

# Addressing Nicotine Dependence in Treatment

The Elephant in the Living Room



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## Tobacco Use Has Traditionally Been Trivialized



- Nicotine addiction has been ignored in the treatment community, with few exceptions
- There is probably no setting in the U.S. with higher rates of smoking than substance abuse treatment facilities and 12 step meetings, where 80-95% of people smoke (McIlvain et al, 1998)

*“Can’t give up everything at one time”*

*“First things first”*

*“No major changes for the first year”*

## A Gateway Drug

- Tobacco is a gateway drug
  - Begins the addictive process in the brain
  - Releases the same neurotransmitters
  - Many addicts smoked a cigarette before getting up the nerve up to engage in more serious levels of drug use.

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- It is a common beginning with many addicts and alcoholics.
- For many addicts that begin using in the early years, using tobacco fits in with the rebellious behavior pattern or process that is often associated with the experimentation of drug use.



## The Cigarette is a Drug-Delivery System

- Smokers typically take 10 puffs per cigarette over a 5-minute period
- A 1-1/2 pack (30 cigarettes) per day smoker gets 300 “hits” of nicotine to the brain each day
- The process of smoking drugs is similar across all drug types and failure to address all smokable drugs may predispose clients to relapse (Sees & Clark, 1993)

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The Cigarette is an extremely efficient and a highly engineered and sophisticated drug-delivery system

## Nicotine Is Mood-Altering

- Nicotine is a mild stimulant and a depressant
- Nicotine is more serious than heroin or cocaine (*NIDA*)
- It is psychoactive (changes information processing in the brain) and highly addictive
- Nicotine stimulates dopamine, just like heroin and cocaine, changing brain cells and damaging bodily functions.

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- A testament to the power of nicotine addiction is that about half of people continue to smoke after cancer surgery or a heart attack brought on by smoking
- Ultimately, nicotine addiction itself is the **most common beginning** for substance abuse
  - It is so important, that the National Institute on Drug Abuse says it is **MORE** serious than heroin
- The brain's receptor sites cannot differentiate between natural occurring neurotransmitter stimulation and drug-induced neurotransmitter stimulation. Whether it is nicotine or heroin, the brain is fooled into releasing its precious chemicals until natural production becomes stunted. Then, when the drug is taken away, withdrawal symptoms take place.

## Tobacco Use Triggers Alcohol and Other Drug Use



- The emotional and cognitive processes associated with tobacco use are identical to those associated with the use of AOD
- Nicotine produces intensive addictive urges cravings –central issues in treatment
- Craving for nicotine increases cravings for other drugs
  - Substance abusers that smoke had cue induced cravings for opiates and cocaine when tobacco cravings were triggered (Heishman, et al, 2000)

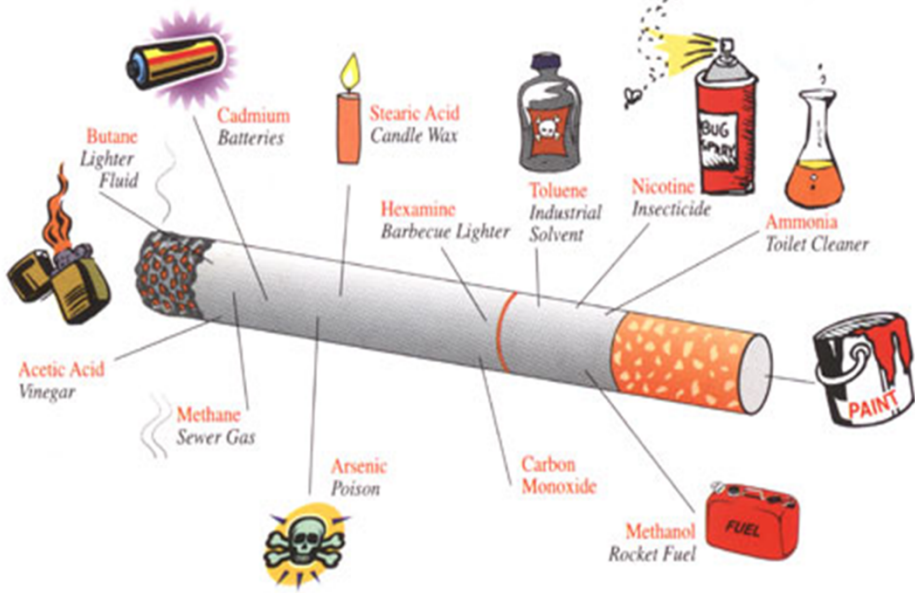
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- Craving for nicotine increases cravings for other drugs; (with tobacco use propiating same drug seeking behavior)
  - Acc. to a NIDA study (Heishman), cravings for opiates and cocaine were induced when tobacco cravings were triggered
  - For many addicts, smoking is a behavioral and chemical **trigger**.
  - The body has been conditioned through familiar social rituals and to smoke while drinking and using drugs with the brain associating smoking with substance abuse

