

# Helping Behavioral Health Clients Succeed with Tobacco Treatment Medication

## Tobacco Treatment Training Program, LifeLong Medical Care

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## Our Program

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The Tobacco Treatment Training Program **helps behavioral health providers in Alameda County improve their tobacco use interventions**

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Contracted with Alameda County Behavioral Health Care Services (ACBH) to support **ACBH-funded substance use disorder and mental health treatment providers**

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Provide **free training and technical assistance** to healthcare staff and leadership

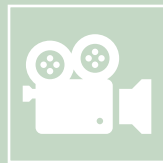
# Housekeeping



Upon joining, all participants will be automatically muted. Participants are encouraged to turn their cameras on.



Please change your Zoom name to your first and last name and your organization/agency (e.g., "Jane Doe, LifeLong Medical Care").



This webinar is being recorded. The link to the recording will be shared after the training, along with a PDF of the slides.



Please use the Zoom Chat to ask questions. We will address questions during the Q&A period at the end of the training.

## Continuing Education Reminders

This training is eligible for **one (1.0) hour** of continuing education credit for **LMFT's, LCSW's, LPCC's, LEP's, and SUD Counseling Staff** as required by the California Board of Behavioral Sciences and by the California Consortium of Addiction Programs and Professionals (CCAPP).

To receive CE credit, attendees must be **present for the entirety of the training and complete the post-test**, which will be provided after the Q&A section.

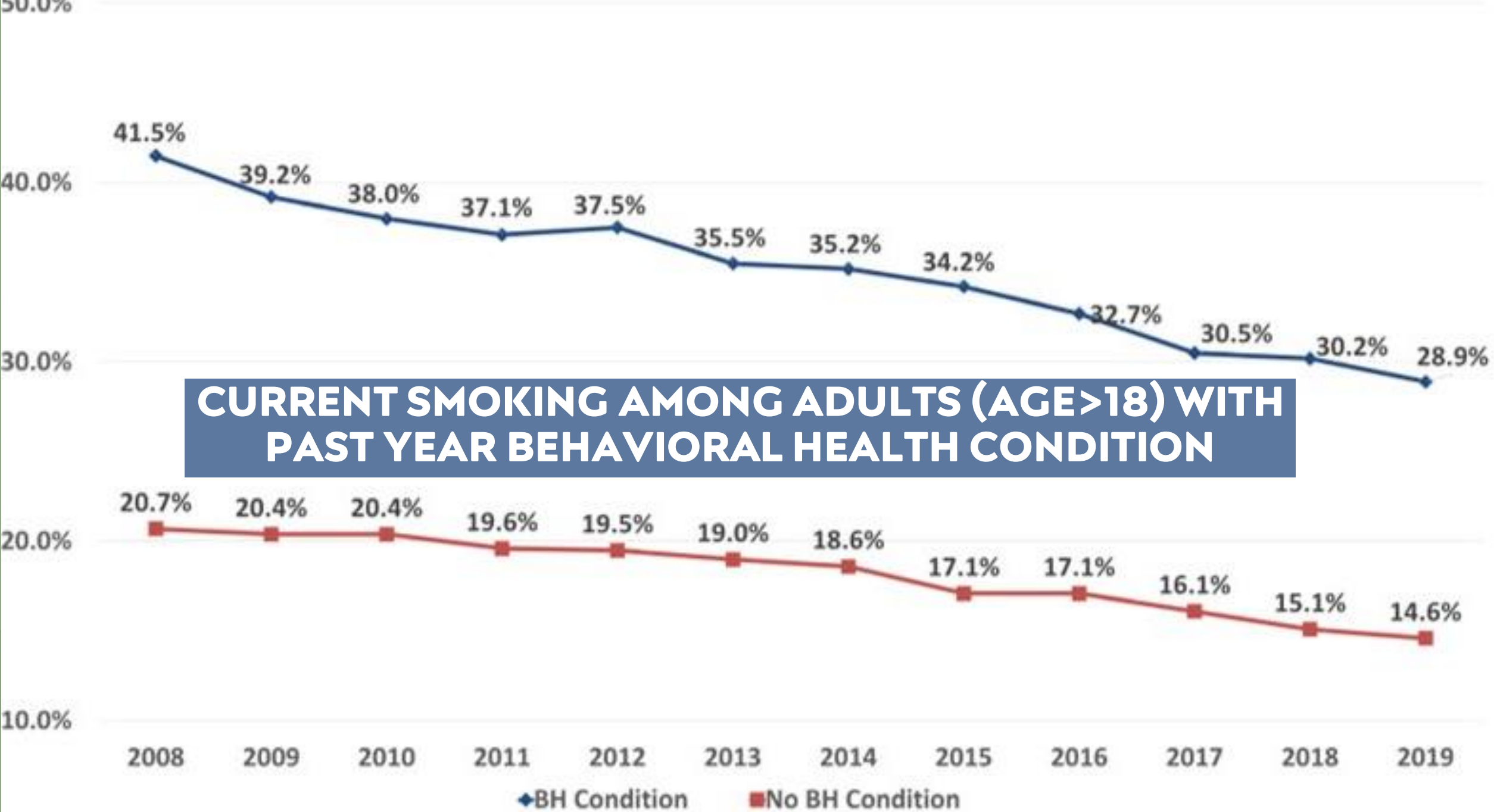
Attendees who do not qualify for CE credit are eligible to receive a course completion certificate, also conditional on full attendance and completion of the post-test.



