



# Welcome to Behavioral Health Technical Assistance (BH TA) Integration of Oral Health and Behavioral Health Virtual Learning Collaborative

Supported by the HRSA Bureau of Primary Health Care (BPHC), Office of Quality Improvement (OQI)

Vision: Healthy Communities, Healthy People







#### **Tobacco, Vaping, and Cannabis: Implications for Patients**

Benjamin W. Chaffee, DDS, MPH, Ph.D.

Amber Murray, BSN, MA – Deputy Project Director & Facilitator

Wednesday, March 8, 2023 from 1:00 - 2:00 ET

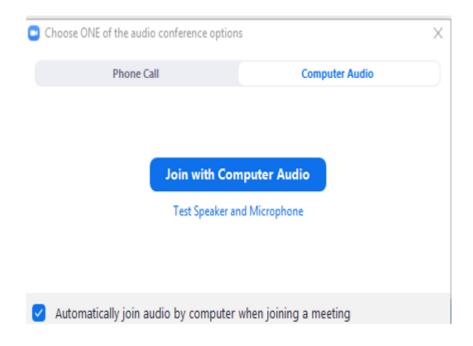
Vision: Healthy Communities, Healthy People



## **Housekeeping – Connecting to Audio**

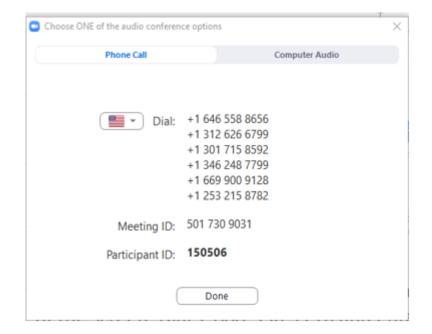
#### By computer:

Click Join with Computer Audio.



#### By phone:

 Click the Phone Call tab, dial a listed phone number, and enter Meeting ID and Participant ID.







#### **Housekeeping – Zoom Participation**

 You will begin muted. To unmute/mute, click the microphone icon located at the bottom left of your Zoom window.



 We encourage everyone to keep their video enabled. Click Start Video to join by webcam.



 To ask a question using the Chat feature, click the Chat icon located at the bottom center of your Zoom window.







#### **Continuing Education credits (CEs) for Oral Health Professionals**

- We will be offering 1.5 CE credits for your attendance at today's session from the University of Colorado School of Dental Medicine.
- The University of Colorado School of Dental Medicine is an ADA CERP Recognized Provider.\*





\*ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry. CU-SDM designates this activity for 1.5 continuing education credits





## Continuing Education (CE) for Behavioral Health and other Health Care Professionals

- We will be offering 1.5 CE credits for your attendance at today's session.
- You must complete the Health Center Satisfaction Assessment to be eligible for CEs.
- CE credits will be distributed within 3 weeks of the event.



This course has been approved by JBS International, Inc. as a NAADAC Approved Education Provider, for educational credits. NAADAC Provider #86832, JBS international, Inc. is responsible for all aspects of their programming.

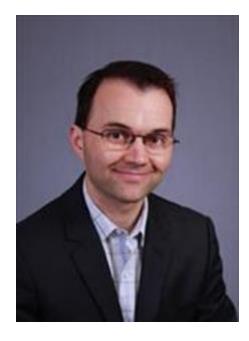


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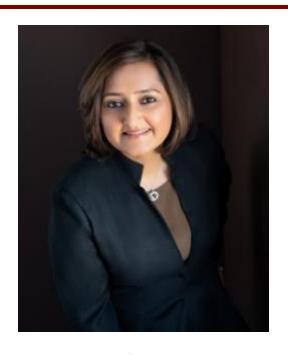




#### **Virtual TA: Presenter and Facilitators**



Presenter:
Benjamin W. Chaffee, DDS, MPH, Ph.D.
Associate Professor
Oral Epidemiology and Dental Public Health
University of California San Francisco



Facilitator:
Tamanna Tiwari, MPH, MDS, BDS
University of Colorado
School of Dental Medicine



Facilitator:
Amber Murray, BSN, MA, PMP
Deputy Project Director
JBS International, Inc.









## Tobacco, Vaping, and Cannabis: Implications for Patients

Vision: Healthy Communities, Healthy People



#### **Disclosures**

Dr. Chaffee: No financial or professional affiliations or conflicts of interests related to tobacco, nicotine, cannabis, or pharmaceutical industries

#### Tobacco-Related Research Funding:

- California Department of Public Health, Contract #20-10026
- California Department of Public Health, Contract #17-10592
- US National Institutes of Health, Grant U54 HL147127
- US National Institutes of Health, Grant P50 CA0180890
- US National Institutes of Health, Grant KL2 TR000143

Content solely the responsibility of the presenter and does not necessarily represent official views of the CA Department of Public Health, NIH, FDA, HRSA, or UCSF.





#### Acknowledgements

Elizabeth T. Couch, RDH, MS

Janelle Urata, RDH, MS

Steven Silverstein, DMD

Joanna Hill

Miranda Werts

Margaret Walsh, RDH, Ed.D.

#### **ADDITIONAL SOURCE MATERIAL:**

Kick It California kickitca.org

Rx for Change rxforchange.ucsf.edu

CA Oral Health Technical Assistance oralhealthsupport.ucsf.edu





#### **Outline**

- Tobacco and Oral Health
- Electronic Cigarettes: Oral Health Implications
- Cannabis: The Dental Perspective
- Tobacco Cessation: What You Can Do in Practice





#### **Dental Professionals and Tobacco**

We have a *professional responsibility* to encourage and support our patients in cessation of all forms of tobacco use.

Cigarette smoking remains the most prevalent form of tobacco use among U.S. adults and the #1 preventable cause of death and disease globally.

Tobacco smoking destroys oral tissues & reduces dental treatment success.

Dental professionals have *skills, resources, and opportunities* to reduce tobacco use among our patients...

...but have largely not fulfilled our obligation.



#### **Dental Professionals and Tobacco**

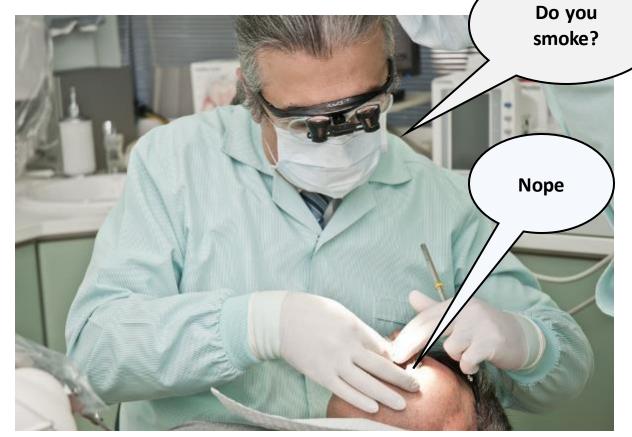
#### At a minimum:

- Ask all patients about tobacco-related behaviors (explicitly ask, including vaping, chewing tobacco, marijuana, and occasional use) and record in chart
- Encourage cessation and determine patient readiness to quit using non-judgmental, purposeful communication techniques
- Connect motivated patients with support to achieve a tobaccofree future





## Major Shifts in the Tobacco Landscape



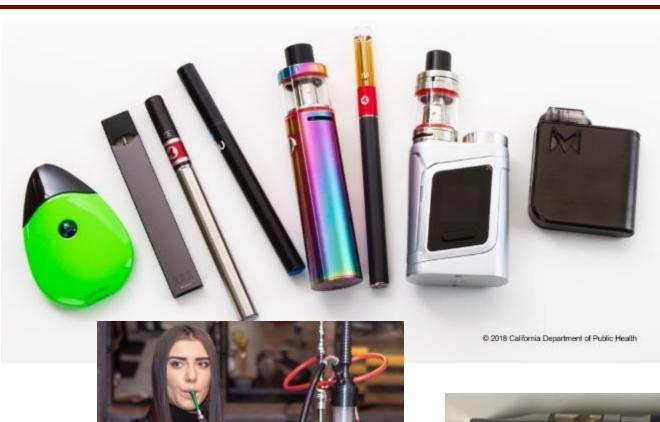
If you only ask your patients "Do you smoke?"

