Vaping / JUULING
WHAT'S THE BIG DEAL?

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Trends in Middle / High school

Clothes / Music
Social media
Snapchat
Instagram
Drinking
Smoking weed
Juuling / Dab pen
Netflix
When describing brain development, scientists consider adolescence to be from ages 10-24.

Maturation of limbic system, prefrontal cortex

Since areas that govern impulse and motivation aren’t fully developed, it increases risks for alcohol, nicotine, and drug addiction.
"I'm good or bad depending on the circumstances, the situation, and the people involved."
Brain Development

Maturation of adolescent brain

- Heredity and environment
- Sex hormones (Estrogen, progesterone, testosterone)
- Physical, mental, economical, psychological status
- Surgical interventions
- Sleep
- Nutritional status
- Pre and postnatal insult
- Pharmacotherapy
- Drug abuse (nicotine, caffeine, alcohol etc)
- Age (10-25 years)
Prefrontal cortex is immature

Adolescents weigh the positive experiences more and the negative experiences less than adults do.

More likely to engage in risky behavior such as reckless driving, unprotected sex, and drug and alcohol use / abuse.
Adolescent behavior

WHAT WAS SAID
Don't you think it's time to get up and get busy?

WHAT WAS HEARD
Don't get up
Brain Development

Executive human brain functions

- Ability to balance short-term rewards with long-term goals
- Considering future and making predictions
- Focusing attention
- Organizing thoughts and problem solving
- Impulse control and delaying gratification
- Forming strategies and planning
- Modulation of intense emotions
- Inhibiting inappropriate behavior and initiating appropriate behavior
- Shifting/adjusting behavior when situations change
- Foreseeing and weighing possible consequences of behavior
- Simultaneously considering multiple streams of information when faced with complex and challenging information
ADOLESCENT THOUGHT PROCESS

- READY
- SET
- GO!!
- UH, OH!
- JUUL is a type of vaping
- Over 2 million middle and high school students admit to vaping routinely
- ALL JUUL pods contain nicotine
- 1 pod contains the equivalent amount of nicotine in 1 PACK of cigarettes
JUUL and pod
Sourin
Vape pens
Dangers

- Easy access
- Nicotine is highly addictive and harms developing brains
- Can lead to problems with attention, learning, mood and impulse control
- The pods contain other flavorings / chemicals
- Some flavors are ok to eat, but may not be ok to inhale
- Using e-cigarettes leads to using regular cigarettes in the future
- These devices can be used to deliver marijuana and other drugs
Dangers

- The aerosol is not just “water vapor”
- Others around the person vaping may inhale small amounts of nicotine and chemicals as well
- Addiction to nicotine – Researcher Richard Miech reported in Nat. Academy of Science report that “Vaping can provide a physical pathway to smoking by creating an addiction to nicotine”. Among adolescents who have never smoked, those who vaped were about 3.5 times likely to have tried cigarettes within a year.

Most worrisome:
- Scientists really don’t know all the harmful long term effects of e-cigarettes
Nicotine addiction

- Inhaling from just 1 cigarette can lead to nicotine addiction

- Kids show signs of addiction almost immediately
Withdrawal from nicotine

- Tingling in hands/feet
- Sweating
- Nausea / abdominal pain
- Headache
- Cough / sore throat
- Depressed mood
- Trouble sleeping
- Trouble concentrating
- Increased hunger
Diacetyl & "Popcorn lung"

Named for people who were exposed to breathing in diacetyl which was in a flavoring of buttery popcorn.
Signs your child may be vaping

- Increased thirst
- Desire for flavor
- Nosebleeds
- Acne
- Cutting back on caffeine
- Pneumonia / frequent cough
- Extra USB drives / spare parts
A February 2019 JAMA study found that among 12 to 15 year-olds who had used e-cigarettes that, within 2 years, they were 3 times more likely to become smokers.
The BASIC PROBLEM

I CAN SEE YOU, I CAN HEAR YOU,

YET I CANNOT COMPREHEND ANYTHING YOU SAY OR DO.