# Who is in the room?

1. First Name and Job Title
2. Any experience talking about tobacco treatment medications as a clinician or counselor



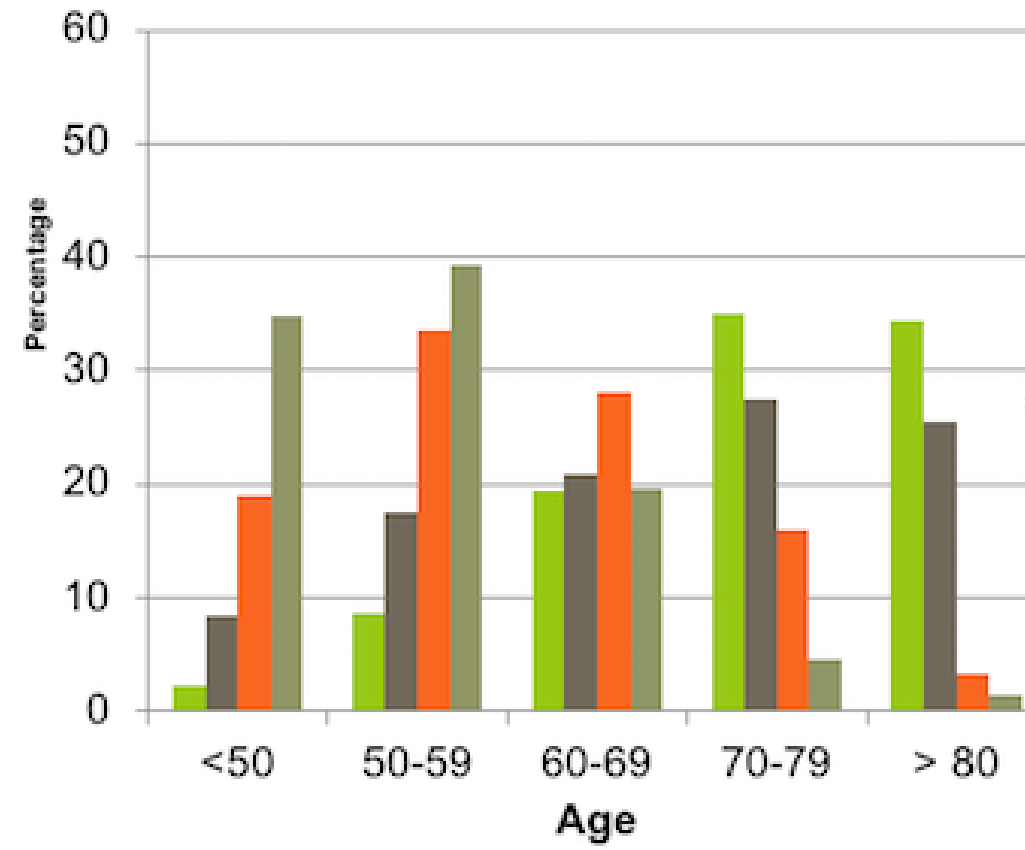
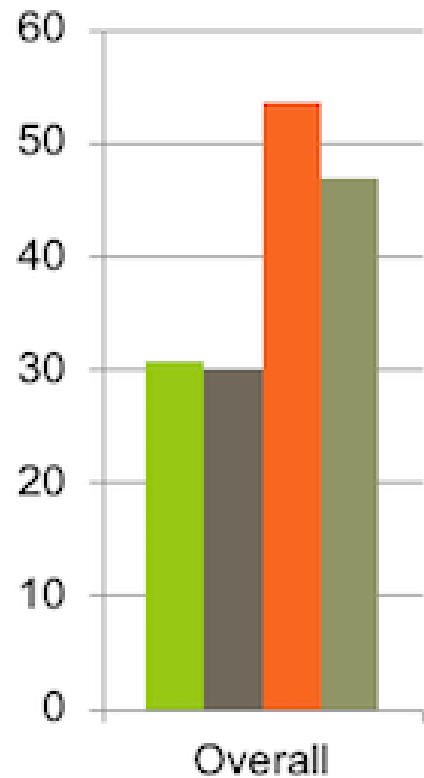


**50% of deaths in  
schizophrenia, depression  
and bipolar disorder  
attributed to tobacco**

*Callaghan et al., 2013*



# Oregon death rates due to tobacco use



- General population
- Mental health only
- Substance abuse only
- Dual diagnosis

**Smoking Keeps  
Consumers from  
Achieving Recovery:  
Being Financially  
Stable  
Getting Jobs  
Securing Housing**



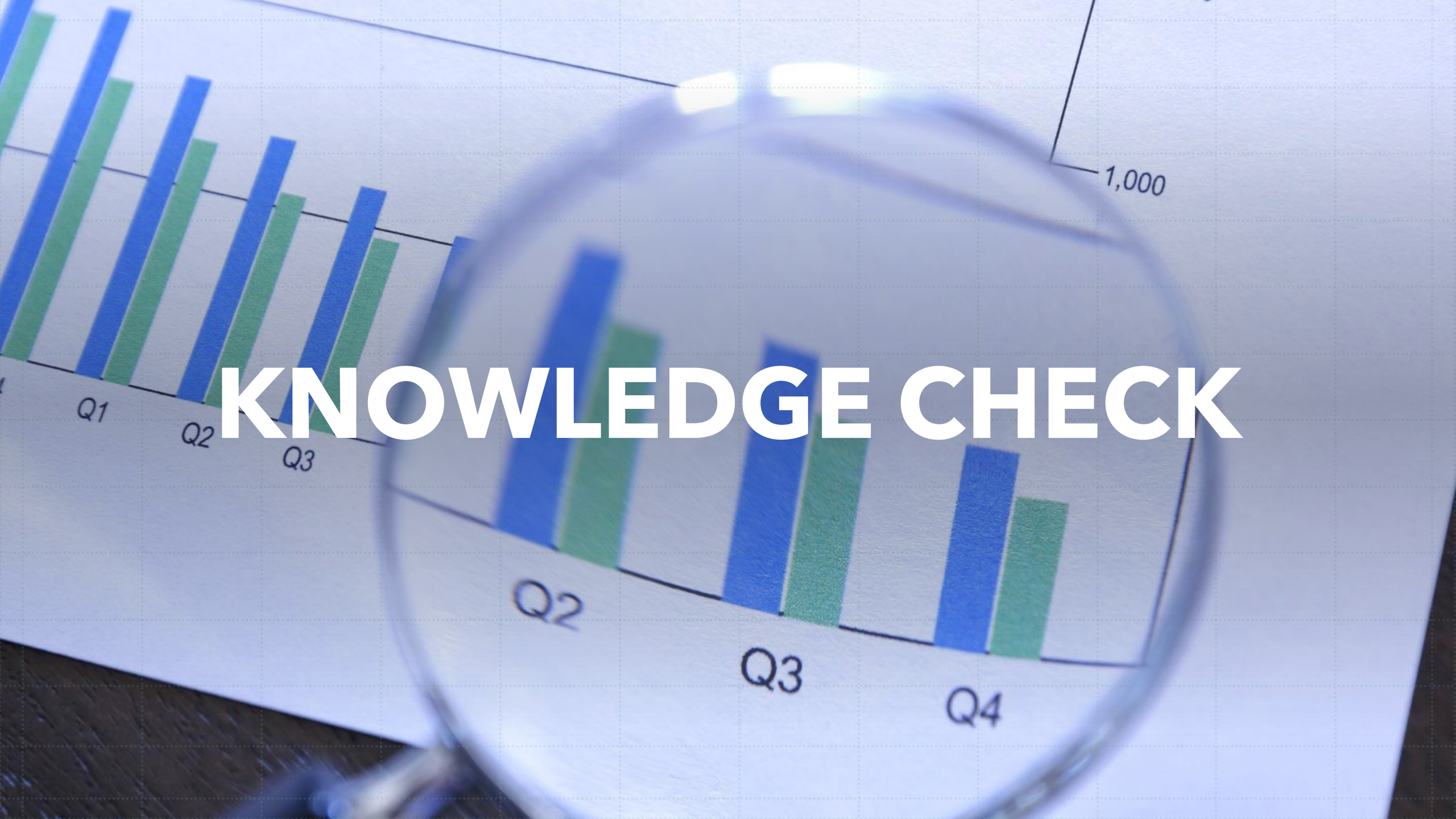
# Improved Mental Health with Quitting Smoking

Meta Analysis of 26 studies, including 6 studies in those with psychiatric conditions