You are *missing* a great deal of tobacco-related behaviors

Image courtesy: Pixabay.com



## **New and Emerging Tobacco / Nicotine Products**



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Image courtesy: Pixabay.com

## **Evolving Tobacco Control Policies and Regulations**

**2009:** Family Smoking Prevention and Tobacco Control Act Gave **FDA Regulatory Authority Over Tobacco** 

Public Law 111–31 111th Congress

An Act

June 22, 2009 [H.R. 1256] To protect the public health by providing the Food and Drug Administration with certain authority to regulate tobacco products, to amend title 5, United States Code, to make certain modifications in the Thrift Savings Plan, the Civil Service Retirement System, and the Federal Employees' Retirement System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Family Smoking Prevention and Tobacco Control Act. DIVISION A—FAMILY SMOKING PRE-VENTION AND TOBACCO CONTROL ACT Recent measures at the state and local level:

- Statewide flavor bans
   California, Massachusetts, New York, New
   Jersey, Rhode Island
- Brookline, MA: No sales to anyone born after year 1999

**2022** - FDA Announces Plans for Proposed Rules to Ban Menthol in Cigarettes and Reduce Nicotine in Cigarettes to Non-Addictive Levels



## **Cigarette Smoking**

- Cigarette smoking affects virtually every system of the body
- Negative effects extend to involuntary exposure
- Increased Risk: cancers, pulmonary diseases, cardiovascular diseases, infertility, cataract, diabetes, and more
- >400,000 premature deaths annually (U.S.); >9 million worldwide
- Most used tobacco product among U.S. adults (12.5% in year 2020)
- Socioeconomic inequities in substance use and disease burden





## **Cigarette Smoking: Oral Health**

- Oral and pharyngeal cancers
- Periodontal disease, alveolar bone loss, tooth loss
- Diminished wound-healing, treatment response, and implant success
- Calculus, mucosal lesions, staining, halitosis, and more
  - Likely mechanisms of action:
    - ✓ Changes in oral microflora and plaque biofilm
    - ✓ Impaired host immune response and increased inflammation
    - ✓ Reduced reparative capacity (cellular level) and local blood flow





## Cigarette Smoking: There is No Safe Smoking

#### Despite consistent misperceptions, all smoking is dangerous

- Filtered cigarettes
- "Light" or low tar cigarettes
- "Natural" or "organic" cigarettes



Image courtesy: Pixabay.com

 "Cutting down" does not reduce health risks linearly — even at one cigarette per day, risk of serious cardiac event increases by 50%





#### **Diversity of Combustible Tobacco**

- "Premium" (large) cigars: one can deliver enough nicotine to establish dependence
- "Little" cigars: may resemble cigarettes but evade cigarette taxes and restrictions on flavors and single-unit sales
- Hookah: Nicotine, tar, & carbon monoxide levels comparable or higher than cigarette smoke
- Most of damage to cardiovascular, respiratory, and periodontal tissues is
  from the smoke

  Rickert WS, Robinson JC, Bray DF, Rogers B, Collishaw NE, 1985





## **Electronic Cigarettes (E-Cigarettes)**

No new tobacco product has gained more attention or controversy



Image courtesy: Pixabay.com



Image courtesy: Pixabay.com



Image courtesy: Unsplash.com



#### **About E-Cigarettes**

- Battery powered devices, aerosolize a nicotine-containing liquid
- Rapid increase in use since 2010; mostly among cigarette smokers and youth
- Deliver many toxicants at lower levels than cigarettes
- Highly variable in design, rapidly evolving
- Efficacy for tobacco cessation and health effects still being studied







#### **E-Cigarettes: Use Prevalence**

#### **Adults:**

- Conventional cigarettes: 12.5%; E-cigarettes: 3.7%
- Greater e-cigarette use:
  - Men (4.6%) vs. Women (2.8%)
  - Age 18-24 (9.4%), 25-44 (5.2%), 45+ (<1%)</li>
- Most adult e-cigarette users also smoke conventional cigarettes

#### **Adolescents:**

- E-cigarettes surpassed cigarettes as most-used tobacco product (2014)
- Use reached 27.5% among high school students in 2019
- Lower use prevalence in 2020-2022 (14.3% in 2022)... caveat: pandemic, shift from school-based surveys

Cornelius ME, Loretan CG, Wang TW, Jamal A, & Homa DM, 2022 Gentzke, AS, Wang TW, Cornelius M, Park-Lee E, Ren C, Sawdey MD, Cullen KA, Loretan C, Jamal A, Homa DM, 2022

## **E-Cigarettes: Evolving Over Time**

- Inconsistent terminology: vapes, vape pens, Electronic Nicotine Delivery Systems (ENDS), JUULs, Puff Bars
- Changing design: "cigalikes" -> build-your-own -> pods -> disposables

Generally, products have become easier to use and more effective at

nicotine delivery





## E-Cigarettes — So, How Bad are They?

The headlines are alarming, but assessing the actual impact to individual and public health is complex.

E-cigarettes may be 'no better' than regular cigarettes

Clardian

Vaping May Be More Dangerous Than Cigarette Smoking, Studies Show

December 18, 2019



Vaping and oral health: It's worse than you think







## **E-Cigarettes: Constituents and Exposures**

• E-cigarette aerosol contains ultrafine particles and known toxins, such as acetaldehyde, acrolein, toluene, formaldehyde, and metals (e.g., lead)...

...albeit at much lower levels than found in cigarette smoke

Cigarette smokers switching to e-cigarettes for two weeks:
 Substantially reduced biomarkers of carcinogens and other toxins





#### **E-Cigarettes: Reason for Concern**

## Vaping Just Once Could Immediately Change Your Blood Vessels, Even Without Nicotine

CARLY CASSELLA 25 AUGUST 2019



Clinical Review » State of the Art Review

What are the respiratory effects of e-cigarettes?

*BMJ* 2019 ; 366 doi: https://doi.org/10.1136/bmj.l5275 (Published 30 September 2019) Cite this as: *BMJ* 2019;366:l5275

Young people who vape are much more likely to become smokers, new research confirms

- Need not be as harmful as cigarettes to be a clinical and public health concern
- Evidence suggests adverse health effects
- Use by children is a serious problem
- Outcomes of long-term use unknown





## **E-Cigarettes and Smoking Cessation**

- Some adult smokers report using e-cigarettes to quit smoking
- E-cigarettes are NOT approved cessation devices
- Randomized controlled trials have tested smoking cessation efficacy... some of those results are encouraging
- Trial results and "real-world" studies do not always agree





## **E-Cigarettes and Smoking Cessation**

- Clinical trials: E-cigarettes vs. FDA-approved nicotine replacement therapy (NRT)
  - E-cigarettes may perform as well or better than NRT among smokers motivated to quit, with counseling program
- Population-based studies:
  - As a consumer product, e-cigarettes associated with smoking relapse, no cessation benefit, ongoing nicotine dependence





#### **E-Cigarettes: The Debate**

#### The Promise:

- "Cleaner" source of nicotine for smokers unable or unwilling to quit
- Potential to save lives

#### The Concerns:

- Most e-cigarette users also smoke (dual-use)
- Addiction continues, may make quitting harder, and may increase potential for relapse
- Reduction in harm may not match optimistic expectations
- Use by youth who never would have smoked
- Marketing and lobbying mimics tobacco industry tactics









Images courtesy: Unsplash.com and pikiest.com

Health Center Program

#### Evidence of oral health effects is limited... Why?

- 1. Most oral diseases are chronic, develop over time
- 2. Most e-cigarette users are younger
- 3. Most e-cigarette users have a history of smoking
- 4. Difficult to mimic realistic exposures in laboratory
- 5. Prevalence of e-cigarette use relatively small





#### **Oral Microbiome**

- E-cigarette use changes microbial diversity/abundance
- Distinct profile from tobacco non-users and from smokers
- Some differences associated with periodontal disease:
  - More pathogens (e.g., Fusobacterium, Bacteroidales)
  - More markers of inflammation
- Observations from cross-sectional and longitudinal studies
- Long-term impact on periodontal condition unclear

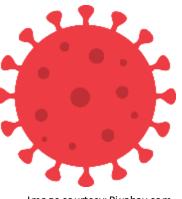


Image courtesy: Pixabay.co



#### **Laboratory (In Vitro) Studies**

Exposure to e-cigarette aerosols or liquids:

- Cytotoxicity, oxidative damage
- Reduced cell proliferation & migration,
- Increased apoptosis & inflammatory mediators

Caveat: Difficult to reproduce relevant exposures in vitro



Image courtesy: Pixabay.com







#### **Clinical Studies**

Most studies cross-sectional with small sample size Possible outcomes more prevalent in e-cigarette users:

- Gingival bleeding
- Oral / mucosal lesions
- Peri-implantitis



Caveats: Outcomes complicated by past / current smoking; Conditions (e.g., bone loss) may take years to occur





