

Substance Abuse, Addiction Recovery and Tobacco Cessation

Prioritizing Healthy Recovery

The Louisiana Campaign
for Tobacco-Free Living

Empowering People
and Communities
Series

About TFL's Empowering People and Communities Series

Equitably bringing health education, resources and hope to people, populations, and communities in Louisiana.

Welcome.

We're happy you're joining us today.

The Louisiana Campaign for Tobacco-Free Living (TFL) is a program of The Louisiana Cancer Research Center, and we thank the TFL Advisory Board, and all our partners who work together to make Louisiana a healthier place to live, work, and play.



Our Agenda:

1. History of Addiction Treatment in Louisiana
2. Addiction Treatment in College
3. Tobacco Cessation During Addiction Recovery
4. The Harmful Effect of Nicotine/Tobacco Products
5. Opportunities for Population Health

Today's Panelists



Roy Baas, LAC, CCS,
AADC, CCDP-D



Sean Simmons, MEd, MA
Louisiana Tech University



Jean Hartzog, CTTS, NCTTP
Northeast Delta Human
Services Authority

Learning Objectives

1. Identify the addictive properties and brain response to nicotine
2. Explore current trends in addiction recovery services and how nicotine addiction is viewed/addressed.
3. Identify opportunities for promoting cessation of all addictive substances, including nicotine.
4. Identify and explain the SBIRT Process steps.
5. Identify resources available to promote cessation in the community and in recovery programs.

Addiction Treatment

- A Brief History
- Integration of mental health and addiction treatment
- Current Practices and Best Practices



Roy Baas, LAC, CCS,
AADC, CCDP-D

Understanding Nicotine and the Products that are Harmful



Cigarettes are Toxic

CHEMICAL COMPOUNDS IN CIGARETTE SMOKE

THIS GRAPHIC OFFERS A SUMMARY OF A SELECTION OF HAZARDOUS COMPOUNDS IN CIGARETTE SMOKE & THEIR EFFECTS

ESTIMATED NUMBER OF CHEMICAL COMPOUNDS IN CIGARETTE SMOKE

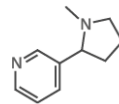
7,357

70

NUMBER OF THESE COMPOUNDS WITH CONFIRMED CARCINOGENIC ACTIVITY

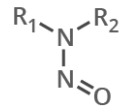
The compounds shown below are all found in cigarette smoke. The mass figures, given in μg , take into account both mainstream (inhaled) and sidestream smoke. 1 μg is equal to 1 millionth of a gram. Amounts of these compounds vary in different brands of cigarettes - these figures are approximate.

NICOTINE



- Approx. 919 μg per cigarette
- Addictive
- Increases heart rate
- Increases blood pressure
- Increases blood glucose
- Lethal dose: around 500-1000mg

N-NITROSAMINES



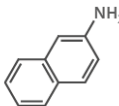
- Large class of compounds
- Several are tobacco-specific
- **Known human carcinogens**
- Most carcinogenic: NNK & NNN
- NNK: approx. 0.3 μg per cigarette
- NNN: approx. 2-50 μg per cigarette
- May cause reproductive damage

BENZENE



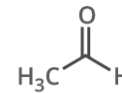
- Approx. 46-272 μg per cigarette
- **Known human carcinogen**
- Damages bone marrow
- Lowers red blood cell count
- May harm reproductive organs

AROMATIC AMINES



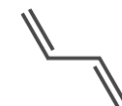
- Large class of compounds
- Includes 2-aminonaphthalene:
- **Known human carcinogen**
- Linked with bladder cancer
- Approx. 0.04 μg per cigarette

ACETALDEHYDE



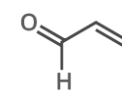
- Approx. 680-1571 μg per cigarette
- **Known animal carcinogen**
- **Probable human carcinogen**
- Irritant to skin & eyes
- Irritant to respiratory tract

1,3-BUTADIENE



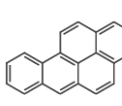
- Approx. 36-191 μg per cigarette
- **Known human carcinogen**
- **Suspected human teratogen**
- Irritant to eyes & skin
- Irritant to upper respiratory tract

ACROLEIN



- Approx. 69-306 μg per cigarette
- **Possible human carcinogen**
- **Known DNA mutagen**
- Irritant to skin & nasal passages
- May contribute to heart disease

POLYAROMATICS



- Large class of compounds
- Includes benzo[a]pyrene:
- **Known human carcinogen**
- **Known DNA mutagen**
- Affects reproductive capacity
- Up to 0.14 μg per cigarette



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Vaping

Vaping is the act of inhaling and exhaling aerosolized chemicals produced by an electronic-cigarette.