Table 1 | Effect of smoking cessation on mental health. Sensitivity analysis after Newcastle-Ottawa scale)

Outcome	No of studies included	No of studies excluded	Star	Effect
Anxiety	4	0	↓	-0.37 (-
Depression	9	1	↓	-0.29 (-
Mixed anxiety and depression	4	1	↓	-0.36 (-
Psychological quality of life	4	4		0.17 (-
Positive affect	1	2		0.68 (-
Stress	2	1	↓	-0.23 (-

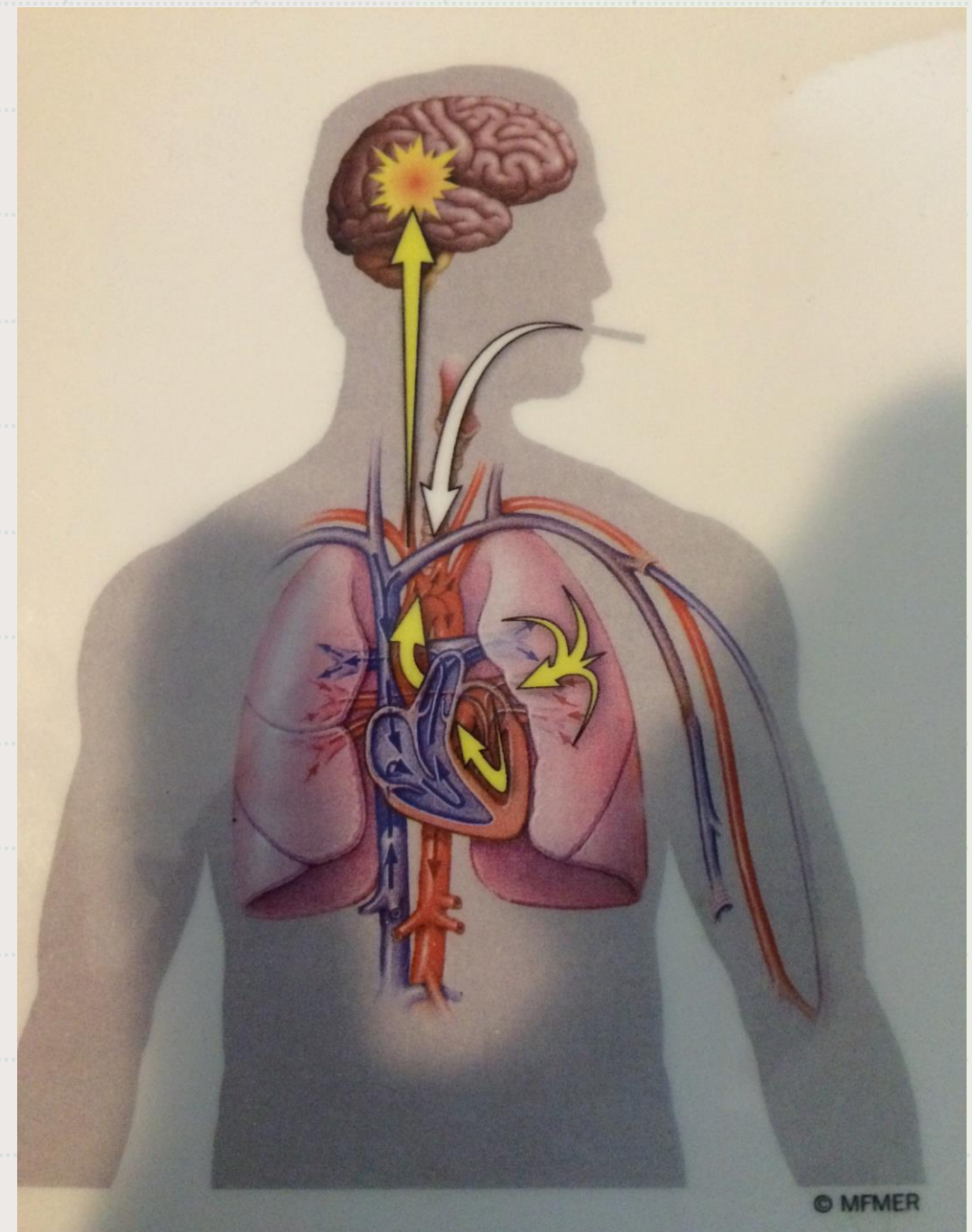
# KNOWLEDGE CHECK

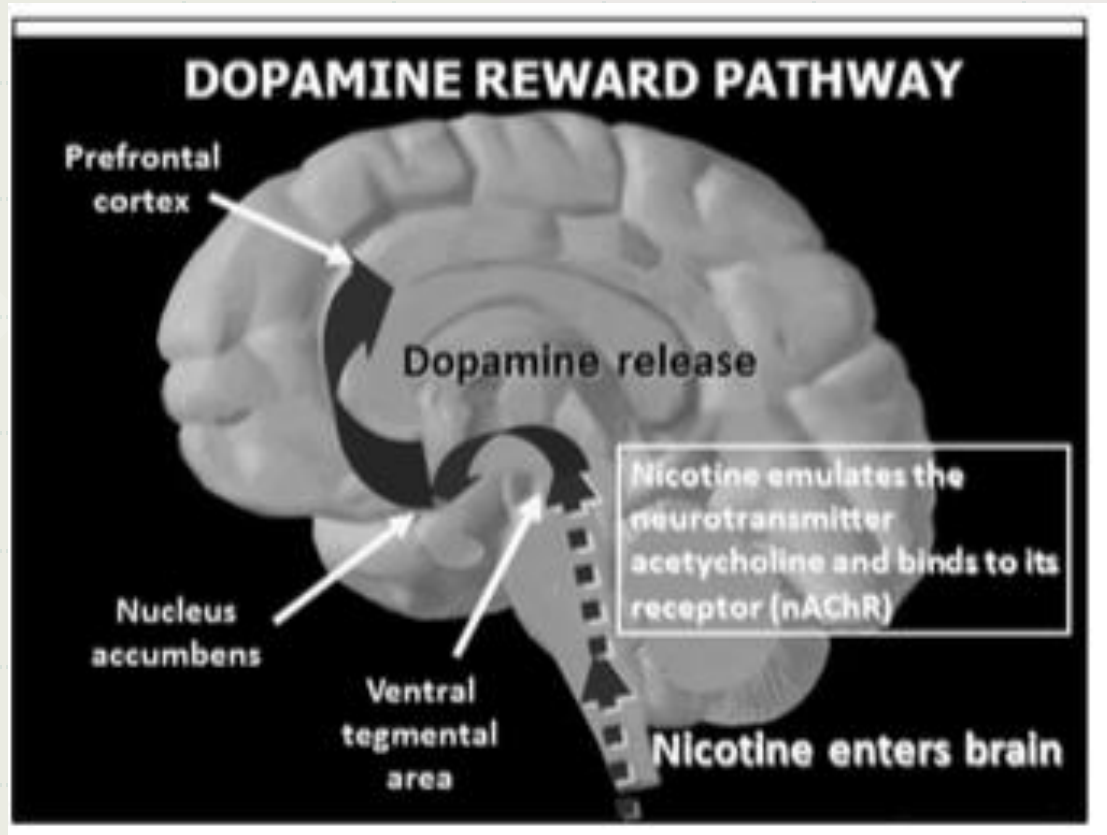


# Factors that Influence Health Behaviors in African Americans & The Need for Cultural Humility

- Perceived Discrimination
  - Medical Distrust
    - Race Discordance
      - Poor Communication