#### **Epidemiology (Population) Studies**

- Largest studies often assess oral health by self-report
- Associations have been reported between vaping and...
  - Bleeding gums
  - Mouth or throat irritation
  - "Dental problems"
  - "Gum disease" history or treatment



Image courtesy: clipsafari.con

Associations generally weaker than for tobacco smoking





### **E-Cigarettes: What to Tell Patients**



The healthiest, safest, and best option is to live completely free of nicotine and tobacco

Image courtesy: Unsplash.com





### **E-Cigarettes: What to Tell Patients**

If a tobacco-smoking patient is considering e-cigarettes to quit:

- ✓ congratulate, enhance, and support the willingness to quit
- ✓ don't let uncertainty about vaping preclude a quit attempt
- ✓ offer evidence-based cessation aids

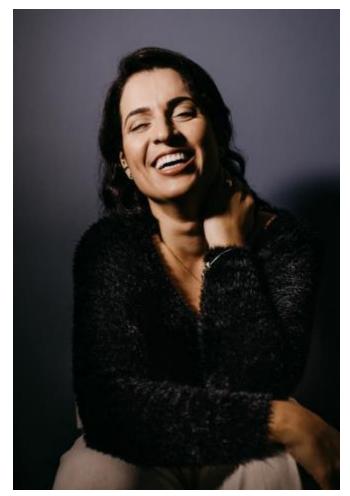


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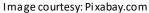




### **Cannabis and Oral Health**

- State policies allowing adult use reflect more accepting attitudes
- Use and access are increasing
- Co-use with tobacco is common
- Implications for policy, research, patient care

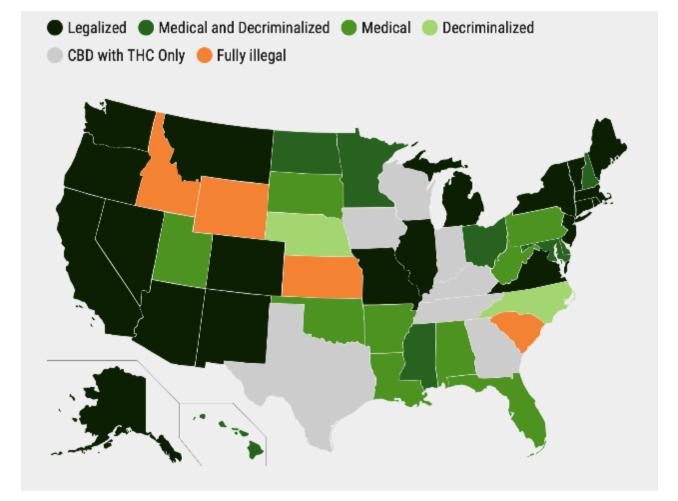






# Cannabis: Increasing Social Acceptance, Legalization at the State Level

**State Cannabis Policies: 2023** 







### **Cannabis and Oral Health Risks**

- Xerostomia
- Leukoedema / Hyperkeratosis
- Candida albicans
- Periodontitis, clinical attachment loss
- Oral cancer?
- Plaque?
- Dental caries?

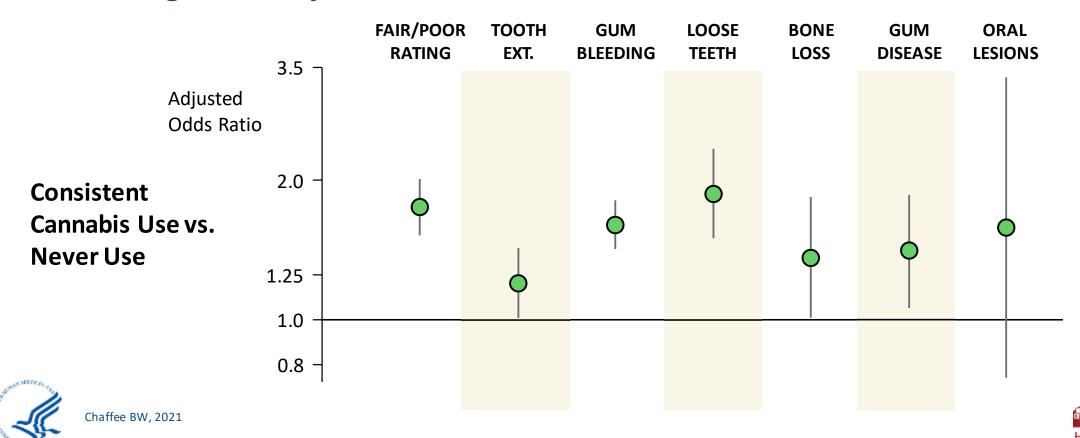
Marijuana *smoke* closely resembles tobacco smoke, delivering tar, carbon monoxide, carcinogens





