Goals for this discussion

- Describe key oral and general diseases related to smoked, smokeless and vaping tobacco products
- Discuss methods to promote tobacco-free outcomes
- Identify digital resources and apps to support a brief tobacco intervention
Why Treat Tobacco Dependence?

- Tobacco products negatively impact all aspects of general and oral health including higher risk for oral cancer, periodontitis, tooth loss, poor surgical outcomes, implant failure, xerostomia and caries in children.
- In addition, with the profound impact on both the respiratory and cardiovascular systems, patients who smoke are at a higher risk of experiencing a medical emergency.
- Cancer, heart disease, and stroke—all of which can be caused by cigarette smoking—are among the five leading causes of death among Hispanics.
- Diabetes is the fifth leading cause of death among Hispanics. The risk of developing diabetes is 30–40% higher for cigarette smokers than nonsmokers.

Smoking continues to be the number one preventable cause of death in the U. S. killing more than 440,000 Americans each year.
Treating Tobacco Dependence (cessation)

- Dental and healthcare providers not only have the education, interest and opportunity, but an ethical mandate to offer potentially life saving tobacco cessation information.

- Patients appreciate and expect you to provide comprehensive care.

- “Combined findings from 14 studies including over 10,500 participants showed that tobacco interventions by dental professionals helped tobacco users to quit.” Carr & Ebberr, Chochrane Review 2012
Tobacco-use in the U.S. & World

- 14% of all US adults (34.3 million people):
  - 15.8% of males, 12.2% of females were current cigarette smokers in 2017.

- Cigarette smoking causes more than 480,000 deaths each year in the United States. This is nearly one in five deaths.1,2,3

- Smoking leads to disease and disability and harms nearly every organ of the body.1

- Smoking is the leading cause of preventable death.

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm (accessed 5.25.19)
Hispanics/Latinos and Tobacco Use

- Prevalence of cigarette smoking is higher among Hispanic adults born in the United States than those who were foreign-born.
Smoking can cause cancer almost anywhere in the body:

- Bladder, blood (acute myeloid leukemia), cervix, colon and rectum (colorectal), esophagus, kidney and ureter, larynx, liver, pancreas, stomach, trachea, bronchus, and lung

- Oropharynx (includes parts of the throat, tongue, soft palate, and the tonsils)

*Average annual number of deaths 2000–2004
Source: [CDC SAMMEC, MMWR 2008;57(45):1226–1228.](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a1.htm)
Oral Cancer – Smoking and Alcohol Predispose a Patient to Squamous Cell Carcinoma (SCC)

SCC in the soft palate region

SCC on the floor of the mouth

Images used with permission from Dr. William Crawford, USC School of Dentistry
Periodontal Disease and Smoking

Smoking is one of the most significant risk factors for Periodontal Disease

Smokers have:

- Greater loss of attachment and bone
- Deeper pocketing
- Less reduction in pocket depth after periodontal therapy

“The Academy of Periodontology strongly recommends inclusion of tobacco cessation in periodontal therapy”

AAP Position Paper: Tobacco Use and the Periodontal Patient, 1999
Harm of Smokeless Tobacco-use

Sean Marsee, age 19, just before he passed away from oral cancer cause by dipping snuff. He started using snuff at 12 years old.

Chaw, plug or quid

Resulting lesions

Snuff Dipper’s Keratosis

Photos courtesy of Dr. A. G. Christen, Indiana University School of Dentistry
Oral Harm from E-Cig, Vaping and Juul Vapor?

- There are no studies that have shown vaping e-cigs to have detrimental effects on periodontal health status.

- A recent in vitro study showed that exposure to human PDL fibers and epithelial cells to e-cig vapor with flavorings:
  1. Increased oxidative stress
  2. DNA damage
  3. Enhanced release of proinflammatory cytokines (PGE2 and COX-2)

- Intensive research is in progress

  Sundar et al., Oncotarget (7) 47, 2016

ENDS: Electronic Nicotine Delivery System

https://www.fda.gov/TobaccoProducts/Labeling/ProductsIngredients/ucm456610.htm; graphic accessed 9.25.18
Health Risks of Vaping with Nicotine

- Nicotine is not known to cause cancer. It is approved for use in nicotine replacement therapies, such as the patch or nicotine gum.