**Nicotine goes  
from the *airway*...  
to the *lungs*...  
to the *heart*...  
to the *brain*...  
in just 7 seconds.**

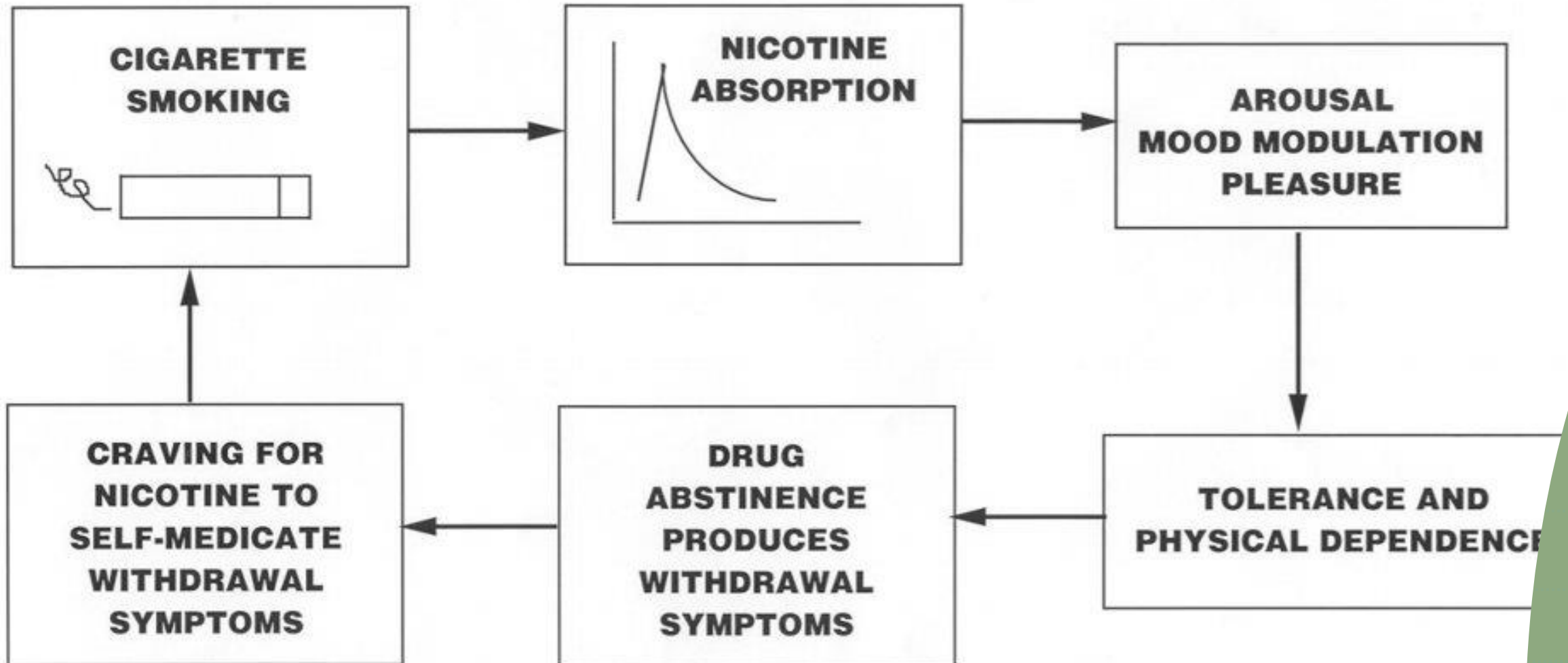




In 7 seconds, nicotine from a cigarette reaches the brain and triggers the release of dopamine in the nucleus accumbens.

E-cigarettes' pharmacokinetics are similar.

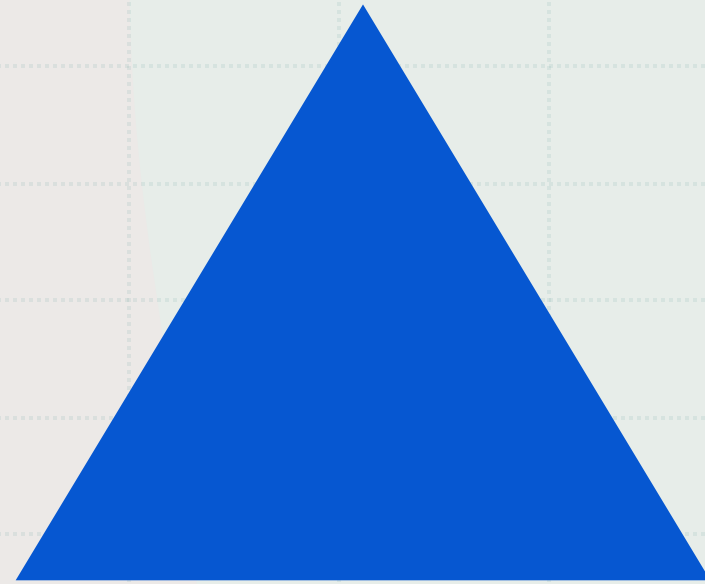
## NICOTINE ADDICTION CYCLE





# Core Components of Tobacco Treatment

**\*Medications**



**\*Counseling**

**\*Support**

\*When appropriate

# People who smoke are *4 times more likely* to use medication than counseling to help themselves quit.

- Evidence-based tobacco treatment = combination of medication and counseling
- *Less than one-third* of adult cigarette smokers use quit counseling or medications approved for tobacco treatment by the Food and Drug Administration when trying to quit smoking.<sup>1</sup>
  - In 2015, 31.2% of adult smokers (7.6 million) reported using counseling or medication when trying to quit.<sup>2</sup>
  - In 2015:
    - 6.8% of adult smokers (1.7 million) reported using counseling;
    - 29.0% (7.1 million) reported using medication; and
    - 4.7% (1.1 million) reported using both counseling and medication when trying to quit.<sup>2</sup>

# Smoking Cessation Services in Substance Use Disorder Treatment

- Substance use disorder treatment is well-positioned to offer smoking cessation services
- Gaps in treatment exist

California	
Screening	52%
Counseling	42%
Tobacco-free grounds	22%
Cessation Medication	20%
Pharmacotherapy	16%

# Smoking effects medication & impacts psychiatric care

## Drug levels decreased by smoking:

- Antidepressants: Amitriptyline, Nortriptyline, Imipramine, Clomipramine, Fluvoxamine, Trazodone
- Antipsychotics: Fluphenazine, Haloperidol, Olanzapine, Clozapine, Chlorpromazine (Williams & Hughes 03)
- Similar effect on caffeine

Clients who smoke get lower blood levels of these medications than those who do not

- This effect takes about 3 weeks to show up - then dose generally needs to be lowered so clients are not "zoned out"

# NICOTINE WITHDRAWAL EFFECTS

- Irritability/frustration/anger
- Anxiety
- Difficulty concentrating
- Restlessness/impatience
- Depressed mood/depression
- Insomnia
- Impaired performance
- Increased appetite/weight gain
- Cravings



Most symptoms manifest within the first 1-2 days, peak within the first week, and subside within 2-4 weeks.

