

# ANTHC Clinical ECHO Series

## Approved Provider Statements:

ANTHC is accredited by the Washington State Medical Association to provide continuing medical education for physicians.

ANTHC is approved as a provider of nursing continuing professional development by the Montana Nurses Association, an accredited approver with distinction by the American Nurses Credentialing Center's Commission on Accreditation.

AKPhA is accredited by the Accreditation Council for Pharmacy Education as a provider of Continuing Pharmacy Education.

## Contact Hours:

ANTHC designates this Live/Virtual Activity for a maximum of 12 AMA PRA Category 1 Credit(s)™ for the entire series, provided in 1 credit/session certificates. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ANTHC designates this activity as meeting the criteria for one nursing contact hour credit for each hour of participation up to a maximum of 12 hour(s) for the entire series, provided in 1 contact hour certificates/session attended.

 The Alaska Pharmacists Association (AKPhA) is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. Through a Joint Providership, ANTHC and AKPhA designates this pharmacist activity for a maximum of 1 hours(s) per session. To receive CE credit, participants must be included in attendance record of facilitator/virtual format moderator with the NABP e-profile number including MM/DD birthdate, and complete the evaluation or post session survey. CPE credit will be posted to the online CPE Monitor System within 60 days of activity completion. CPE credit is offered at no charge to ANTHC/SCF employees and AKPhA members. Fees may apply to participants not affiliated with either organization.

Approved for 1 CHAP CE

## Conflict of Interest Disclosures:

None of the presenters and planners for this educational activity have any relevant relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

## Requirements for Successful Completion:

To receive CE credit be sure you are included in attendance record as directed by the facilitator/session moderator, and complete the course evaluation or post session survey via this link: <https://forms.gle/QhwCeGTf4zLNwpBX7>

For more information contact Jennifer Fielder at [jfielder@anthc.org](mailto:jfielder@anthc.org) or (907) 729-1387

# TOBACCO USE DISORDER

Review of management options

Alyssa Rizzuto, MD

AK Family Medicine Residency

# LAND ACKNOWLEDGEMENT

**Take a moment to connect with the physical land on which you stand.**

*In a spirit of truth and reconciliation, we acknowledge that we gather, occupy, and learn on the ancestral lands of the Dena'ina peoples who have persisted and stewarded this land since time immemorial. We acknowledge the painful history of genocide, forced removal, and the attempted erasure of Indigenous identities. We honor, respect, and thank the diverse Indigenous peoples still connected to the land on which we meet.*

*We acknowledge the painful legacy of racism in America against many groups, especially that of black Americans, and that many of our institutions exist due to the labor and talents of those who were enslaved and indentured. We recognize the collective human cost of structural racism and seek to dismantle systems that serve to perpetuate inequity.*

# DISCLOSURES

- None

# OBJECTIVES

- Participants will broaden their understanding of the natural history of tobacco use disorder
- Participants will understand the science and evidence base behind medication assisted treatment (MAT) for TUD.
- Participants will demonstrate knowledge of FDA-approved medications for tobacco use disorder (TUD).

# DIVERSITY OF TUD

Mechanism of delivery, frequency of use, and timing of use in relation to waking are all variables in determining the severity of TUD and assist in dosing regimens for treatment.

