What YOU need to know about VAPING
Discussing:

What is vaping?

What is a vape?

Why are children vaping?

What are and Do we have all the facts on the dangers?
What is vaping?

Vaping is the inhaling of aerosol, often called vapor, produced by e-cigarettes or other similar devices.

Vaping, e-cigarettes, e-cigars, and “Juuling” are all the same thing.
Why do we care about vaping?

Since introduced to the U.S. in 2006 it has rapidly grown into a $3.6 Billion industry that has been poorly regulated and is affecting our health.
All major tobacco companies have stake in vape companies. Altria (Marlboro) purchased 35% of Juul for $13 Billion. With big tobacco comes big money for ads and lobbying.
YOUTH E-CIGARETTE USE

- 3.6 million middle school & high school students currently use e-cigarettes
- 1.5 million from last year
- 78% among high school students
- 48% among middle school students

CRACKING DOWN

FDA: E-CIG USE SPIKED 78% AMONG HIGH SCHOOLERS AND 48% AMONG MIDDLE SCHOOLERS SINCE LAST YEAR

SOURCE: NATIONAL YOUTH TOBACCO SURVEY
Vaping is being sold to children as a social activity with “influencers” and celebrities modeling vaping and selling their own product. It is also marketed as a “community” appealing to all of us.
Many flavors, Many ingredients

Vape “Juice”
Until recently no federal agency has overseen the vape industry. The FDA is finally setting regulations.

However currently vape juices are not tested or verified so in reality, NO ONE KNOWS!!
Forty-Two Chemicals Identified in Electronic Cigarettes

✓ = exposure can be especially harmful to the health. Chemicals in red are emitted in secondhand smoke.

2-butanone (MEK)
2-furaldehyde
Acetaldehyde ✓
Acetic acid
Acetone ✓
Acrolein ✓
Aluminum
Barium
Benzene ✓
Boron
Butanal
Butyl hydroxyl toluene
Cadmium ✓
Chromium ✓
Copper
Crotonaldehyde
Diethylene Glycol ✓
Formaldehyde ✓
Glyoxal
Iron
Isoprene ✓
Lead ✓
Limonene
m,p-Xylen
Magnesium
Manganese
Nickel ✓
Nicotine ✓
N-Nitrosonornicotine ✓
o-Methylbenzaldehyde ✓
p,m-Xylene
Phenol ✓
Polycyclic Aromatic Hydrocarbons ✓
Potassium
Propanal ✓
Propylene Glycol ✓
Sulfur
Tin ✓
Toluene ✓
Valeraldehyde
Zinc
Zirconium
The health risks of vaping are still being discovered. It took decades to understand all of the dangers of smoking. Vaping has only been here for about 13 years yet serious health effects are rapidly emerging.

Vaping has been linked to:

- Weakened immune system
- Nicotine addiction
- Raised blood pressure
- Inflammation of lungs
- Risk of lung disease
- Mouth and Throat irritation
- Heart attack and stroke
### Relative Addictiveness of Common Drugs

<table>
<thead>
<tr>
<th>Drug</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine</td>
<td>99</td>
</tr>
<tr>
<td>Smoked methamphetamine</td>
<td>98</td>
</tr>
<tr>
<td>Crack cocaine</td>
<td>97</td>
</tr>
<tr>
<td>Injected methamphetamine</td>
<td>92</td>
</tr>
<tr>
<td>Valium</td>
<td>83</td>
</tr>
<tr>
<td>Seconal</td>
<td>82</td>
</tr>
<tr>
<td>Heroin</td>
<td>80</td>
</tr>
<tr>
<td>Nasal amphetamine</td>
<td>80</td>
</tr>
</tbody>
</table>
How much Nicotine is in your vape?

A significant issue is that no one knows how much Nicotine they are actually getting from a “hit” of vape. A hit varies by how big of an inhale you take, the potency of the liquid, and settings of the vape. Because of these variants users frequently overdose on Nicotine. An issue not seen with cigarettes due to differences in how long it takes to ingest the Nicotine and how strong the dose is.

So, How much Nicotine is in one Juul pod?
1-2 packs of cigarettes, or

20-40 cigarettes are equal to

1 juul pod

Source: V2C system
Aside from being highly addictive, nicotine has adverse effects on adolescent brain development and dopamine levels.
Popcorn lung (Bronchiolitis obliterans) was first observed in workers who worked at a popcorn factory. It is a debilitating condition that is caused when DIACETYL, a safe to eat food grade flavor enhancing chemical, is heated and turned into vapor. Symptoms can be managed but it **CAN NOT be cured or reversed!**
*The CDC is working with state health departments nationwide. Since June 28, states have reported 8 deaths and over 500 cases of severe lung illness tied to vaping. Primarily among teenagers and young adults. Patients experienced coughing, shortness of breath and fatigue. Some had serious breathing difficulties that required ventilation.

*August 2019 an 18 year old in Florida was hospitalized, requiring emergency surgery after his lung collapsed from a hole. His lungs were found to have severe inflammation and a hole which was caused by his daily use of a Juul vape. Ammirata had been a vape user for less than 2 years.
Vaping and Narcotics

Marijuana is already widely available in Vape format. It is more potent than marijuana of the past and there are the same issues as with Nicotine.

Other narcotics that have been successfully vaped include:

- Bath Salts
- Methamphetamine
- Flakka
- DMT

All of these drugs are psychoactive and synthetic. They have been linked to addiction and death.
Because vaping has been proven to be a cost effective and very efficient delivery system pharmaceutical companies and drug cartels are working to make **fentanyl** and other synthetic opioids vapable. It has been proven it can be done already.

How will this affect the opioid crisis??

How will you detect it in your vape?

How much are you ingesting?
Conclusion

Vaping has become an epidemic among our students. There are severe negative health risks from vaping or being around vaping already established and being discovered. If you don’t vape please don’t start. If you do vape, please seek out help to stop.