Other effects include coughing, dizziness, depression, tightness in chest, and hunger

# Pharmacotherapy

## Behavioral health clients with TUD:

- Most will need medication to quit
- May need higher doses, longer duration of treatment, and combination of medications

# The Best Treatment for Tobacco Dependence

## - Approximate Efficacy at 6 Months -



Self quitting (aka Cold Turkey): 5%



Physician Advice: 10%



Group or Individual Counseling: 20%



Medication: 20%



**Combination medication + counseling: 35-40%**

# How successful are people at quitting after 6 months? - medication only -

- **Self quitting:** 5% - **Physician Advice:** 10%
- **Placebo:** 13.8%
- **Nicotine patch:** 6-14 weeks 23.4%
- **Bupropion/Zyban:** 24.2%
- **Patch + Paxil or Effexor:** 24.3%
- **Patch + Zyban:** 28.9%
- **Varenicline/Chantix:** 33.2%
- **Nicotine patch >14 weeks + gum or spray:** 36.5%



# More than One Way to Quit Smoking

7 FDA-APPROVED MEDICATIONS FOR TOBACCO TREATMENT

CONTAINS NICOTINE		How to Use	How Often (Frequency)	How it Helps You
Patch		Worn on skin	1 patch a day	Provides continuous nicotine all day
Gum		Chew then "park" between cheek & gums	Up to 24 pieces a day	Quick way to relieve cravings
Lozenge		Dissolves in mouth	Up to 20 pieces a day	25% more nicotine than gum; has different flavors
Inhaler		Puff in by mouth	1 cartridge every 1-2 hours, up to 6-12 cartridges a day	Mimics inhaling a cigarette/vape
Spray		Spray in nose	At least 8 sprays per day	Delivers nicotine into your system fastest
DOES NOT CONTAIN NICOTINE				
Pills	Bupropion SR 	Ingest by mouth	1-2 pills per day <i>(Ask your provider about daily dosage use)</i>	Helps prevent relapse and weight gain
	Varenicline 			Stops nicotine cravings

Your insurance may cover these medications. Ask your doctor if using 2 or more medications may be right for you.



# Patient Info Sheet & Coverage

(Alameda County Tobacco Control Coalition)

# Nicotine Replacement Therapy: Rationale for Use

- Reduces physical withdrawal from nicotine-help client understand how withdrawal causes cravings
- Eliminates the immediate, reinforcing effects of nicotine that is rapidly absorbed via tobacco smoke
- Allows patient to focus on behavioral and psychological aspects of tobacco cessation
- *Note: Patient should consult doctor prior to beginning any NRT.*

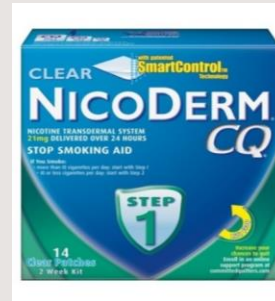
**Use of NRT products approximately doubles quit rates.**

*Generally does not cause addiction due to slow absorption*

# Types of Nicotine Replacement



**LOZENGE**



**PATCH**



**GUM**



**INHALER**




**SPRAY**

# Nicotine Patch



# Nicotine Patch

- Nicotine replacement is VERY SAFE
- **Dosages:** 7mg, 14mg, 21mg
- Clients are already using nicotine
- Smoke with patch may need  NRT (patch, gum, lozenge)
- No new medication interactions
- Coach about just absorbed through skin
- Only use once a day in am (before smoking)



# Patch - Dosing Guideline

- Remember tobacco math: 20 cigarettes in a pack, 1 mg nicotine per cigarette
- Vaping: Go by mgs of nicotine in a cartridge and how long it takes for the client to vape the entirety of the cartridge

## PATCH

21 mg, 14 mg or 7 mg

Dose: 1 patch every 24 hrs

Start: 21 mg patch if  $\geq 10$  cig/day  
14 mg patch if  $< 10$  cig/day

Duration: ~8 weeks to up to 6 months

# Pitfalls of Nicotine Patch

- Too much can cause nausea - reduce dose
- Still having withdrawal symptoms - increase dose
- Vivid dreams (-) remove at night (+) continue at night
- Patch falling off - may need to tape it on
- Rash in patch's location - rotate 14 different spots; use topical hydrocortisone cream

# Short-Acting Nicotine Gum

- Gum comes in 2mg and 4 mg
- 4mg for more addicted- those who smoke within 30 minutes of awakening
- Comes in plain and flavors- most prefer mint or fruit but must be on scrip
- Must use chew and park method or does not work/upsets stomach
- Challenging for those with dentures, braces, or missing teeth
- Can be used in combo with nicotine patch, typically when the client is having breakthrough cravings



# Short-Acting Nicotine Lozenge

- Lozenge comes in 2 mg and 4 mg
- 4 mg for clients with high levels of addiction = those who smoke within 30 minutes of awakening
- Lozenge comes in plain and flavors - most clients prefer mint or fruit, but must be on script
- Use "suck and park" method

# Nicotine Lozenge & Gum

- Lozenge and gum can be used in combination with the nicotine patch, typically when the client is having breakthrough cravings
- When lozenge or gum are used alone, they are generally used according to a schedule that decreases the reflex to have nicotine when the client has a craving
- In the above situation, they are typically used for 2-6 months

# KNOWLEDGE CHECK



# Explanations for treatment failures with NRT



**Used** patch for 5 days - no cravings - decided they did not need it anymore and relapsed (urge clients to finish recommended course)



Smoked in AM before applying the patch



NRT too low --> cravings or NRT too high --> nausea



Chewing gum like regular gum instead of using the "park n' chew" method



Discontinued patch due to rash (can rotate patch, pretreat or switch patch)



## COMBINATION PHARMACOTHERAPY

Regimens with enough evidence to be 'recommended' first-line

### ■ **Combination NRT**

Long-acting formulation (patch)

- Produces relatively constant levels of nicotine

**PLUS**

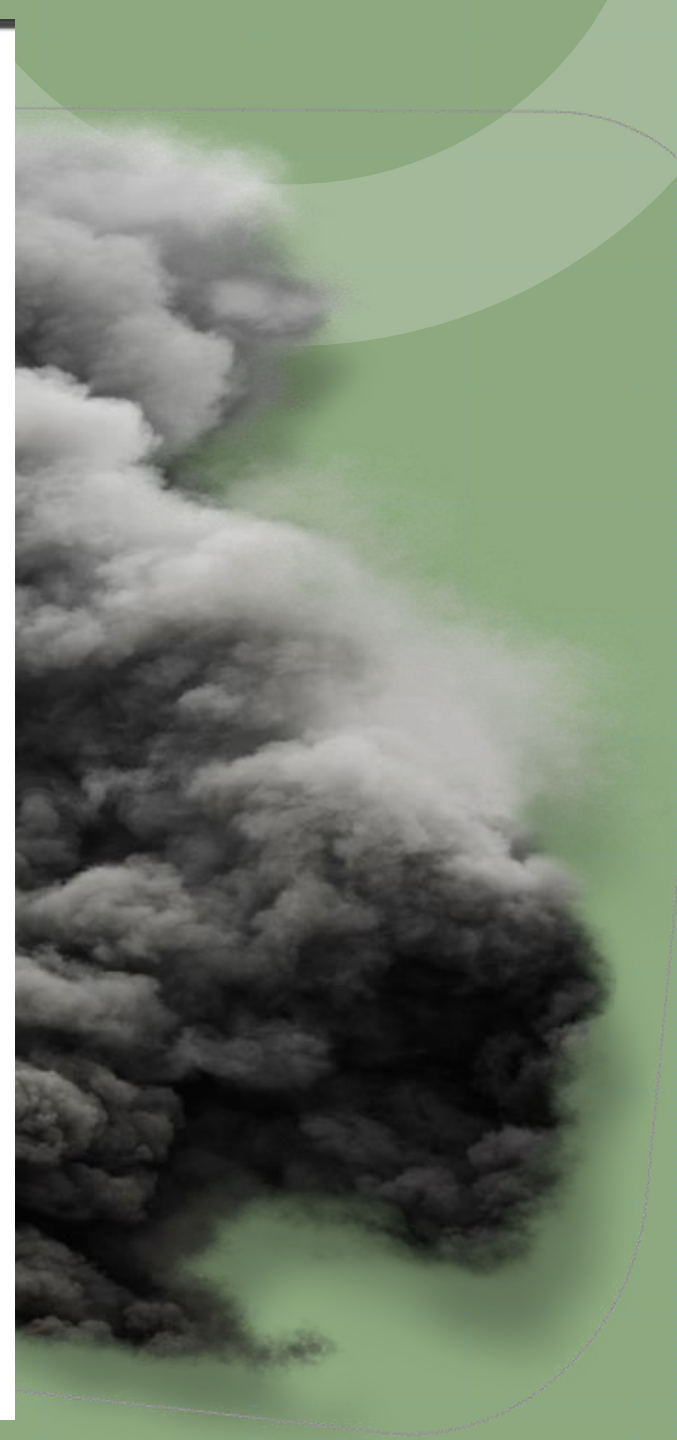
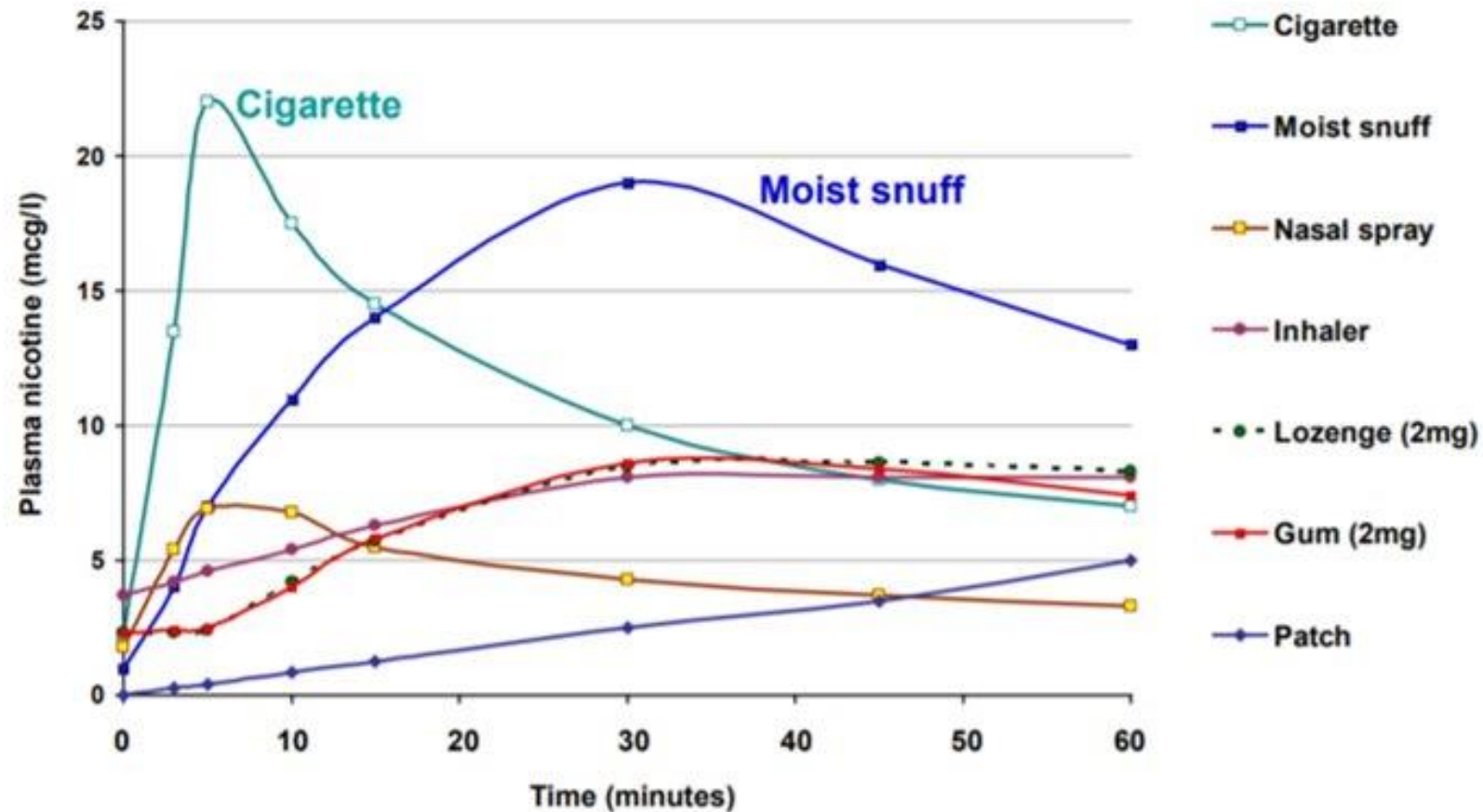
Short-acting formulation (gum, inhaler, nasal spray)

- Allows for acute dose titration as needed for nicotine withdrawal symptoms

### ■ **Bupropion SR + Nicotine Patch**



# PLASMA NICOTINE CONCENTRATIONS for NICOTINE-CONTAINING PRODUCTS



# Reduce to Quit Strategy

- For patients who don't want to quit but are willing to use nicotine replacement to reduce their smoking.
- Prescribe patch in usual dosing for the # cigarettes smoked. Follow up closely - WILL decrease cigs & increase quit rate.