- **However, there are risks linked to nicotine.**
  - Nicotine is a highly addictive substance. Vaping product use could result in symptoms of dependence.
  - Children and youth are especially susceptible to the negative effects of nicotine, including addiction. Nicotine is known to alter brain development and can affect memory and concentration. It may also predispose youth to addiction to nicotine and possibly other drugs.
  - In some cases, vaping liquid containers have enough nicotine to be poisonous to young children.
Nicotine Addiction is a Chronic Relapsing Disease

Assessment of use & dependence, incorporation into Tx planning and care, follow-up and ongoing intervention is key to a successful outcome. Addiction cannot be overcome with a one-time “You need to stop smoking – it is bad for your health.” Our tobacco-using patients expect us to help them.
Commonly expressed barriers to providing cessation treatment

- Inadequate training
- Perceived patient resistance
- Lack of reimbursement
- Lack of time
- Lack of knowledge of referral sources
- “Not my job” “Not a part of dental treatment”
- “Someone else does that in our program”

With advocacy, training and support, these can be overcome!
Evidence-Based Tobacco Treatment: 5 A’s

1. Ask
   • Risk Assessment,
     ▪ Health history, interview
     ▪ Fagerstrom Test for Nicotine Dependence

2. Advise
   • Clear Quit Message

3. Assess *(Assess before Advise – establish a rapport)*
   • Stages of Change / Ready or not

4. Assist
   • Pharmacotherapy, quit plan, referral

5. Arrange
   • Follow-up(re-care)
Treatment Considerations

Assess Level of Tobacco Dependence:

Amount

- Social Smoker / ‘Chipper’
  - Weekends and at parties
- Light: less than 1 pack a day
- Moderate: about 1 pack a day
- Heavy: 2+ packs a day

Time to Use

- Use of tobacco w/in 30min of waking
- General Dependence Guideline:
  >20 cig./day and use within 30 min. of waking = high level of dependence
Step 1

- Capture the needed information in the Health History
### Tobacco-Use / Treatment Notes: Use ADA Code 1320

1. Do you use tobacco in any form? Yes____ No____ (ASK)
   - If no, have you ever used tobacco in the past? Yes___ No___

   *Questions 2 to 8 are for current tobacco users only.*

2. If you smoke /vape, what type? How many? (number)
   - Cigarettes_____ # per day_____ Times per week_____ Hookah/Water Pipe_____ Times per week_____
   - E-cigarette / Vaping ______ Times per week ______ Other type of smoke product (e.g. marijuana) _________

3. If you chew/use snuff, smokeless tobacco what type? How much?
   - Snuff/chew_____ days a can/package lasts_____ Other type: __________

4. How soon after you wake up do you first use tobacco?  Within 30 minutes____ More than 30 minutes_____

5. How have you tried to quit in the past?
   - Cold turkey____ Used medications? What type__________________________

6. How interested are you in stopping your use of tobacco? (ASSESS)
   - Not at all____ a little____ somewhat____ Yes, today_____  

7. Tobacco Treatment: (ADVISE and ASSIST)
   - Recommended cessation _____ Referred to Quitline _____ Cessation App _____
   - OTC/ Rx Medication: __________________________________________________

8. Follow-up: (ARRANGE)
Step 2

- Discuss cessation as you would any other treatment component
Tobacco-Use Treatment (TUT) as an Integral Part of the Treatment Plan

✓ Include TUT in the initial discussion while reviewing the health history

✓ Support open-ended questions, building rapport, listening

✓ Have a TUT bin with cessation resources and Quitline fax sheets

✓ Follow-up at every appointment (same as OHI oral hygiene instructions)
Consider Cessation Medications
Medications Can Help Patients Quit

- Withdrawal symptoms can be relieved by use of specific FDA approved drugs. Each country has its own laws and available cessation medications.

- When medications are properly used and combined with counseling, from 30-50% of tobacco users will succeed in their quit attempt.

- A quit date should be decided on before medications are recommended or prescribed.

