Nicotine Dependence and Cessation: Help People of All Ages Quit



A Worldwide Epidemic

Tobacco use killed 100 million people in the 20th century.

We can expect 1 billion humans to die tobaccorelated deaths in the 21st century if current smoking patterns continue.



Here in Rhode Island

- We are 1,059,639 strong with a
 14.4% adult smoking rate and 4.8%
 youth smoking rate
- 1800 RI adults/year die from smoking
- 150 adults, children and babies die each year as a result of others' smoking
- 23,000 of the RI children currently under 18 will ultimately die prematurely due to maternal and second-hand smoking



Secondhand Smoke

Secondhand smoke can cause serious health problems in children, including:

SIDS, less lung growth, more frequent bronchitis and pneumonia, wheezing and coughing, asthma and more severe and frequent asthma attacks, more ear infections and more operations to put in ear tubes for drainage.



Nicotine Delivery

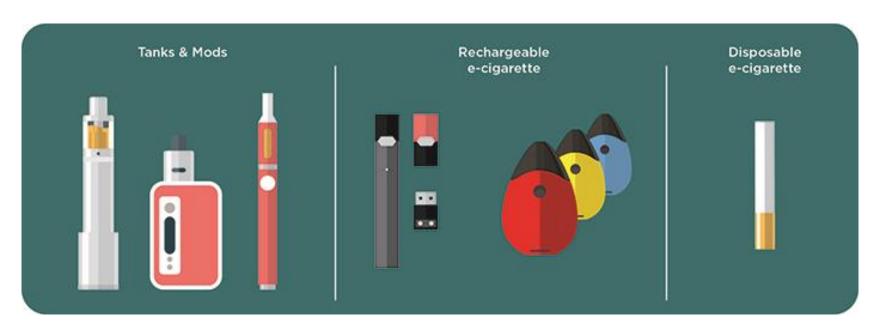
Smoking delivers nicotine via the lungs to brain in **7-10 seconds**, diabolically faster than any other nicotine delivery mechanism.

Nicotine produces physiological effects, primarily stimulating the dopamine "Reward" pathway contributing to the establishment and maintenance of dependence.



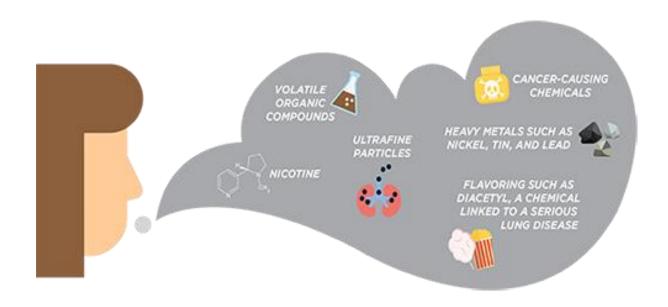
Electronic Nicotine Delivery Systems (ENDS)

- Most have a battery, a heating element, and a place to hold a liquid.
- Nicknames:
 - "e-cigs," "e-hookahs," "mods," "vape pens," "vapes," and "tank systems."



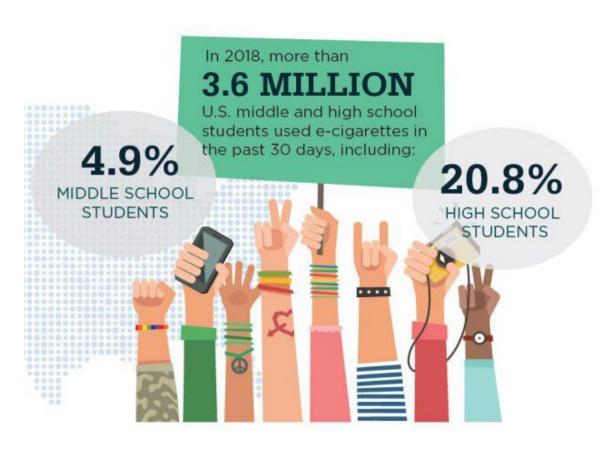
Electronic Nicotine Delivery Systems (ENDS)

- It is difficult for consumers to know what these products contain.
- Some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine.



Electronic Nicotine Delivery Systems (ENDS)

Who is using these products?



Bio/Psycho/Social Model of Tobacco Use

PSYCHOLOGICAL

Learning

Memory

Emotions

Perceptions

Thinking

Beliefs

Attitudes

Stress management

strategies

BIOLOGICAL

Genetic predisposition

Neurochemistry

Effect of medications

Immune response

HPA axis

Fight-flight response

Psychological responses

SOCIAL

Social Support

Family Background

Interpersonal relationships

Cultural traditions

Medical care

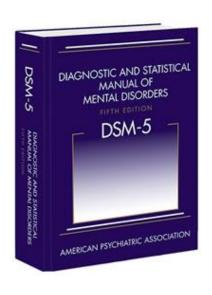
Socio-economic status

Poverty

Physical exercise

Biofeedback

Tobacco Use Disorder: Definition



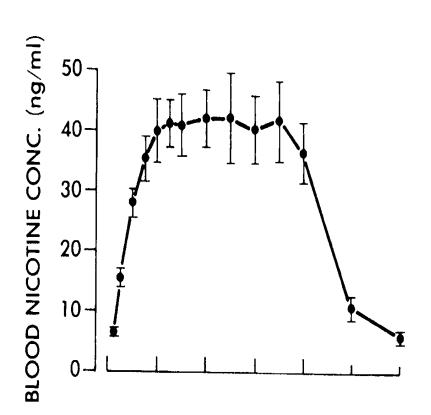
Diagnostic and Statistic Manual of Mental Disorders, 5th Edition (DSM 5)