**Table 1. Diversity of tobacco products.**

Product	Definition	Types	pH	Nicotine levels
Cigarette	Tobacco rolled in paper for smoking	A typical cigarette weighs <1 g; regular length (70 mm long), king (84 mm), 100s (100 mm), and 120s (120 mm)	Acidic, inhalable, pH 5.5–6	Average in rod, 13.5 mg (range: 11.9–14.5 mg); nicotine yield to the smoker: 1–1.5 mg/cigarette
Cigar	Air-cured, fermented tobacco wrapped in material made at least, in part, of tobacco leaf	Small filtered cigars (0.9–1.3 g tobacco), cigarillos (13–25 g tobacco), and large (premium) cigars	pH 6.5–8.0 inhalable and/or buccal depending on product pH	Nicotine content ranges from 10 to 444 mg and dependent on weight of the cigar
Blunt	Cannabis filled in a hollowed-out cigarillo shell		No pH data available	Nicotine intake much lower than from cigarette or cigar smoking, but, based on animal studies, could enhance rewarding effects of delta 9-tetrahydrocannabinol
Smokeless tobacco	Tobacco inserted between lip and gum or snorted into the nose rather than smoked by the user	Snuff (ground tobacco), snus (ground tobacco in a tea bag-like pouch), chew (shredded tobacco)	Products range from more acidic, pH 5.2–7.1, to more alkaline for greater buccal absorption, pH 7.6–8.6	Nicotine concentrations vary, range of 0.2 to 34 mg/g, the more alkaline products are capable of delivering higher levels of nicotine
Waterpipe/Hookah	Charcoal-heated flavored tobacco passed through a water-filled chamber that cools the smoke	Water tobacco is a mixture of dried fruit, molasses and glycerin, and conventional tobacco leaf	pH 3.8–5.8	Average of 1.13 mg/g and high of 3.30 mg/g for product containing nicotine; nicotine-free for herbal (nontobacco) varieties
Heated tobacco	Electronic devices that heat reconstituted tobacco sticks treated with a glycerin humectant to deliver an aerosol	IQOS, Glo, and Ploom Tech	pH 5.5–6	Nicotine delivery can match that of conventional cigarettes
E-cigarette	Electric devices that produce an aerosol from a liquid that typically contains nicotine, propylene glycol, vegetable glycerin, and flavorings	Cigalikes/e-pens, tank systems, pods/nicotine salts (e.g., benzoate and lactate)	Free base e-liquid: alkaline, pH 7–9; nicotine salts: acidic, inhalable, pH 3.5–6.8	E-liquid nicotine content from 0 to 100 mg/ml. Nicotine delivery can match that of conventional cigarette but varies by device design (heating temperature), e-liquid nicotine content, and user behavior

