finding and recruiting qualified staff.

- Both the National Association of State Mental Health Program Directors and Substance Abuse and Mental Health Services Administration (SAMHSA) encourage the integration of tobacco treatment into services and the adoption of tobacco-free grounds for all behavioral health settings.

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