- Problematic pattern of tobacco use
- Resulting in clinically significant impairment or distress
- Diagnosis requires 2 symptoms over a 12-month period

Diagnostic Criteria

- 1. Craving
- 2. Tolerance
- 3. Taken in larger amounts or over longer period than intended
- 4. Persistent desire or unsuccessful efforts to cut down or quit
- 5. Great deal of time spent to obtain or use
- 6. Recurrent use resulting in failure to fulfill major role obligations
- 7. Use despite persistent social or interpersonal problems
- 8. Giving up or reducing important activities because of use
- 9. Recurrent use in physically hazardous situations
- 10. Use despite persistent physical or psychological problems
- 11. Withdrawal

Biological Overview



- Nicotine accumulates over 6-8
 hours, plateaus and rapidly drops
 off during sleep, explaining the
 importance of the first cigarette
 smoked each day. It provides the
 most enjoyment.
- This short half-life drives the need for rapid re-dosing to reduce withdrawal, a significant marker of dependence.

Withdrawal Symptoms

- Irritability/frustration/anger
- Anxiety
- Difficulty concentrating
- Increased appetite/weight gain
- Restlessness/impatience
- Depressed mood/dysphoria
- Insomnia

Onset: 1-2 days

Peak: first 7 days

Lessen: 2-4 weeks



Tobacco Dependence

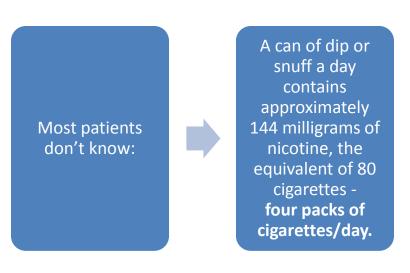
Dependence does not require a long smoking history.
Withdrawal symptoms can occur in new and social smokers.
Special concern for adolescents:

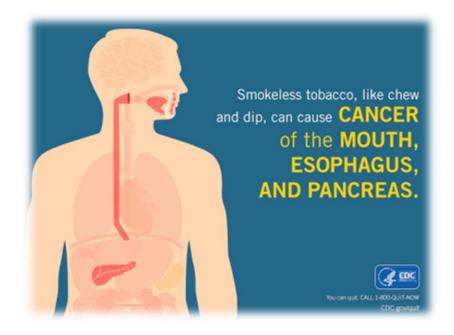


- "Priming effect" Adolescent brains are more responsive to nicotine's rewarding effects than adults'
- 80% of smokers have their first cigarette before age 18
- Youth don't perceive vaping as dangerous

What About Smokeless Tobacco?

Dip and chew can cause periodontal disease, cavities, and leukoplakia (white patches and oral lesions which can lead to oral cancer).





Psychological Overview

- Psychological factors contribute to the initiation and maintenance of smoking including:
 - Perceived psychological and cognitive benefits, stress relief, concentration, etc.
 - Attitudes about smoking/quitting, personality and emotions
 - Strong correlation with the use of alcohol and other substances
 - High prevalence among persons with mental illnesses



Social Overview

- Social factors contribute to the initiation and maintenance of smoking
- Social determinants include:
 - Demographics (age, ethnicity, socioeconomic status, etc.)
 - Peers have the greatest influence
 - Parental/family history of smoking
 - Current home/work environments
 - Cultural factors which can influence beliefs and social norms about tobacco use

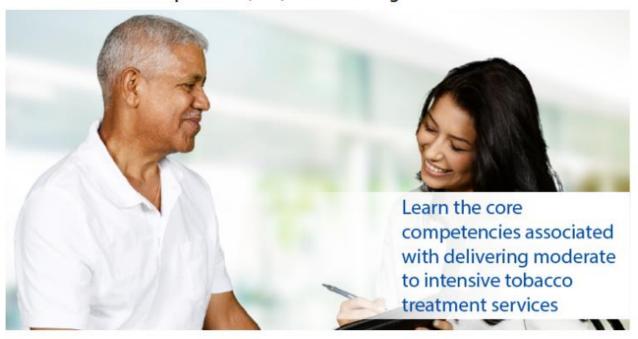


Part Three: Treatment



CODAC Trains Tobacco Treatment Specialists

Tobacco Treatment Specialist (TTS) Core Training



About the training

The TTS Core Training is an intensive 4-day, in-person, evidence-based training program. Successful completion of this training qualifies as training requirement to apply for the <u>National Certificate in Tobacco Treatment Practice</u>. The training is designed for persons who deliver moderate to intensive tobacco treatment services within health care or community setting. The curriculum addresses a set of core competencies for tobacco treatment specialists. The competencies were first defined by the Massachusetts Certification Steering Committee in 1998. Later, the competencies were further defined by the Association for the Treatment of Tobacco Use and Dependence (ATTUD).