# Two other NRT which are not OTC but instead require prescription

Hard to get on Medi-Cal, need PAR

## Nicotrol Inhaler



## Nicotrol Nasal Spray





# Other Short-Acting Nicotine Replacement Therapies

- Harder to get because they require prior authorization request (PAR)
- Prescription only
- **Inhaler** - hand to mouth - conspicuous - suck to back of throat - lots of sucking to get proper dose
- **Nasal Spray** - fast acting - more addictive potential - very uncomfortable first doses due to coughing and sneezing - supervise first dose in session - improves overtime - do not inhale the spray
- Avoid/exercise caution in those with significant reactive airway disease

# Medication as a Relapse Prevention Tool

- Short acting nicotine replacement, particularly gum or lozenge, is frequently recommended to be carried at all times for the first 6-12 months after quitting to use if serious urges to smoke come up
- It is important to pair this with encouragement to use other relapse prevention tools, like phone calls, avoiding risky situations, etc.
- Emerging use of NRT for reduce to quit VERY IMPORTANT - Use NRT to reduce smoking BEFORE quitting. Use the same dose as if planning to quit.
- Rate of smoking will go down if they use it
- Practice quits

# Non-NRT Tobacco Treatment Medications

**Both started 1 week before quitting - one standard dose adjusted for side effects as needed**

## **Bupropion SR or**

**XL** Contraindication: seizure disorders



Likely works by decreasing breakdown of dopamine

## **Varenicline or Chantix**

Contraindication: Severe GI problems



Works by partially blocking nicotine receptors and partially stimulating nicotine receptors

# How does bupropion/Wellbutrin work?

- It is not NRT
- It increases dopamine by decreasing dopamine breakdown
- Antidepressant - not used as such; can help a depressed person who smokes cigarettes
- Started a week before quitting
- 150 mg 1/day x 3 days, 150 mg 2/day x 4 days → then quit
- Standard dose
- Can be used in combination with nicotine patch

# Explanations for treatment failures with Bupropion

- Irritable with Bupropion (lower dose)
- Insomnia with Bupropion (lower dose) or take 8 hours from first dose but take first dose super early
- Not doing any counseling
- No advance planning
  
- All are opportunities to encourage another quit attempt by listening to what the client is saying  
& motivational interviewing

# Varenicline/Chantix

- First ever non-nicotine medication designed for smoking cessation
- Alpha 4 Beta 2 partial agonist
- Blocking effect - competitive agonist makes nicotine less effective
- .5 mg qdx3; .5mg BID x4; 1mg bid x 3 months.
- Begin the week before quit date (OK to take for 35 days before quitting)
- Black box warning removed (caution with severe depression & suicidality)
- May be extended an additional 3 months if successful (those who continue experience 30% less relapse at 12 months)

# Varenicline: Mechanism of Action

- Varenicline (Chantix) is the only pill developed to treat tobacco dependence
- Varenicline/Chantix is not NRT. It acts as a partial agonist/antagonist on the nicotinic acetylcholine receptors:
  - Provides some nicotine effects to ease the withdrawal symptoms
  - Blocks the effects of nicotine from cigarettes if they resume smoking

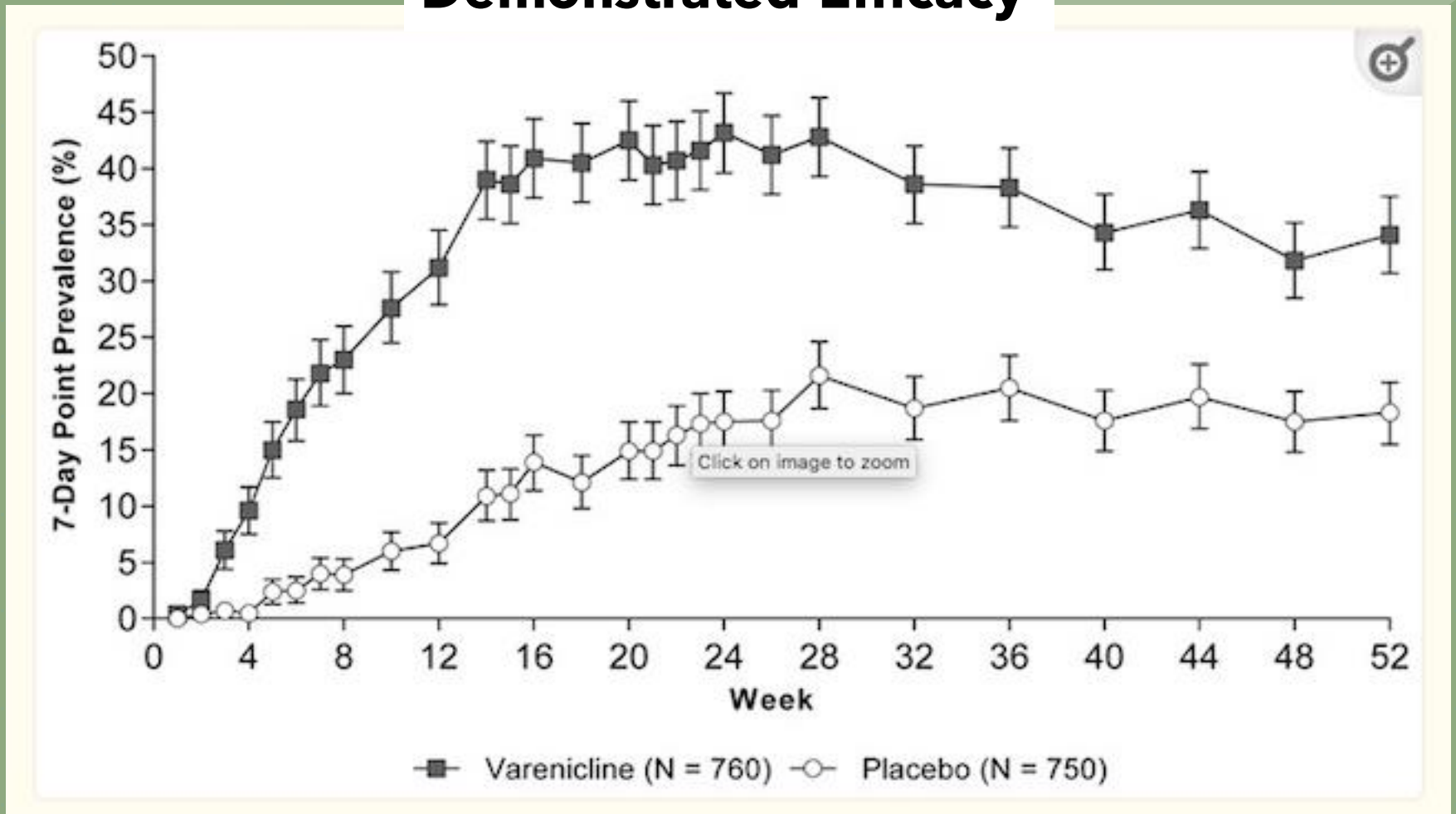
# Nicotine Patch + Varenicline - Promising New Treatment

	Cont Abstinent 12 WEEKS	Cont Abstinence 24 WEEKS
<b>V + N</b>	<b>55.4%</b>	<b>49 %</b>
<b>V + P</b>	<b>40%</b>	<b>32.6%</b>



## Demonstrated Efficacy

Recently researched treatment - "reduce to quit" with varenicline



# **The two most effective FDA approved tobacco treatment medication regimes (to be used with counseling, ideally)**

1. Varenicline alone
2. Nicotine patch combined with short acting - gum or lozenge

If available, can combine with short acting inhaler or nasal spray

**The most effective medication plan is the one the client can get and will use**

**This may be impacted by many factors, including past experiences with meds**

# Duration of Treatment

**Typically 3-6 months - not forever**

**Sometimes multiple years or indefinitely**

**Encourage clients to complete treatment**

**If a client cannot successfully transition off treatment, long-term treatment is better than smoking**

# Medication for Adolescents and Other Special Populations

- If an **adolescent** is smoking or vaping non-stop, NRT likely helpful. Will need to be prescribed by doc if under 18, consistent with American Academy of Pediatrics (AAP) practices.
- Replacement is not recommended for someone who vapes a little bit off-and-on but will help quickly for vaping non-stop.
- Bupropion is not approved for tobacco treatment in children and teens
- Varenicline not approved for 16 and under
- Should be available confidentially through sensitive services Medi-Cal
- **Pregnancy** - no meds preferred; if necessary, consult OB
- **Light smokers** - seems meds are likely helpful if needed
  - Caucasian light smokers twice as successful with varenicline as with placebo (Ebbert et al., 2016)
  - Cox et al., 2022 demonstrated with a large group of African American heavy and light smokers that Varenicline was 2x better than placebo in light smokers and 3x better in heavy smokers

# Indicators of Degree of Addiction & the Trouble with Rules

- Number of cigs per day  $> 10$  now or recently
- Smoking 5-30 minutes after awake
- Waking at night to smoke
- Butting out cigs
- Previous trouble with smoke-free rules

# Coverage Issues



Medi-Cal formulary includes:

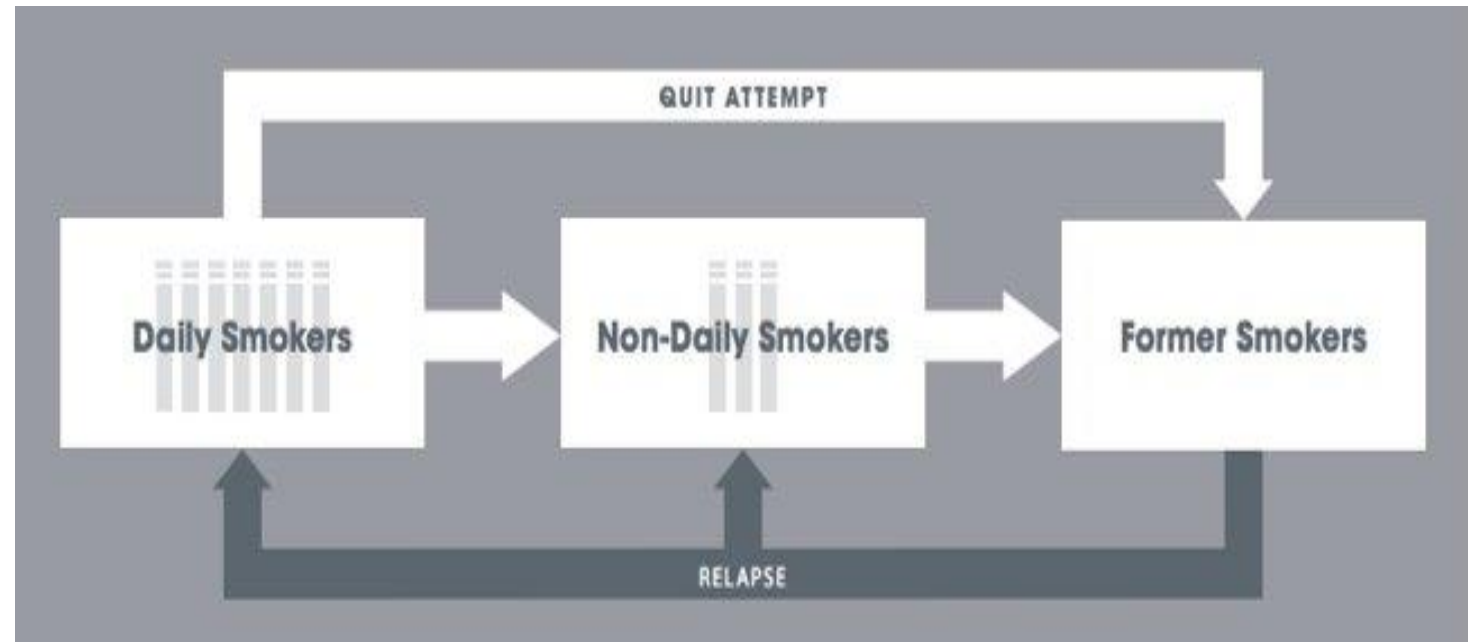
- Patch, gum, lozenge OTC; need scrip for Medi-Cal
- Bupropion and varenicline need scrip
- Nicotine inhaler and nasal spray require scrip + PAR

# Special Issues for Residential Programs

## Much easier for clients to quit in a completely tobacco-free program - why?

- Most can quit in tobacco-free program with the patch alone due to lack of smoke (protects re: begging for gum or lozenge)
- Sometimes getting prescriptions for NRT in residential programs is difficult
- Consider standing order by Medical Director delivered by staff following a protocol to screen clients appropriately and follow standing order of physician
- Support clients in contacting the helpline if eligible for free NRT (Native Asian speakers, pregnant, or caring for child <5 years old)
- Alternatively, work with a local community clinic with a protocol

- Find out what helped the client stay tobacco-free
- Provide encouragement when someone relapses
- Provide options:
  - Medication "preloading" (trying out)
  - Quitting for a day with meds
  - Gradual reductions with meds



# Building the Quitting Machine

**Count every quit attempt or step toward quitting as a success!**



# Summary

How FDA approved tobacco medications work and are used was presented and discussed with relevance to ways to help clients/patients to get thru challenges.

How NRT, Bupropion and Varenicline can be used for combination therapy and reduce to quit.

Presenter: Cathy McDonald, MD,  
MPH





**Questions?**

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