Other terms: Vapes, Vape Pen, Mods, Pods, Vaporizers, or JUUL (Juuling).



Nicotine content can be more than in cigarettes

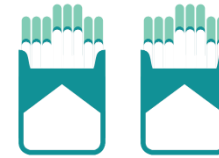


**1 JUUL POD = 20
CIGARETTES WORTH
OF NICOTINE**

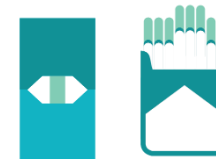
How Much Nicotine?

All salt-based e-juice/liquid contains nicotine

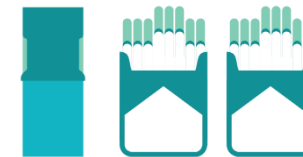
1 pack of cigarettes



1 JUUL pod



1 PHIX pod



1 Suorin pod



MYTH

There's no smoke from e-cigarettes—just harmless water vapor.



FACT

The aerosol that's created when an e-cigarette heats up the e-liquid is not just water vapor; it is harmful for users and for others who are exposed to it secondhand.

THE E-CIGARETTE AEROSOL THAT USERS BREATHE FROM THE DEVICE AND EXHALE CAN CONTAIN HARMFUL AND POTENTIALLY HARMFUL SUBSTANCES:



VOLATILE ORGANIC COMPOUNDS SUCH AS BENZENE, WHICH IS FOUND IN CAR EXHAUST



HEAVY METALS SUCH AS NICKEL, TIN, AND LEAD THAT CAN CAUSE RESPIRATORY DISTRESS



CANCER CAUSING CHEMICALS

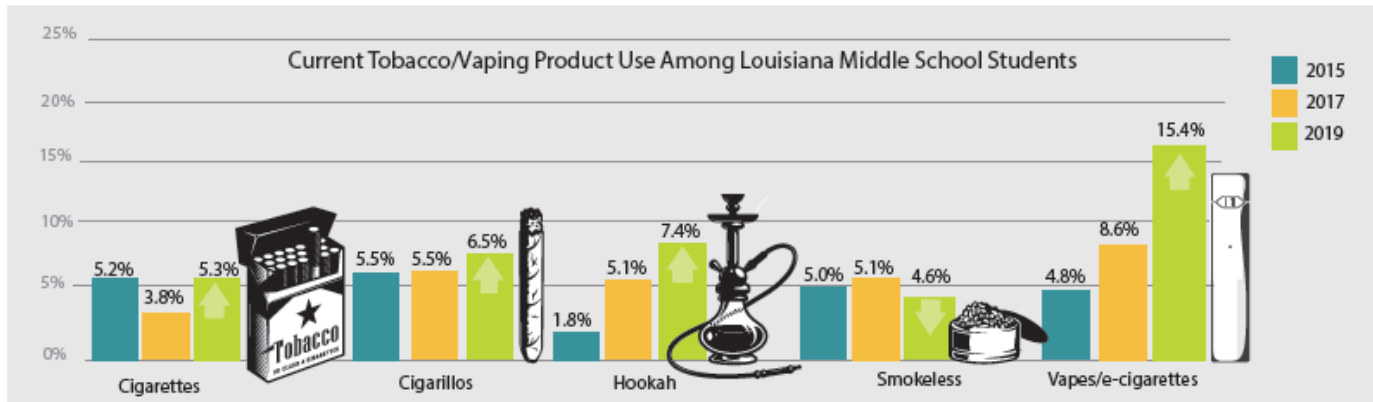


ULTRAFINE PARTICLES THAT CAN BE INHALED DEEPLY INTO THE LUNGS

FLAVORING SUCH AS DIACETYL, A CHEMICAL LINKED TO A SERIOUS LUNG DISEASE

Youth Use on the on the Rise

In 2019, tobacco use among Louisiana middle school students slightly increased, however, **vape use almost DOUBLED.**



What to know about vaping among Louisiana middle school students

Popular Vape Brands

JUUL
Blu
VUSE
Vapin Plus
Logic

Do they think vaping is more or less harmful than smoking?

More harmful	23.6%
Equally harmful	25.7%
Less harmful	19.5%
Not sure	31.2%

HOW DOES NICOTINE WORK IN THE BODY?



