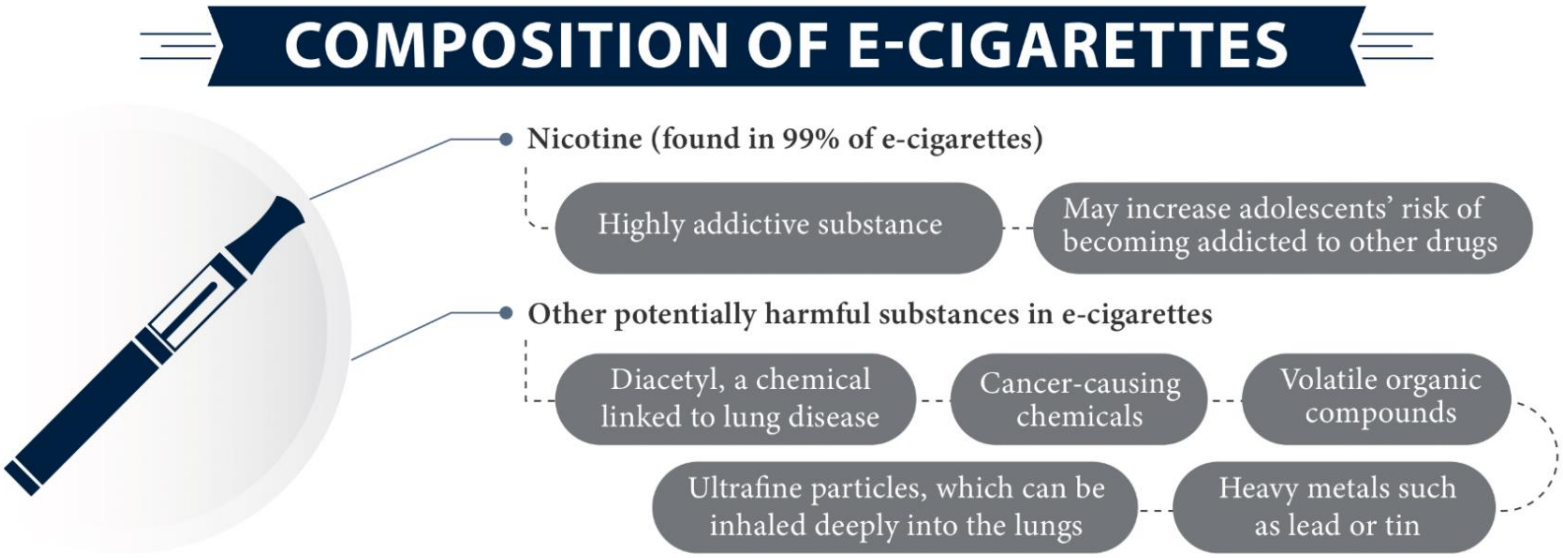
Vaping Effects on the Brain

Vaping and traditional cigarettes pose different health risks, but neither are safe. Traditional cigarettes contain tobacco that, when burned, produces thousands of chemicals, including at least 70 known carcinogens. They have been extensively studied and linked to lung cancer, heart disease, stroke, COPD, and many other severe health conditions.

Vaping products heat a liquid (usually containing nicotine, flavorings, and other chemicals) to create an aerosol that users inhale. While vaping eliminates many of the harmful combustion products found in cigarette smoke, it introduces other concerns:

- Vaping liquids can contain harmful substances like formaldehyde, acrolein, and metal particles
- The long-term effects of inhaling vaping aerosols are still being studied
- Severe lung injuries have been linked to vaping products, particularly those containing vitamin E acetate
- Both products contain nicotine, which is highly addictive



Source: University of Nevada, Reno

VAPING AND BRAIN FOG

Studies suggest that adults and children who vape are more likely to experience cognitive function interference (aka "brain fog") than their non-vaping peers. This can include:

- Greater difficulty concentrating
- Harder time remembering things
- Greater difficulty in decision-making

These studies suggest that vaping should not be touted as a safe tobacco alternative.

Brain fog is more a group of symptoms than a true medical condition, and can be caused by various factors such as:

- Lack of sleep
- Dementia
- Increased stress
- Depression
- Viral infections such as COVID-19
- Hormonal issues such as thyroid disorders
- Chronic health conditions like multiple sclerosis

e-cigarettes can also contain marijuana, which makes the drug odorless, and interferes even more with the brain.