## **“Hey, same as my meth...”**

- After seeing the list of ingredients in cigarettes, women from a Long Beach, CA treatment center stated that many of these ingredients were the same as the ones they used to make methamphetamine.

# Ingredients in Tobacco







## **Tobacco Use Leads to Nicotine Addiction**

**“The pharmacologic and behavioral processes that determine tobacco addiction are similar to those that determine addiction to drugs such as heroin and cocaine.”**

*-Surgeon General Report, 1988*

## Tobacco Use Leads to Nicotine Addiction

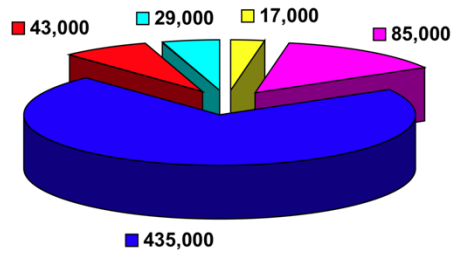
- Nicotine stimulates the production of dopamine which increases the desire to consume drugs
- Produces rapid distribution of nicotine to the brain, with drug levels peaking within 10 seconds of inhalation
- Acute effects of nicotine dissipate in a few minutes
  - causes the smoker to continue dosing to maintain the drug's pleasurable effects and prevent withdrawal

*(Benowitz NL, 1996, NIDA website)*

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- Research has shown how nicotine acts on the brain to produce a number of effects. Of primary importance to its addictive nature are findings that nicotine activates reward pathways—the brain circuitry that regulates feelings of pleasure. A key brain chemical involved in mediating the desire to consume drugs is the neurotransmitter dopamine, and research has shown that nicotine increases levels of dopamine in the reward circuits. This reaction is similar to that seen with other drugs of abuse, and is thought to underlie the pleasurable sensations experienced by many smokers. Nicotine's pharmacokinetic properties also enhance its abuse potential. Cigarette smoking produces a rapid distribution of nicotine to the brain, with drug levels peaking within 10 seconds of inhalation<sup>9</sup>. However, the acute effects of nicotine dissipate in a few minutes, as do the associated feelings of reward, which causes the smoker to continue dosing to maintain the drug's pleasurable effects and prevent withdrawal.

# Actual Causes of Death U.S., 2000



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Illicit Drugs Alcohol Tobacco Motor Vehicles Firearms

## A Unique Setting



- In general, if a person has not started smoking by age 20, it is unlikely that they will ever smoke. However, a significant number of adult substance abusers start smoking while in treatment/recovery, suggesting that the treatment climate is particularly conducive to smoking (*Friend & Pagano, 2004*).