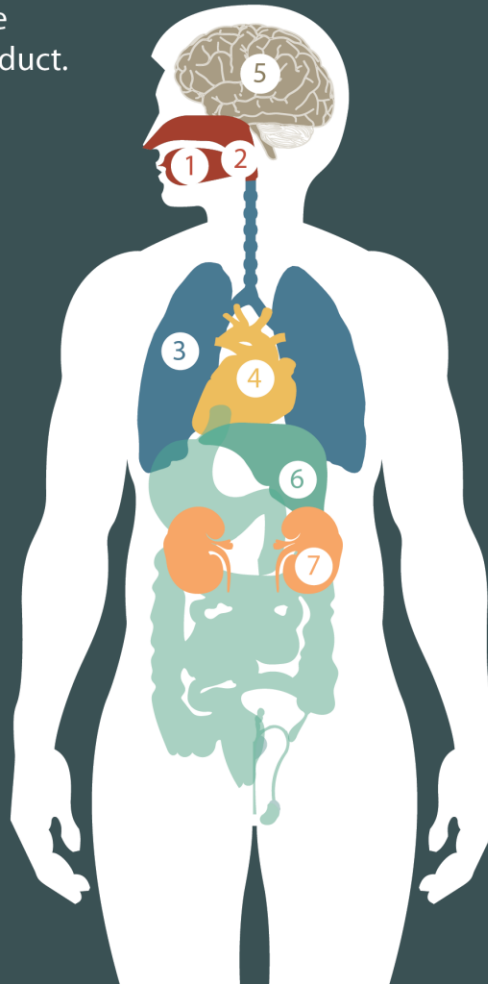
You smoke a cigarette or take a nicotine product. Nicotine is absorbed through the mucosal linings in the nose and mouth.



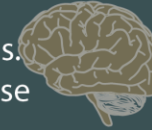
When you inhale, nicotine passes through the lung's membranes and into the bloodstream.



After it reaches the bloodstream, nicotine makes its way to your heart. There, it's transferred to your arteries, and up to your brain.



Nicotine reaches the brain in 10-20 seconds. It stimulates the release of neurotransmitters adrenaline and dopamine.



Nicotine is extensively metabolized to a number of metabolites by the liver.



Nicotine is filtered by the kidneys and excreted in urine, with variable reabsorption depending on urinary pH.



 addictionblog.org

NICOTINE PRODUCTS



Cigarettes and e-cigarettes



Chewing Tobacco and Snuff



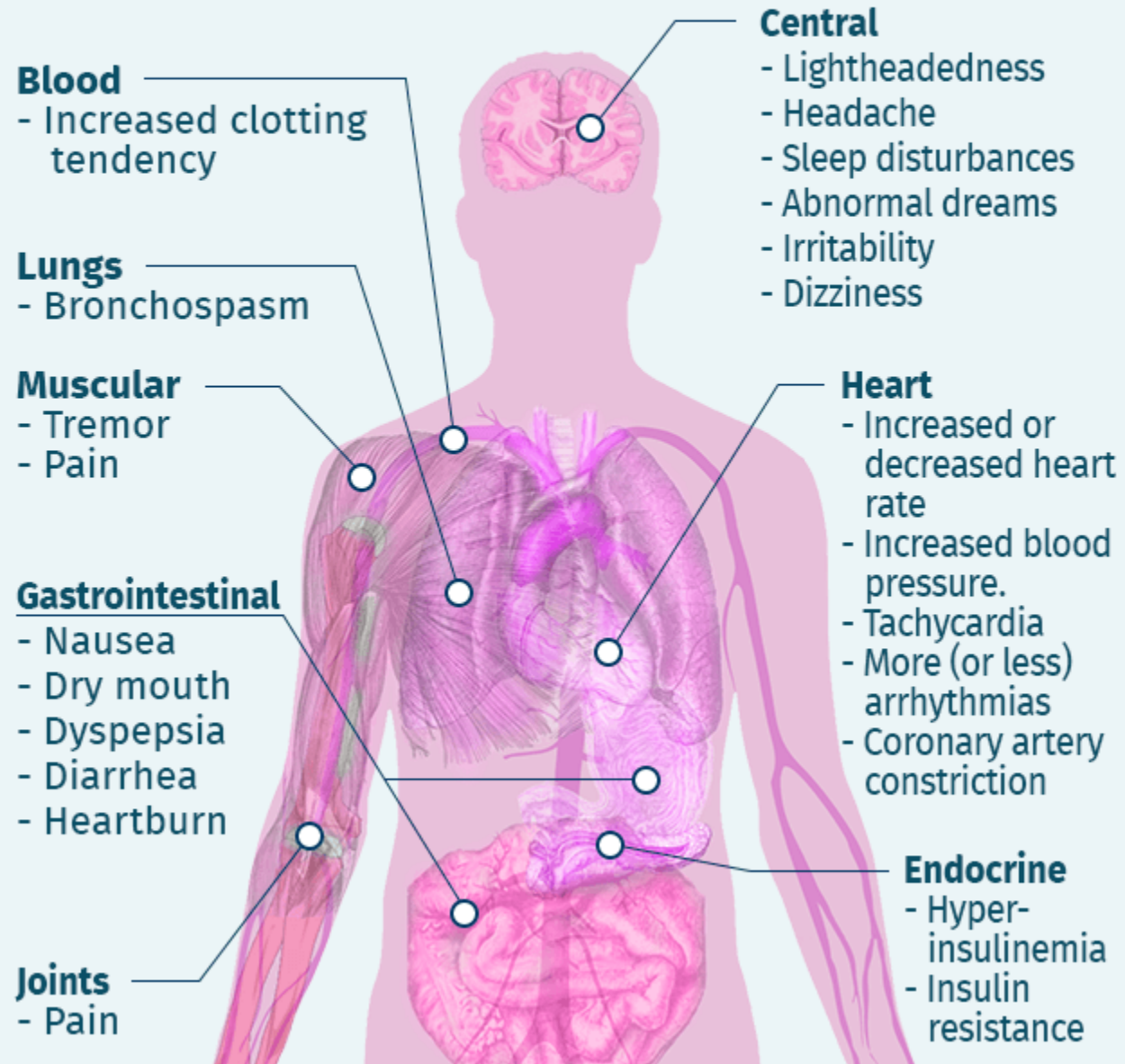
Pipes



Dissolvable tobacco (lozenges)

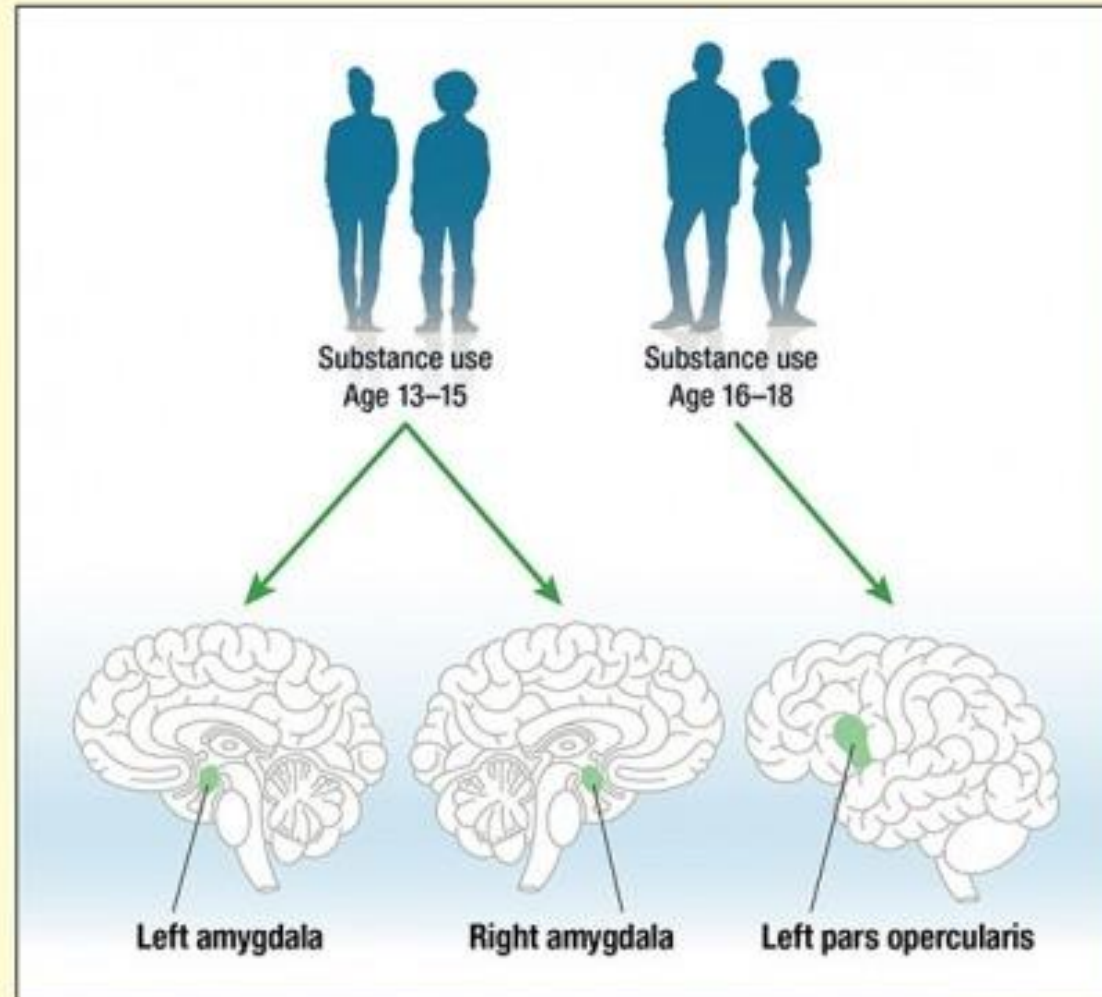
**Even if it was
'just nicotine'**

Side effects of **NICOTINE**



Brain Development and Addiction

Higher levels of alcohol, nicotine, and marijuana use before age 19 correlated with smaller gray matter volume in two brain areas.



Adapted from Windle et al. 2018. Permission for use of data provided by Dr. M. Windle.

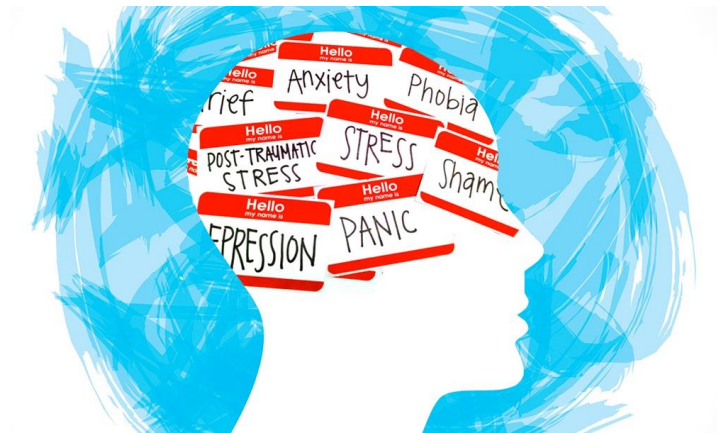
Nicotine and Mental Health

- Nicotine actually changes adolescents' brain cell activity in the parts of the brain responsible for attention, learning, and memory
- Nicotine can worsen ANXIETY, IRRITABILITY, and IMPULSIVITY
- Nicotine-induced changes to the brain during adolescence can be permanent
- Nicotine's harm can lead to long-term effects on the ability to make decisions and can also leave teens with an increased risk of addiction to other substances

There is NOTHING good about nicotine

Nicotine and Mental Health

- E-cigarette users report higher stress than non-users
- Tobacco addiction is associated with:
 - Schizophrenia
 - Mood Disorders
 - Anxiety Disorders
- During Adolescence exposure to nicotine can increase likelihood of developing chronic mental health disorders
- Depression is highly associated with e-cigarette use



Nicotine and Mental Health

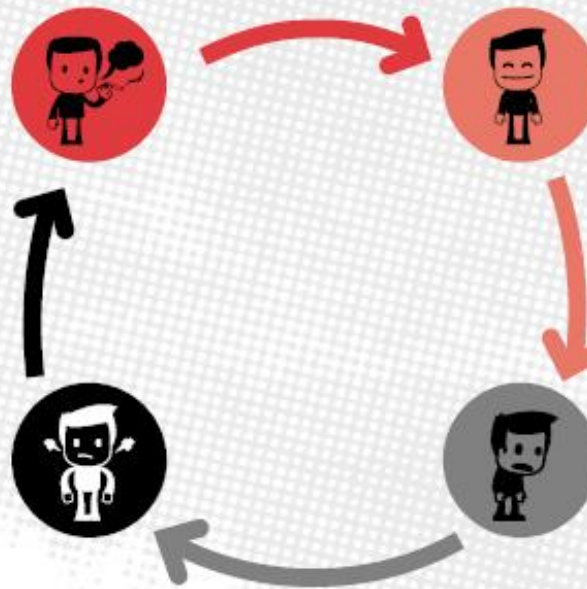
The stress cycle of smoking

1.