# IDENTIFYING THE PATIENT/CLIENT

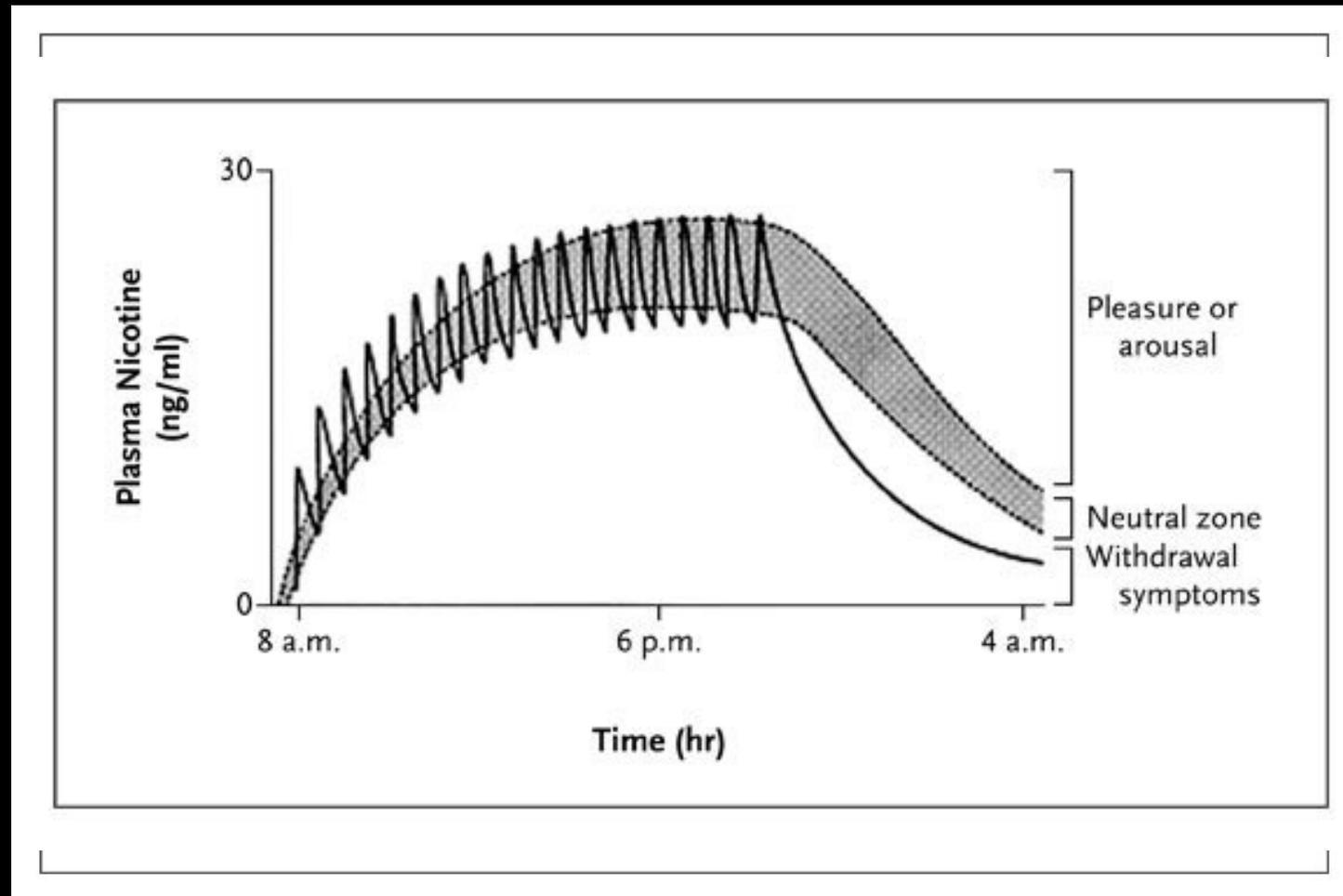
## 5 A's Approach

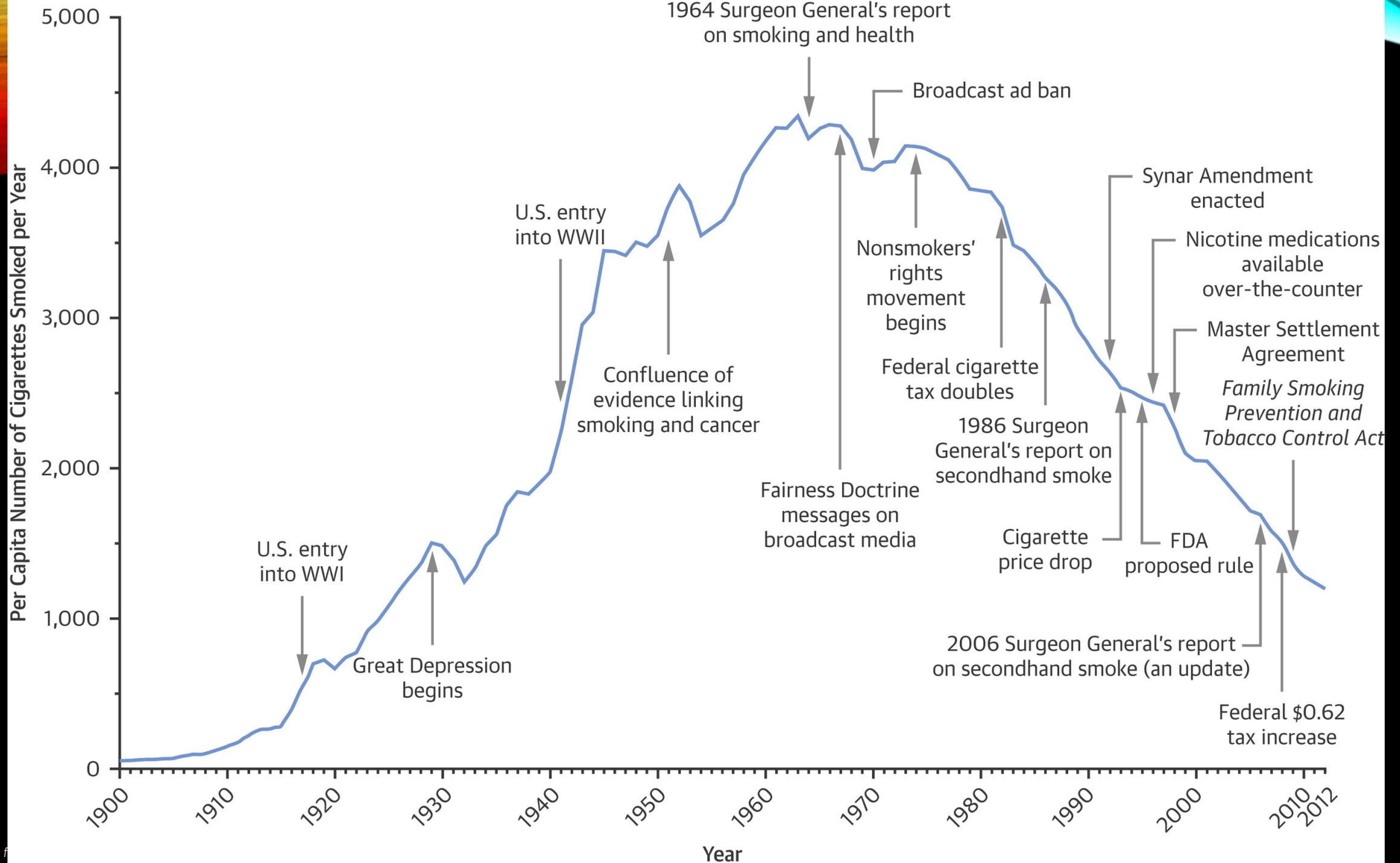
<b>ASK</b>	about tobacco <b>USE</b>
<b>ADVISE</b>	tobacco users to <b>QUIT</b>
<b>ASSESS</b>	readiness to make a <b>QUIT</b> attempt
<b>ASSIST</b>	with the <b>QUIT ATTEMPT</b>
<b>ARRANGE</b>	<b>FOLLOW-UP</b> care

## 5 R's Approach



# NATURAL HISTORY OF TUD





# NRT

Formulation	Dosing	Common Side Effects	OTC?
Patches	>10 cig/day → 21mg starting dose, taper after 6 wks  <10 cig/day → 14mg starting dose, taper after 6 wks	Irritation at patch site, sleep disturbances	Yes
Gum	1 <sup>st</sup> cig w/in 30 min of waking? → 4mg q 1-2h  1 <sup>st</sup> cig after 30 min of waking? → 2mg q1-2h	Oral issues, nausea, heartburn, hiccups	Yes
Lozenge	^^	^^	Yes
Inhaler	10mg cartridge 6-16x/d	Oropharyngeal irritation, sneezing, coughing	No
Nasal Spray	1-2 sprays/nostril/h	Nasopharyngeal irritation, sneezing, coughing	No

# OTHER PHARMACOLOGIC TARGETS

## Varenicline (Chantix)

- Nicotinic receptor agonist
- Initiate 1 wk prior to quit date, titrate and continue for 12 wks
- Side effects: nausea, sleep disturbances, headache