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- Recovery facilities are **not addressing** the worse addiction of all
  - It is the responsibility and duty of facilities to address tobacco use in order to ensure optimal treatment and recovery



## Heavier Users

- Substance abusers are heavier smokers ( $\geq 2$  packs per day) (Hughes & Kalman, 2005; Marks et al, 1997),
- Heavier smokers:
  - Have higher nicotine dependence scores (Hughes & Kalman, 2005; Marks et al, 1997)
  - Have more (72% vs. 9%) AOD problems (Hughes, 1996)
- Nearly 50% of substance abusers in recovery will die from tobacco-related diseases (Hughes et al, 2000; Hurt et al., 1996).



## Most Important Facts

- More recovering drug and alcohol addicts will die of tobacco-related causes than any other cause. Both co-founders of Alcoholics Anonymous, Bill W. and Dr. Bob, died of tobacco-related causes
- Smokers have a higher relapse rate than do clients who have quit smoking while in recovery

(Clinical Psychiatry News, 1999, *Push Tobacco Cessation When Treating Drug and Alcohol Addicts*)

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Smoking cessation is a contentious issue within the substance abuse treatment field in spite of mounting evidence that tobacco is more deadly in the long run than alcohol and other drugs. There are several studies that show a higher relapse rate among smokers.

## Myths Among Treatment Staff



- Smoking cessation is too difficult for clients in early recovery (*Chiauzzi & Liljegren, 1993*).
- Smoking is less harmful than illegal drug or alcohol use (*McIlvain et al, 1998*)
- Treatment programs perceive that they may suffer financially if clients do not enter treatment or leave prematurely because of smoking bans or pressure to quit smoking (*Hurt & Slade, 1990; Eliason & Worthington, 2005*).

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The reluctance to address nicotine addiction stems from many possible sources that are inherent in organizations, staff, and clients. The reality is that it is easier for clients to quit all drugs together. That is why we do not ask them to quit crack first, then alcohol, then marijuana. Also, more addicts die from tobacco, so it is not a less harmful drug...unless we are only looking at their current law enforcement involvement and not their long-term quality of life in recovery. Treatment centers that have anti-tobacco policies in place, do not suffer financially because of a lack of clients or staff.

## Myths Among Treatment Staff



- A common belief of both administrators and staff is that smoking relieves the anxiety associated with withdrawal from alcohol and other drugs (*Eliason and Worthington, 2005*)
- Treatment staff who smoke are more prone to endorsing the myths about smoking than nonsmokers (*Gill et al., 2000; Eliason and Worthington, 2005*)

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•A common belief of both administrators and staff is that smoking relieves the anxiety associated with withdrawal from alcohol and other drugs. While this may contain some element of truth, the effects of nicotine on anxiety are very short-term and may present a false picture of its effectiveness for anxiety reduction.

•Patches, lozenges, or nicotine gum that provides a steady dose of nicotine may actually be more effective over the course of the day in reducing anxiety than smoking.

•**NRT doubles quit rates** at one year **when added to behavioral therapy**

Much of this information was gathered in a research study done by two Fellows in the Robert Wood Johnson Foundation's *Developing Leadership in Reducing Substance Abuse* Fellowship program which is currently under review. We randomly selected tx programs across the US to survey clients, staff, and administrators about beliefs, attitudes, programming, policies, and personal histories of tobacco.



## Other Barriers to Cessation



- Many treatment counselors are in recovery and are smokers
- 12 step meetings and treatment facilities have traditionally allowed smoking, so staff and clients are comfortable in this environment
- Smoking cessation counseling is not included in counselor education
- Separate research and treatment funding sources for tobacco versus other drugs

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- The smoking rate is slightly less for addicts in long-term recovery, therefore counselors smoke. Those that smoke do not generally discuss tobacco use and the risks with clients, nor do they encourage cessation as part of treatment.
- Academic institutions do not include tobacco treatment in their curricula for drug and alcohol studies.
- Funding for drug and alcohol is almost always completely separate from the tobacco funding, therefore agencies with both types of funding must keep all activities separate in order to comply with the restrictions of funders.