When you light up a smoke, it tops up your nicotine levels.

2.

Your nicotine withdrawal symptoms (like irritability, anxiety and restlessness) are immediately relieved, making you feel relaxed – but only temporarily.



4.

Once your nicotine levels have dropped even more, you begin to experience withdrawal symptoms including irritability, anxiety, headaches and difficulty concentrating.

3.

Soon after you've finished having a smoke, your nicotine levels begin to fall – leaving you craving another smoke and starting to feel anxious.

Nicotine Opens Pathways



- Those who reported past 30-day **e-cigarette** use at age 18 were more likely to report past 30-day **cigarette** use, alcohol use, marijuana use, and non-medical prescription drug use at age 19
- Use of nicotine e-cigarettes was associated with a greater likelihood of vaping marijuana for adults aged 25-54 years

SBRIT

Screening, Brief Intervention and Referral to Treatment

- Screening quickly assesses the severity of substance use and identifies the appropriate level of treatment.
- Brief intervention focuses on increasing insight and awareness regarding substance use and motivation toward behavioral change.
- Referral to treatment provides those identified as needing more extensive treatment with access to specialty care.



<https://www.samhsa.gov/sbirt>

<https://attcnetwork.org/centers/northwest-attc/screening-brief-intervention-and-referral-treatment-sbirt>

Addiction in College

- Academic Expectations
- Family Separation/ Issues
- Independence/Freedom
- Social Scene
- Greek Scene
- Availability of drugs/alcohol



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Louisiana Tech University

Tobacco Cessation in Addiction Treatment Programs

- Mental Health
- Myths about tobacco cessation
- Possible Reasons for Resistance in Addiction Recovery



Jean Hartzog, CTTS, NCTTP

Northeast Delta Human
Services Authority



Resources to help with Anxiety, Depression, and Addiction

Northeast Delta Human Services Authority

St. Francis Tobacco Cessation Program

Vantage Tobacco Cessation Program

Family Solutions Counseling Center

ULM Counseling Center

LA Tech Counseling Center

Go Care (also specializes in working with LGBTQ+ population)



Quitting

- Text QUIT to 47848
- Use the quitSTART app
 - Available in the Apple Store and on Google Play
- Speak to an expert
 - Call 1-800-QUIT-NOW
 - 1-800-784-8669
 - Visit QuitWithUsLa.org



Live Vape Free

Step 1

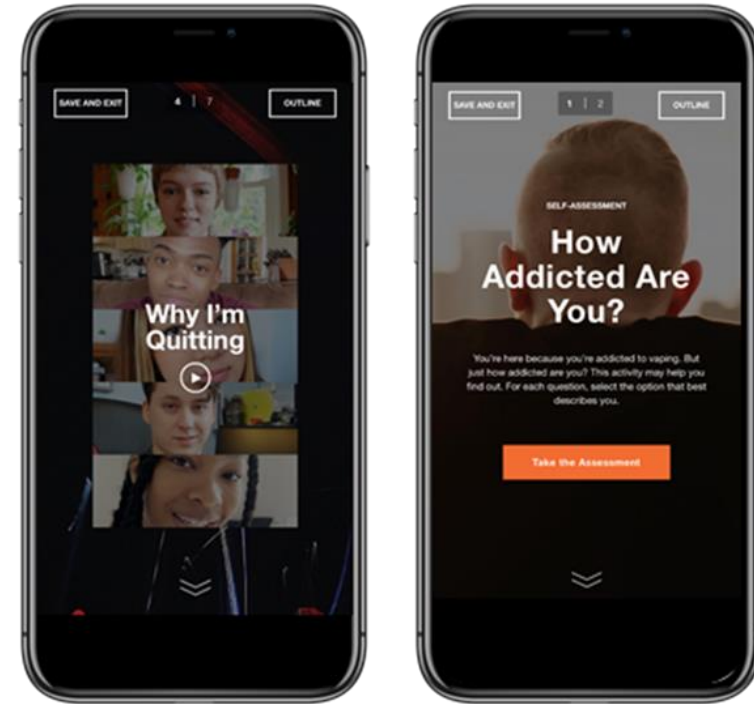
Participant texts
VAPEFREE to **873373**

Step 2

Participant completes a
brief assessment

Step 3

- Experience kicks off with the first introductory lesson
- Teen sets a quit date



ALL IMAGES ARE FPO

Q&A Session

Let's start a conversation.

Thank you.

We look forward to seeing you again.

Please take the survey you will receive in your email inbox shortly.