### **Cannabis and Oral Health Risks**

Cannabis use associated with adverse periodontal outcomes over time, including after adjustment for other factors



### **Cannabis and Dental Practice**

### Statistically, some of your patients are using cannabis.

#### May cause:

- Anxiety, agitation, dysphoria
- Impaired decision-making
- Potential drug interactions
  - o epinephrine & tachycardia

### Resources to quit (limited)

- https://www.marijuana-anonymous.org
- https://www.samhsa.gov/find-help/national-helpline



Image courtesy: Pixabay.com



### **Cannabis and Dental Practice**

• Smoke is harmful to oral tissues, impairs post-op healing RECOMMENDATION: Include cannabis in patient history and post-op instructions

 Patients self-medicate with cannabis for dental pain and anxiety

**RECOMMENDATION**: Have a policy / protocol in your practice (Consent, care delivery, drug interactions, transportation)



### Provider Roles to Address Tobacco and Cannabis Use

We have a *professional responsibility* to encourage and support our patients in cessation of all forms of tobacco use

Dental professionals have *skills, resources, and opportunities* to reduce tobaccouse among our patients

#### At a minimum:

- Ask all patients about tobacco-related behaviors (explicitly ask, including vaping, chewing tobacco, marijuana, and occasional use) and record in chart
- Encourage cessation and determine patient readiness to quit using non-judgmental, purposeful communication techniques
- Connect motivated patients with support to achieve a tobacco-free future





### **Provider Roles to Address Tobacco Use**

#### **Patient Resistance?**

- Patients who use tobacco products expect to be encouraged to quit by health professionals
- Screening for tobacco use and providing cessation counseling is positively associated with patient satisfaction
- Survey of >3000 dental patients: ~60% believed that dental offices should provide tobacco cessation treatment





### **Provider Roles to Address Tobacco Use**

#### Lack of Time?

- The more time dedicated to in-office cessation, the more likely patients will remain tobacco-free after 5 months, which saves time at future appointments
- As little as 3 minutes discussing tobacco and encouraging cessation increases the chance of success





### **Provider Roles to Address Tobacco Use**

#### Don't Get Paid for It?

American Dental Association CDT Code for Tobacco Use

Cessation Services (D1320)

• Why don't more payers cover it?

Study of dental insurers: Lack of purchaser demand

Using D1320, even if not payable, sends signal to insurers that we value this service





American Dental Association (ADA). The Code on Dental Procedures and Nomenclature (Code), 2017 Shelley D, Wright S, McNeely J, Rotrosen J, Winitzer RF, et al., 2012

### **Why Our Intervention Matters**

- Nicotine is a highly addictive substance
- Quitting tobacco is extremely difficult
- Most dental patients who use tobacco are not ready to quit right this instant, but many could be motivated to make an evidence-supported quit attempt with your help





### **Patient Support Recommendations**

### In my opinion...

Two biggest things dental providers can do to help their patients quit tobacco

- 1. Use purposeful, genuine, strategic communication to enhance patient readiness and motivation to quit
- 2. Connect patients with tangible support





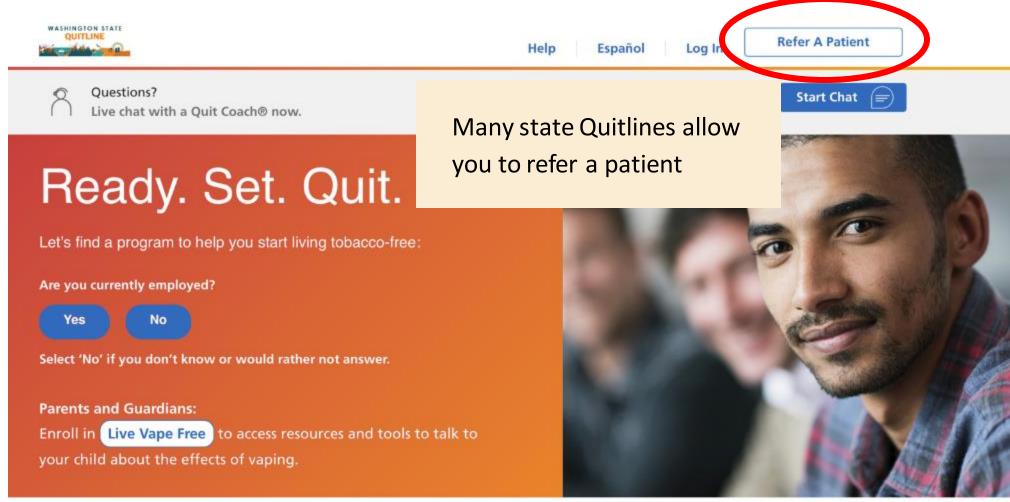
### **Connecting Patients With Cessation Support**