## Harmful Opinions

- “From a treatment perspective, the findings may argue against asking [AOD] patients to tackle too many problems at once, such as quitting smoking at the same time...” *(Join Together, 2002, “Will to Stay Sober Can Be Weakened”, Bob Curley)*

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“Will to Stay Sober” was an article written on the skewed research of Roy Baumeister in Stamford, CA. He declared the will of the addict can be weakened by forcing the addict to suppress a desire (to quit smoking), but he did not use smoking in the research...he used handgrip strength, emotional movies, and chocolate chip cookies to measure the participants suppression of emotions. Although the study showed a correlation between emotional control and depleted hand-grip exercises, as well as between hungry addicts and their depleted self-control when locked in a room with chocolate chip cookies, there was NO evidence showing that attempting to quit smoking depletes the desire, or willpower, to stay clean. On the other hand, there is research showing a correlation between quitting smoking at the same time as other chemicals of addiction, and a reduced rate of relapse.

## Research Confirms Cessation Improves Recovery Rates



- Kalman et al. (2001) found that people in concurrent tobacco and alcohol/drug treatment had a lower rate of relapse on alcohol/drugs than clients in a delayed tobacco treatment that occurred after they finished alcohol/drug treatment.
  - All participants who achieved nicotine abstinence also achieved abstinence from alcohol.

## Research Confirms Cessation Improves Recovery Rates



- Lemon et al. (2003) examined data from the Drug Abuse Treatment Outcomes Study for over 2300 smokers in treatment and reported that smoking cessation during treatment was associated with greater abstinence from drugs and alcohol after treatment and at 12 month follow-up (see also Joseph et al., 2003; Burling et al., 1991; Campbell et al., 1995; Hurt et al., 1994; Shoptaw et al., 1996, 2002)

## Research Confirms Cessation Improves Recovery Rates



- Friend & Pagano (2005a) examined 1300+ people from Project Match data set.
  - clients who quit on their own had more abstinent days from alcohol and a lower rate of drinking on drinking days than those who continued to smoke.
  - clients who decreased tobacco use were less likely to relapse than those who maintained or increased their tobacco use

## Research Confirms Cessation Improves Recovery Rates



- Recovering alcoholics who were encouraged to quit smoking were less likely to relapse to drinking (*MA Medical Society, MMWR 1997*)
- Alcoholics who stopped smoking during recovery are more likely to maintain long-term abstinence from alcohol than those who continued to smoke (*Bobo, et al., 1989; Sees and Clark, 1993*)
- Continued use of nicotine may be a relapse factor for resuming alcohol use (*Stuyt, 1997*)

## Research Confirms Cessation Improves Recovery Rates



- Successful tobacco quitters were 3X's as likely not to use cocaine as their peers who smoked (Frosch, et al., 1997)
- Researchers report that smokers who fail to quit smoking are more likely to use cocaine than those who quit (Frosch, et al., 1997; Shoptaw et al., 1996)
- Non-tobacco users maintain longer periods of sobriety after inpatient treatment than tobacco users (Stuyt, 1997)

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•Retrospective studies have indicated that those who fail to quit smoking abstinence in a smoking cessation program are more likely to use cocaine than those who successfully stop smoking (Frosch, et al., 1997; Shoptaw et al., 1996)

## Research Confirms Cessation Improves Recovery Rates



- Patients use common tools/methods to deal with all addictions
- Recovering alcoholics should be encouraged to use abstinence coping skills learned in alcohol treatment to quit smoking (*Bobo, 1993*)
- Addressing nicotine addiction promotes fuller freedom from addictive urges and abstinence

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•Including nicotine in chemical dependency treatment **supports fuller freedom** from addictive urges and abstinence from alcohol and drugs; gives them **tools** to deal with all addictions



## Research Confirms Cessation Improves Recovery Rates



- Clients are much better able to focus on the issues central to their recovery when not using tobacco.
- Emotional and cognitive processes with tobacco use are identical to those associated with use of alcohol and other drugs.