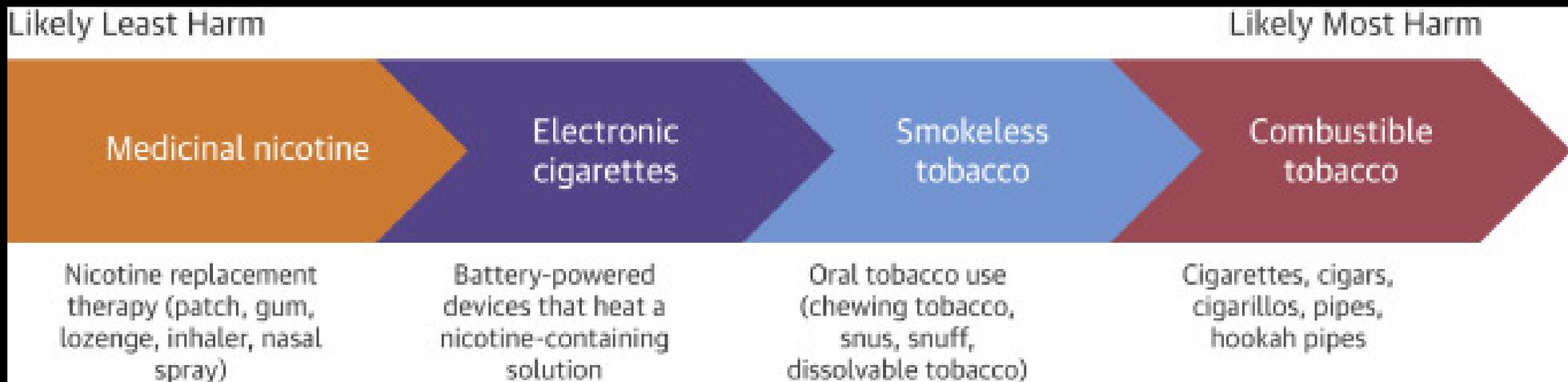
## Bupropion (Zyban)

- DA/NE Reuptake Inhibitor
- Initiate 1-2 wks prior to quit date, maintain 7-12 wks. Up to 6mo maintenance for TUD.
- Side effects: insomnia, lower seizure threshold, dry mouth, nausea, blunted weight gain, anxiety

# FOLLOW UP

- Routine follow up and relapse prevention
  - Encouragement/congratulations
  - Engage in active discussion– “How has quitting tobacco helped you since we last spoke?”
- Relapse management
  - Review the circumstances around the first use after setting the quit date
  - Supportive re-framing
  - Address underlying barriers
- Ongoing follow-up

# HARM REDUCTION



# RESOURCES BEYOND THE OFFICE

- 1-800-QUIT-NOW
  - Free in US
  - Counseling and NRT
- Smokefree.gov
  - Internet-based service
  - EBM guidelines for quitting, tailored readiness assessments, and availability of professional advice with instant messaging and telephone
- SmokefreeTXT
  - Mobile-based service
  - Primarily for encouragement, support, practical advice targeted at young adults
- CDC's Tips

A TIP FROM A  
FORMER  
SMOKER

**ALLOW EXTRA  
TIME TO PUT ON  
YOUR LEGS.**

Brandon, Age 31, Diagnosed at 18  
North Dakota



Smoking causes immediate damage to your body. For Brandon, it caused Buerger's disease, which cut off blood flow and led to amputation. You can quit. For free help, call **1-800-QUIT-NOW**.



U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention  
[www.smokefree.gov](http://www.smokefree.gov)

# QUESTIONS/DISCUSSION

A TIP FROM A  
FORMER  
SMOKER

**RECORD YOUR  
VOICE FOR LOVED  
ONES WHILE  
YOU STILL CAN.**

Terrie, Age 52  
North Carolina



Smoking causes immediate damage to your body. For Terrie, it gave her throat cancer. You can quit. For free help, call **1-800-QUIT-NOW**.



U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention  
[www.cdc.gov](http://www.cdc.gov)

Thank you for joining us today.  
We appreciate your participation and hope  
to see you at the **NEXT ECHO Session:**

You will be receiving a follow up survey that we hope you will complete to help us improve. If you are requesting continuing education credits, you will be required to complete the survey to receive your CEs.