- Have a consistent protocol for addressing tobacco use
- Have a list of local cessation programs in your county
- Consider prescribing cessation medication, including overthe-counter products (e.g., nicotine gum, patch)
- Refer to smokefree.gov or 1-800-QUITNOW
  - ...Or the Quitline for your state



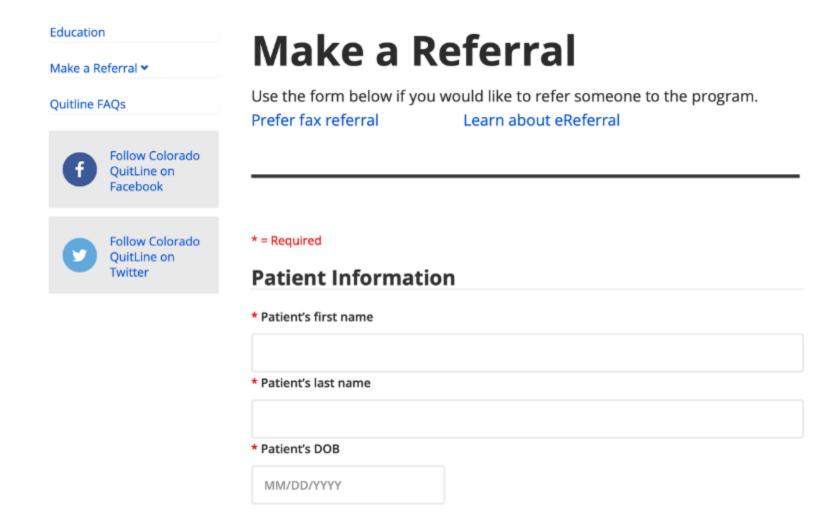


### **Connecting Patients With Cessation Support**





### **Connecting Patients With Cessation Support**





### Thank you, and Remember...

Every patient deserves access to effective tobacco cessation support

Save a life in just 3 minutes

The tobacco landscape is growing more varied and complex

E-cigarettes may not be as harmful as cigarettes but are not proven safe

Dental patients are using cannabis

It's our responsibility to be aware, prepared, and professional

The entire dental team can help patients to quit tobacco

It takes great communication and the knowledge and willingness to help





# **Questions?**





### **Wrap-Up Polling Question**



Source: iStock

What were the main reasons for your participation in today's event? Select all that apply.

- 1. To learn more about the topic from the presenter
- 2. To engage with other health centers
- 3. To raise questions about this topic as it relates to my health center
- 4. To learn about the experiences other health centers have related to this topic





### **BPHC-BH TA Portal**

#### https://bphc-ta.jbsinternational.com/

- Access Past BH TA Resources
- Request TA
- Access Learning Management System (LMS) modules
- Learn more about BH TA options







### Register for Tomorrow's Discussion Session

#### **Session 3: Facilitated Discussion**

This session will continue the discussion from the didactic session to address the rapidly changing products and patterns of tobacco and other substance use among patients to facilitate a greater understanding of the oral health effects and overall health implications of cigarettes, non-cigarette tobacco, and other substances to provide proper patient treatment and counseling.