## What can we do?

- There are a wide variety of ways that treatment professionals can begin to change this social norm
- Treatment professionals have a responsibility to their clients to address tobacco



## Policy Examples

- Program
  - No smoking within 50 ft of doors and windows
  - No visitor smoking
  - No smoking on the grounds
  - No tobacco products allowed on the premises
  - No upper management or administrator smoking
  - Address all tobacco use with the goal of being completely tobacco free within a reasonable amount of time



## Policy Examples

- Staff
  - Offer cessation and incentives for quitting to staff
  - No smoking with clients
  - No evidence of smoking while on the clock

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- One tx agency in Los Angeles provides staff with cash incentives for 30 day, 6 month, and 1 yr of abstinence from tobacco
- Another gives staff a free day off, another ED takes their staff out to lunch when they have 30 days off tobacco



## Policy Examples

- Clients
  - Assess for tobacco dependence immediately
  - Mandate cessation classes or integrate tobacco addiction treatment into the general curriculum
  - No smoke breaks between/during groups
  - No smoking on the grounds

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It is important to have policies in place

## Stages of Change



- Widely used in substance abuse treatment programs today as a theoretical model/framework.
- Smokers relate best to interventions that are drawn from the stage of change that they are currently in

## Stages of Change



- Pre-contemplative
- Contemplative
- Preparation
- Action
- Maintenance
- Relapse

## Motivational Interviewing



- MI is used in both substance abuse treatment and in smoking cessation settings
  - establishes a positive, non-confrontational, empathic relationship with clients that facilitates and guides, but does not direct the client



## Motivational Interviewing



- Encourages clients to identify their ambivalence about smoking
- Builds internal motivation for change
- Counselors
  - reflect back client's statements,
  - avoids getting into confrontations or trying to break down denial
  - Rewards/enhances statements about change and growth

## Just Like Other Drugs...

- Nicotine withdrawal symptoms include irritability, craving, cognitive and attention deficits, sleep disturbances, and increased appetite.
- Symptoms may begin within a few hours after the last cigarette, quickly driving people back to tobacco use.
- Symptoms peak within the first few days of smoking cessation and may subside within a few weeks

## A Long Process



- Step by Step Process
- Do not expect staff and clients to quit smoking today
- Consider tobacco use an addiction issue to be addressed
- Embrace a more comprehensive approach to treatment that addresses *all* addictions

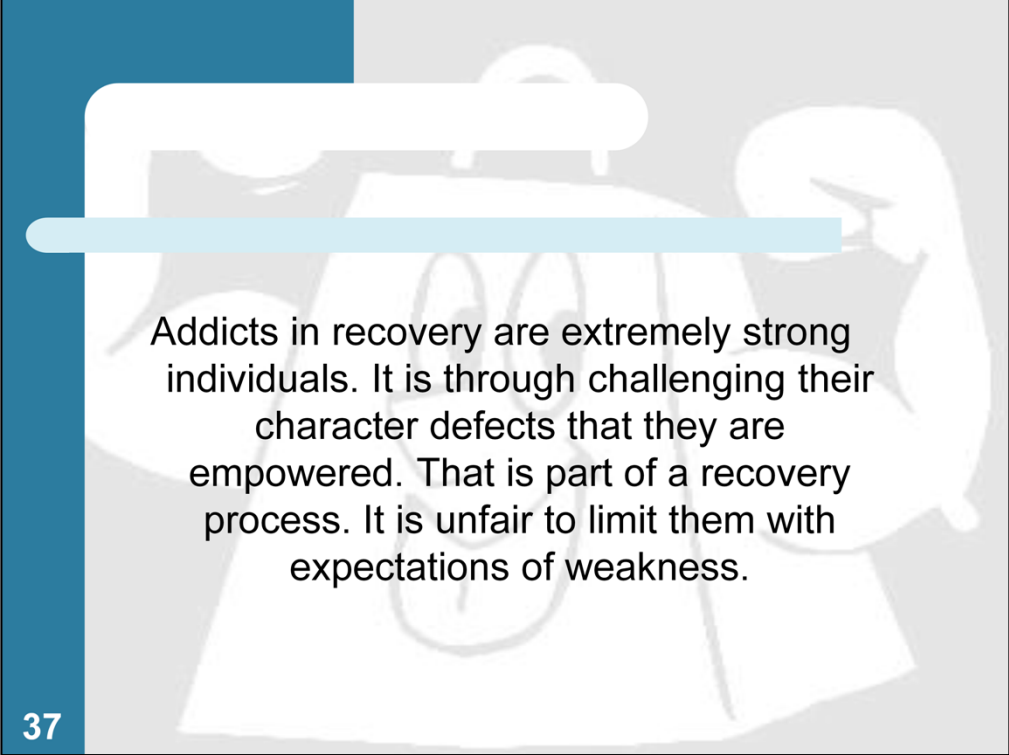
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•**State** alcohol & drug programs in NJ, TX, WA, TN, the *Dakota's* and even Napa County