*Medications can double your chances of quitting for good. Using quit smoking medications doesn't mean you aren't strong enough to quit on your own. Using medication can strengthen your determination to quit and shows you are committed to quitting for yourself and others.*

- Smokefree.gov (2018)
Step 3

- Levels of Interventions: Brief, Moderate or Intensive
Tobacco Dependence Treatment Levels

- **A Given: All Patients** should be assessed for tobacco use & interest in quitting
- **Brief Intervention** (1-3min)
  - Ready to quit and does not want help – support and quitline referral
  - Not ready to quit – Build rapport “We are here to help.” pamphlet /quitline in patient bag
- **Moderate Intervention** (5-15min.)
  - Ready to quit – Assist, Arrange: self-directed quit plan, discussion of meds, support system, quitline
  - Not ready to quit – MI, develop discrepancy, 5R’s, pamphlet /quitline in pt. bag
- **Intensive or Advanced Intervention** (multiple sessions)
  - In-house Tobacco Dependence Treatment Program
  - Referral to treatment program

Davis, Koerber JDE, 2010
Three Levels of Intervention - BRIEF

BRIEF: 3-5 minutes: Ask, Advise, Refer
- Yes on the HH – “Tell me about your smoking/tobacco use” *(Ask)*
  - Gather use data – ideally pre-appointment
- “You are losing bone around your teeth due to infection. Your body cannot fight the infection due to the toxins in the tobacco smoke” *(Advise)*
- “We are here to help. We have several ways to help you quit for good” *(Advise)*
- Ready to Quit? (move into a MODERATE intervention)
- Not ready to Quit? – build trust and rapport “I understand. Would you like to have a cessation specialist call you to talk about way to help you succeed in quitting? *(Refer)*
- No? “We are here to help you get healthy and will check back with you to see how things are going at your next appointment. Would that be OK?”
- Yes? Have the patient fill out the Quitline fax – submit fax
- Follow-up next appointment “Tell me about how your are doing w/ your quit plan. How can we help?”
- Provide clear information on how the smoking toxins are continuing to harm their oral health. Offer help and support non-judgmentally
Three Levels of Intervention: Moderate

Moderate / Ready to quit: 15-20 minutes: Brief + Assist & Arrange

- Provide emotional support, affirm benefits of not using tobacco stated by patient
- Explore different options to aid the patient to quit
  - Explore cessation medications
  - Offer the Quitline referral, online support and app
  - Printed materials / Starter kit
  - Encourage them to development of a support system
  - Set a Quit Date and make note in the chart for future follow-up; Allow the patient to make their own quit plan

Intensive: Tobacco Treatment Specialist, multiple visits.
See ATTUD at https://www.attud.org/
Tobacco Use: Multifactorial

- **Ritual / Habit**
  - Tobacco use is tied to most life activities such as drinking coffee, driving a car, eating, talking on the phone…

- **Environmental / Social**
  - Tobacco use is often associated with social situations such as bowling, fishing or drinking with friends

- **Nicotine Dependency**
  - Nicotine is absorbed into the bloodstream and alters the normal biochemical function of the brain giving the user a sense of being alert, relaxed, and feeling good

Quitting often requires a complete change in a user’s life!
Prevention for the Non-Tobacco User

“Great Choice!”

Prevention

- Affirm a great choice not to use tobacco or vaping

- Youth are often influenced by a health care provider affirming positive choices

- Caution against vaping and Juuls

- Former users need encouragement to remain tobacco free
Tobacco Treatment Resources
In the U.S., each state has a quit line and cessation support.

The CDC provides multiple, person-centered quit assistance

Smokefree.gov
cdc.gov/tobacco
Resources in Each Country
The WHO & Global Bridges assisting providers

https://www.who.int/tobacco/quitting/en/ accessed 5.27.19
https://globalbridges.org/ accessed 5.27.19
Tobacco Free! Curriculum
Open Access, evidence-based

- Six modules – fee standing
- Self-instruction option
- Lesson Plans
- Extensive resources
- Behaviorally based
- For professional dental and medical instructors
- Open access

https://tobaccofree.atsu.edu/ accessed 5.25.19
Can We Help Patients Succeed? **YES!**

There are no easy answers but research is clear—clinicians who provide tobacco cessation interventions make a difference.

With your help, up to 30%+ of your patients who try to quit can achieve long term abstinence.

**You can** make a difference!

- 70% of smokers say they want to quit smoking
- 46% try to quit each year
- Only 5-7% a year succeed on their own

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Thank you!

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https://www.cdc.gov/tobacco/disparities/hispanics-latinos/index.htm
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