Contact CODAC for Training

To learn more about tobacco/nicotine treatment training and resources please contact:

Lisabeth Bennett – CODAC/TCSRI BBennett@codacinc.org 401.207.7788





TCSRI

Integration of Pharmacotherapy

- A combination of counseling and pharmacotherapy is more effective than either alone
- Best practice is combination therapy (e.g., patch + gum/lozenge, NRT + bupropion)
- Method must be consistent with patient's preferences, lifestyle and beliefs



Quitting Takes Practice

- Quitting smoking almost always requires multiple attempts.
- Each smoker is different and the number of attempts is NOT what matters
- Eventually quitting is the goal,
 no matter how long it takes
 or how many attempts are made.





In-person Group and Individual Treatment





- Tobacco treatment at 7 CODAC locations
- Workshops for healthcare professionals
- Professional training for candidates seeking the National Certificate in Tobacco Treatment Practice
- Consulting services and solutions for organizations implementing TTx or smoke-free campuses

Telephonic and Digital Resources

Ready to quit smoking? Free help is available* in Rhode Island. Counseling by phone + NRT can double a smoker's chances of quitting. FREE services are available that can double your chances of Quit Success. The Rhode Island Smoker's Helpline (1-800-QUIT-NOW) Oct up to 5 free quit smoking coathing lesions by phone Certified Tobacco Tinatment Specialists will share stranges to quit snoking. manage cowings, and more! A free two-week supply of Micotine Replacement Therapy (NRT). NRT is available to eligible calling as parches, quirk, or loowinges. (while supplier, last) NET is clinically proven as sale and effective by the ECA. 1-800-QUIT-NOW

QUITWORKS-RI

- Referring patients to free tobacco cessation services is fast and easy by fax or online.
- Get free follow-up reports on your patient's quit journey.

www.QuitWorksRl.org



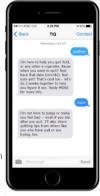
quitting e-cigarettes

e-cigarettes cessation



In the wake of the surgeon general declaring a youth e-cigarette epidemic, Truth Initiative® has expanded its quit-smoking resources to include a first-of-its kind e-cigarette quit program. This innovative and free text message program was created with input from teens, college students and young adults who have attempted to, or successfully, quit e-cigarettes.

The program is tailored by age group to give teens and young adults appropriate recommendations about quitting. The program will also serve as a resource for parents looking to help their children who now vape.



To access the new e-cigarette quit program, users can text "QUIT" to (202) 804-9884. Users can also enroll in This is Quitting or BecomeAnEX®, free digital quit programs from Truth Initiative that integrate the text program.

www.QuitNowRI.com

QUITWORKS-RI

A solution for providers to help patients quit smoking.



Home

About Us

Getting Started

Provider Resources

Patient Resources

Evidence & Training

You can help your patients quit smoking in 3 easy steps using telephone-based counseling FREE to all Rhode Island residents regardless of whether they have health insurance or not:

- 1. ASK about tobacco use and readiness to guit.
- ASSIST by identifying reasons to quit and prescribing medications.
- REFER your patients to QUiTWORKS-RI using the <u>online</u> or fax enrollment form.

Learn More »



Now up to 4 weeks of NRT

Increase your patients' chances of quitting smoking.

Nicotine replacement therapy is NOW available to patients ages 18 and over at no charge. Patients may receive a 2-week supply of gum, patches, or lozenges while supplies last. ACT NOW!

References

Agency for Healthcare Research and Quality. https://www.ahrq.gov/professionals/clinicians-providers/guidelines-

recommendations/tobacco/5steps.html

American Psychiatric Association. https://www.psychiatry.org/psychiatrists/practice/dsm

CDC. Smokeless Tobacco Health Effects.

https://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/health_effects/index.htm

ADA's Practical Guide Series: Dental Procedure Codes and Dental Coding. CDT Code 2016. American Dental Association

World Health Organization. http://www.who.int/topics/tobacco/en/

References

MentalHelp.net. https://www.mentalhelp.net/aware/pregnancy-addiction/

Nicotine Anonymous. https://nicotine-anonymous.org

SAMHSA. https://www.samhsa.gov/atod/tobacco

SBIRT: A Step-by-Step Guide. MASBIRT.

https://www.masbirt.org/sites/www.masbirt.org/files/documents/toolkit.pdf

U.S. Census Bureau. http://www-census.gov/quickfacts/RI

University of Massachusetts Medical School. Tobacco Treatment Training Manual. https://www.umassmed.edu/tobacco/training/