- have **integrated policies** regarding tobacco use and treatment
  - into their **licensing and certification** requirements.
  - SUGGEST CA TO DO THIS ALSO**

## NAADAC's Position on Tobacco

- NAADAC recommends that all patients presenting for substance abuse services be screened and assessed for tobacco use
- NAADAC further recommends that tobacco dependence be included in the treatment plan for every patient to whom it applies. Furthermore, discharge plans should address all unresolved problems, including the use of tobacco, identified at admission or during treatment.



Addicts in recovery are extremely strong individuals. It is through challenging their character defects that they are empowered. That is part of a recovery process. It is unfair to limit them with expectations of weakness.

## The Bottom Line!



Clients should be given the opportunity to embrace recovery from all forms of substance abuse in a treatment setting.

## Tobacco IS an Issue!

- Alcohol & drug programs in NJ, TX, WA, TN, ND, SD, CA, MN and others have begun to include tobacco treatment in their programs
- *NAADAC, The Association for Addiction Professionals*
  - adopted a Position Statement on Nicotine Dependence (6/21/01)
- *The American Society of Addiction Medicine (ASAM)*
  - Adopted a Policy Statement regarding Nicotine and Addiction (4/20/88)

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- NAADAC/AAP (Ass. for Addiction Professionals)
  - Recommends all patients be screened and assessed for tobacco and a diagnosis be made in the the patient's chart using DSM-IV or ICD 9 criteria
  - Tobacco dependence should be included in tx plans and discharge plans should address all unresolved prob.'s including use of tobacco
  - Encourages provision of tobacco ed within the addictions tx milieu
    - At a minimum, tobacco specific didactic sessions can be added to the existing AOD, HIV/AIDS ed and health curriculum
  - Encourage tobacco ed for family members so they can support and encourage recovery from tobacco dependence for patients
  - Acknowledge that counselors need to demonstrate healthy lifestyles through role modeling. As field moves toward treating tob dependence, they recommend that staff not be identifiable as tob users during working hours or when representing facility.
  - Train addictions specialists to regard tob dependence as a health issue that requires parity of tx with AOD.
- ASAM represents addiction concerns of the AMA (ASAM amended there statement on 9/25/89 and 4/17/96) [www.asam.org.nic/nicotine.htm](http://www.asam.org.nic/nicotine.htm)
  - ASAM supports the dev of policies & programs which promote the

prev and tx of nicotine addiction

- Supports training management of nicotine dependence to all providers, including drug & alcohol counselors.
  - Nicotine dependence needs to be diagnosed and treated along with other drug dependencies.
- A particular treatment center in Oakland, CA has adopted comprehensive policies regarding tobacco use
- Include tobacco use as a vital sign
  - Smoking is not only prohibited amongst their adolescent clientele, but even visitors are not permitted to visit if they smell of smoke
  - developed a comprehensive Nicotine Dependence Treatment Training



# Tobacco Dependence in Substance Abuse Treatment

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