**Date/Time:** Thursday, March 9, 2023, from 1:00 – 2:00 p.m. ET

### **Registration Link:**

https://us06web.zoom.us/meeting/register/tZAldeqtrz8sGNZQxw9gAZetrVXrC2lElZQe





### Save the Date! Next Learning Collaborative Session

#### **Session 4 Didactic**

Trauma Informed Care: Creating Partnerships for Better Oral Health

**Date:** Wednesday, April 12, 2023, from 1:00 – 2:30 PM ET

**Registration Link:** 

https://us06web.zoom.us/meeting/register/tZApduGtqz8iHdTRTRf3O-

922zwJqMa1H 2I

#### **Session 4 Discussion**

Trauma Informed Care: Creating Partnerships for Better Oral Health

**Date:** Thursday, April 20, 2023, from 1:00 – 2:00 PM ET

**Registration Link:** 

https://us06web.zoom.us/meeting/register/tZYode2qrTsqGdY2Mgv7BS

8bOxM5e2ifRzNl





### **TA Opportunities for Health Centers**

- One-on-One Coaching
- Communities of Practices (CoPs)
- Virtual + On-site Visits T/TA
- Oral Behavioral Health Learning Collaborative (LC)
- Virtual Brown Bag TA Sessions
- Webinars







### **CEs for Dental Providers**

### To obtain continuing education credit for participation in this session:

 Complete the Qualtrics evaluation survey within 8 days of the webinar. Once received, a certificate of completion with 1.5 CEUs for participation will be forwarded to you within four weeks. Please retain this certificate for your records.



https://ucdenver.co1.qualtrics.com/jfe/form/SV\_29tcTxoaOKVg3yu









### **CEs for Non-Dental Providers**

- We will be offering **1.5 CE credit per session** attended for a maximum of 12 CEs for participation in all 8 CoP sessions
- You must complete the Health Center Satisfaction Assessment after each session for which you plan on receiving CEs
  - Follow the link in the chat
  - The assessment will pop-up in a separate browser at the conclusion of this event
  - The assessment link will be emailed to you in a follow-up email from the session
- CE credits will be distributed within 4 weeks after the session



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Home > Toolkits > Tobacco Cessation Toolkit

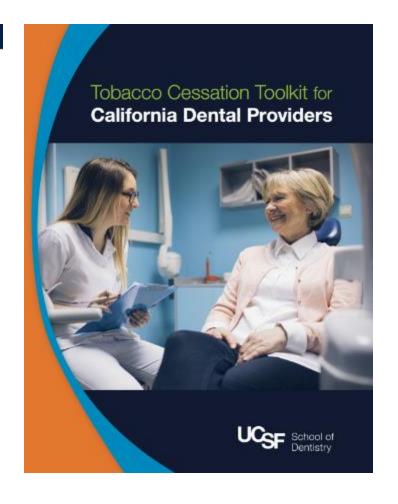
Tobacco Cessation for California Dental Providers: Toolkit and 1-hour Webinar

#### Tobacco Cessation Toolkit for Dental Providers

Dental teams can play a critical role in helping their patients live tobacco free. The <u>Tobacco Cessation Toolkit for California Dental Providers</u> toolkit is designed to assist dental providers with integrating brief tobacco cessation interventions into their routine dental care workflows. The toolkit provides practical tools and evidence-based resources to help dental providers and their tobacco-using patients.

This toolkit was created by the UCSF California Technical Assistance Center (COHTAC) in partnership with San Joaquin County Public Health Services Smoking & Tobacco Outreach and Prevention Program (STOPP) and Local Oral Health Program, and the California Department of Public Health, Office of Oral Health.





https://oralhealthsupport.ucsf.edu/tobacco-cessation-california-dental-providers-toolkit-and-1-hour-webinar





- 1. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014. Atlanta, GA: US DHHS; 2014.
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- 3. Chrcanovic, B. R., Albrektsson, T., & Wennerberg, A. (2015). Smoking and dental implants: A systematic review and meta-analysis. *Journal of Dentistry*, 43(5), 487-98. <a href="https://doi.org/10.1016/j.jdent.2015.03.003">https://doi.org/10.1016/j.jdent.2015.03.003</a>.
- 4. Tomar, S. L., & Asman S. (2000). Smoking-attributable periodontitis in the United States: Findings From NHANES III. *Journal of Periodontology*, 71(5), 743-751. <a href="https://doi.org/10.1902/jop.2000.71.5.743">https://doi.org/10.1902/jop.2000.71.5.743</a>
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- 6. Hackshaw, A., Morris, J. K., Boniface, S., Tang, J. L., & Milenković, D. (2018). Low cigarette consumption and risk of coronary heart disease and stroke: Meta-analysis of 141 cohort studies in 55 study reports. *BMJ*, 360, j5855. https://doi.org/10.1136/bmj.j5855
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## Thank You!

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