WARNING: Vapes can unknowingly contain fentanyl!!

VAPING, BRAIN FOG AND YOUTH

Teen brain facts

Brain size
- The brain reaches full size in girls at around age 11.
- The brain reaches full size in boys at around age 14.

The brain does not finish developing until the mid-to-late 20s.

The teen brain is readily capable of adaptation.

Numerous mental disorders may manifest during adolescence such as anxiety, depression and bipolar disorder.

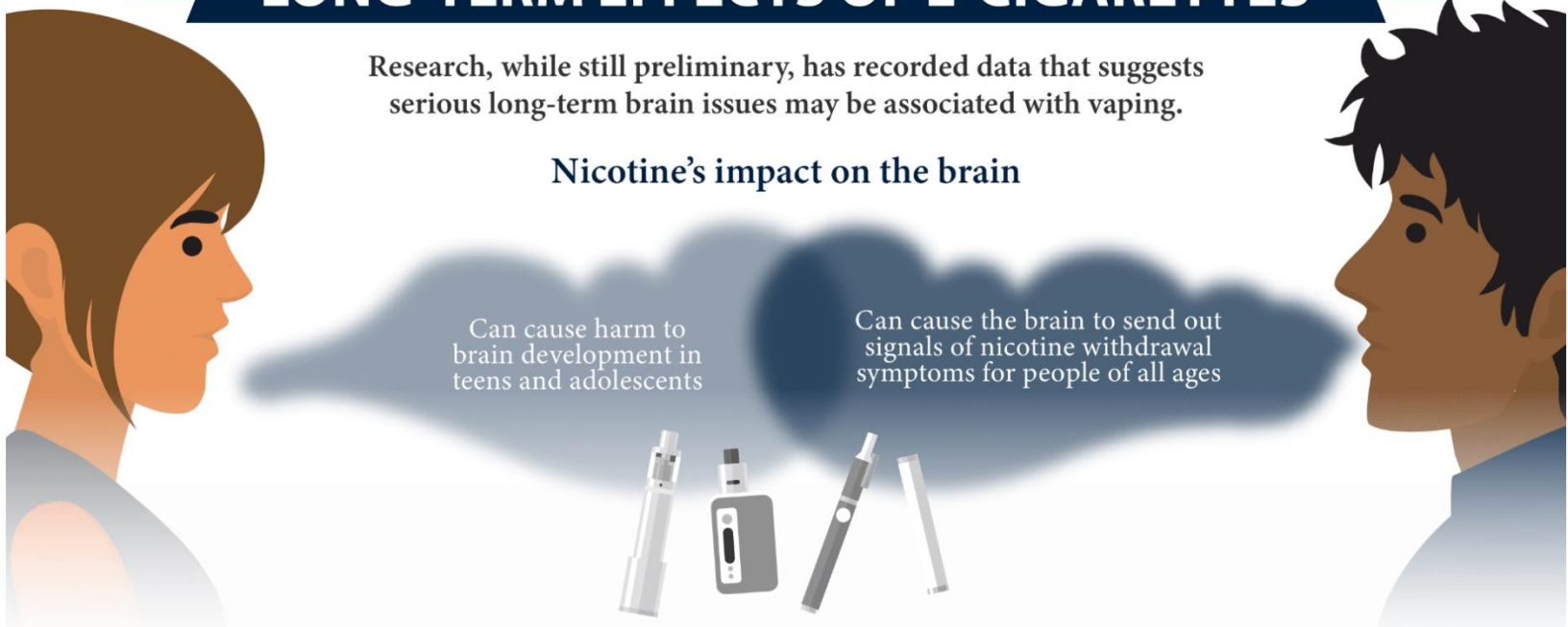
Teen brains may be more susceptible to stress.

Studies suggest children between the ages of 8 and 13 are at a higher risk of brain fog due to vaping than children 14 or older.

LONG-TERM EFFECTS OF E-CIGARETTES

Research, while still preliminary, has recorded data that suggests serious long-term brain issues may be associated with vaping.

Nicotine's impact on the brain



Alteration of brain activity

Nicotine has a negative impact on the synapses that connect brain cells.

Changes occur in the brain area controlling essential functions:
- Mood
- Attention
- Learning
- Impulse control

Many vaping devices produce vapor containing lead, which can cause brain damage.

This is what e-cigarette devices can look like: