# Vaping The essentials

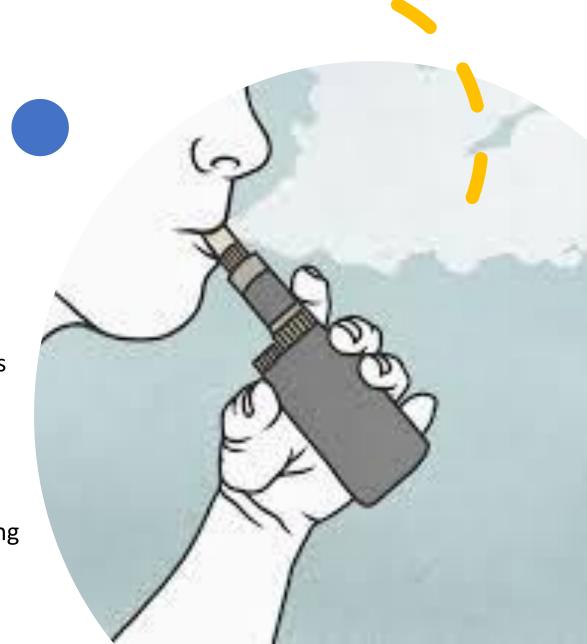
Bron Grieve Community Health Nurse May 2023





#### What is Vaping?

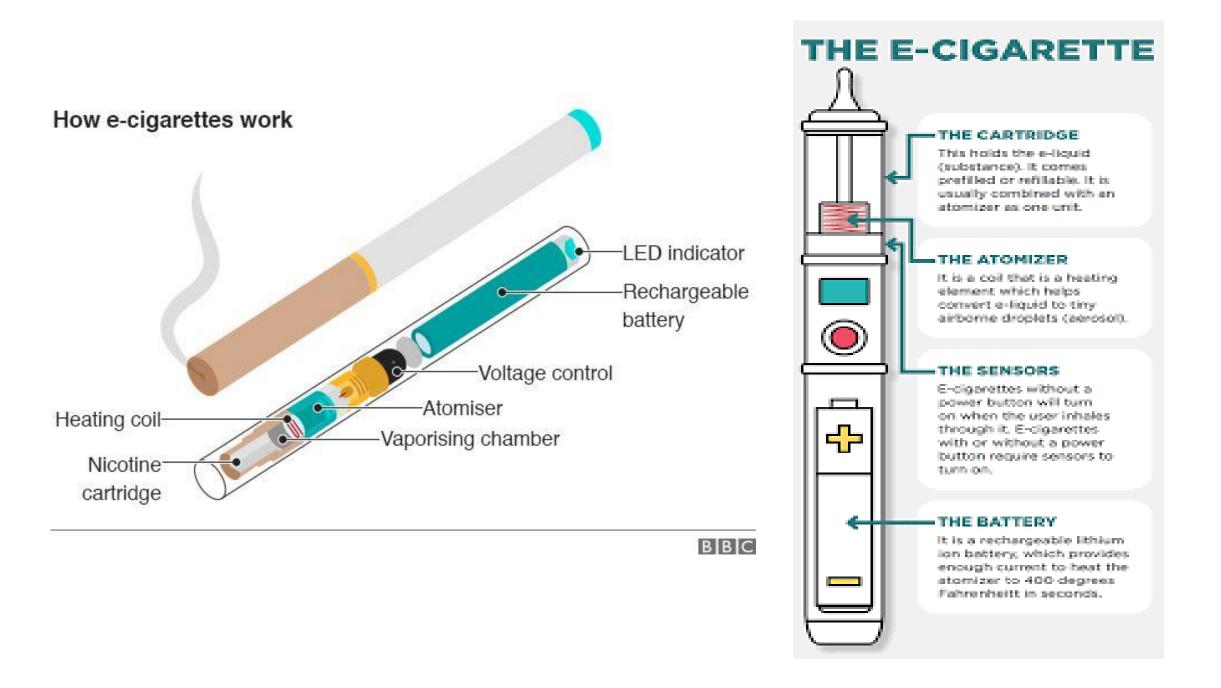
- A smoking device that is battery powered that heats a liquid (often called an 'e liquid/ e juice/nic juice/zero nic/smoke juice') until it becomes a vapour that can be inhaled (vaped) into the lungs
- The "vapour" (fine mist of chemicals) is an aerosol (not steam) as contains chemicals from e liquid
- 22000 different e-liquids-base ingredients & 7000 flavours
- Look like pens, highlighters and USB drives
- Often/originally prescribed to assist people to quit smoking (first manufactured in 2003)



## Other names for Vaping

- E cigarettes- ecigs
- Juuls
- ENDS- (electronic nicotine delivery system)
- ENNDS (electronic non nicotine delivery systems)
- E- hookahs
- Personal vaporisers
- Mods
- Vape Pen
- ANDS- (Alternative nicotine delivery system)
- Lithium battery operated devices









#### **Types of E-Cigarettes**



Box or vape mods



mods

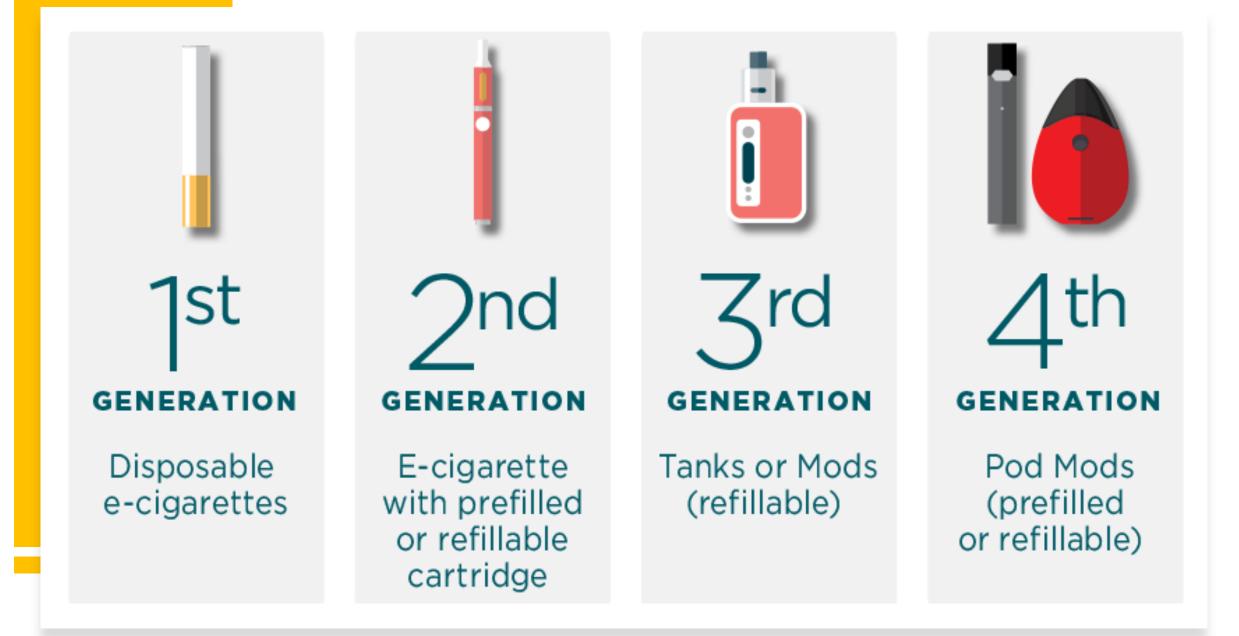
Squonk



mm

mmjdoctor.com





- 53% of e-cigarette use is by people who also smoke
- 54% of e cigarette users in Victoria are under 30 yrs (2022 Quit)
- 14% 12- 17yrs tried vaping, 1/3 use many times per week

### Stats

(CDC,, DARTA, QUIT, Vic smoking and Health Survey 2022,Nat Centre for epidmology and population Health)

- 15.5% of people who vape have never smoked\* (Quit- 25%)
- Use in youth and adults doubled in 12 months (Vic smoking and health survey 2022)
- Increased 5-fold in woman 18-24yrs between 2018- 2022 ( Quit 2022)
- Between 2015- 2019 increased 96% in Australia

# Why are young people Vaping?

- Curiosity (72.3% NSW Health)
- Can do it anywhere/ easy to hide
- Cool smoke- tricks!\*
- Don't have to share with anyone
- Cheaper than cigarettes
- Easy to buy online or in person
- Think less harmful than cigarettes (20.4% NSW Health 2022)
- Make online videos fun
- Fun flavours –taste good!
- Social media platforms (tic tok etc) glorifying
- Celebrities glorifying
- Push boundaries- 'gotcha' moments
- Social acceptance
- Cool "teen terms" and challenges to create



#### TOP 10 VAPE TRICKS EVERY SMOKER NEEDS TO KNOW











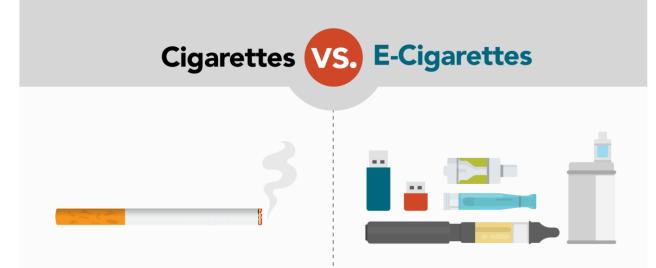
CONFESSION TIME: GETING REAL



- Many believe (and made to believe) it is safe- its just water vapour
- Many believe "it wouldn't be so widely available if it were dangerous"

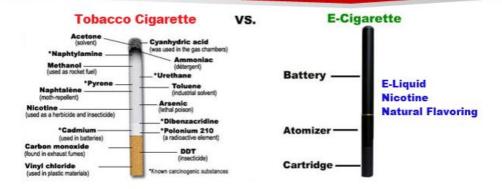
Why is Vaping a problem?

- No quality or safety standards- labelling currently unregulated in Australia\*
- Deliver hundreds of chemicals some known to be toxic, others unknown effects\*
- Some chemicals activated by heat- harmless on list- not when heated
- USA- >2500 teens hospitalised with lung issues related to vaping (EVALI\*)> 70 deaths (2018)
- Addictions- nicotine and social

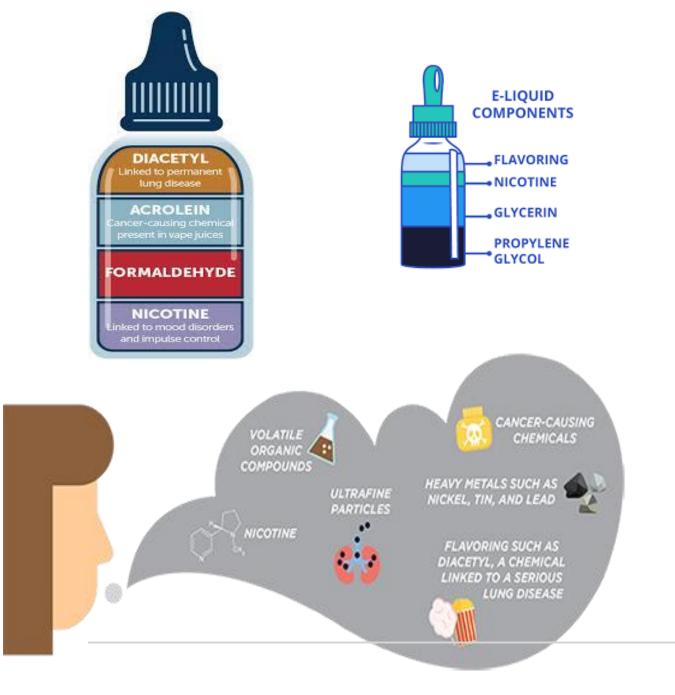


#### (••) 65 26 10 **CHEMICAL** CHEMICAL **CHEMICALS** COMPOUNDS **COMPOUNDS** found in have been are considered e-cigarette aerosol harmful found in various are similar or potentially e-cigarette to those found juices and harmful to humans. in cigarette smoke. aerosols.

#### **ARE E-CIGARETTES SAFE?**



#### E-CIGS VS TOBACCO CIGARETTES



38 chemicals are listed as poisons on the Australian Poisons standard 50% of 65 Australian e-liquids advertised as best-sellers contained chemicals used in pesticides and disinfectants

# VAPING... A TOXIC MIX It's more than just WATER VAPOR



### Signs someone may be Vaping

- Sweet or fruity smell\* clothes, backpack, room
- Vaping devices- USB drives, unfamiliar chargers or batteries, metallic wires.
- Unusual spending/ packages arriving
- Increased thirst
- Nose bleeds, increased cough, mouth sores
- Behavioural changes, mood swings, agitation, low concentration
- Increased secrecy eg deleting texts/ passwords/ behaviours
- Shortness of breath
- Trouble sleeping
- Desire for spicy or salty foods- 'vapers tongue'\*
- Recent weight loss
- Photos, videos, or adds about vaping on phones/ social media
- Vomiting, nausea feeling unwell (Nic sick)



# Where are our youth getting products?

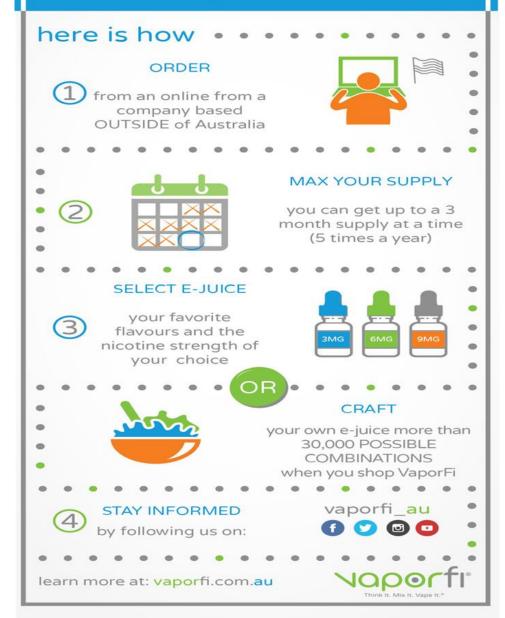
#### Shops-known to youth

#### online

### Friends/ dealers

#### Instagram

#### wondering how to legally buy nicotine e-juice in Australia?



## The law and Vaping

NOT illegal to vape if under 18- only if can be detected to have cannabis (DARTA)

Must be over 18 years of age to BUY e cigarettes Only pharmacies legally allowed to sell nicotine e cigarettes with a script

e-cigarettes cannot be used in areas where smoking is banned

IS illegal to import or buy ecigarettes from overseas

### The Law and Vaping

Sale, possession and use of non-nicotine e-cigarettes is legal in Victoria The Tobacco Amendment Act 2016 regulates all ecigarettes in the same laws as tobacco products

Vic-e-cigarettes remain unclassed and are therefore not regulated under tobacco laws. (vape Australia.com) There is no current legislation to seize any tobacco or e-cigarettes of a minor ( under 18- cannot confiscate( Vic Police)

## In summary- Why is vaping a problem?

Young brainsdeveloping more prone to addiction and behavioural changes

Young people who vape 3x more likely to take up smoking

(Aust national University 2022)

Unknown chemicalseven those labelled 'nicotine free' may still include nicotine.

Don't know what you are inhaling Could be up to 150 unknown chemicals

Health effects are unknown- but emerging

## What can parents/carers do??

#### FOUNDATIONS!

- Calm down..step back... Breath...\*
- Recognise that vaping was not part of your life- new for you to understand
- Remember what it was like to be a teen\*
- Know the facts
  - still evolving
  - variety sources
  - Keep UTD
- Practice what you want to say
  - No judgements
  - Positive wording
  - Listening ears on
- Find right time and place to speak to YOUR child

# What can parents/carers do ?

- Avoid scare tactics-FACTS over emotions
- Early and often- Keep dialogue open
  - comment on others
  - chat in general
  - Not an overnight fix
- Why NOT vape vs WHY vape?
- **Empower** strongest tool is your own opinion (esp if you are a teen??)
- Consider Social needs

TOOLS NOT RULZ! BE KIND TO YOURSELF!



5 steps to having a productive conversation about vapes/drugs (DARTA)

**1.Ask their perspective-** why did/do they vape? Why want to? help me understand YOUR per angle. FOUNDATION of talk.

2.Express your views/ what you know- keep it simple, no judgements, facts over emotions

#### **3.Express your family expectations/boundaries on vaping\***

(parental disappointment is powerful), consequences of vaping in home,

4.Time for them to respond (emotions and all-but don't get caught up in their emotions)

**5.Offer to learn together-** compare resources, documentary, movie- Broken: Big Vape(Netflix), insight (https://youtu.be/d38P6HD9RNE?t=12)

# What can we do to support Schools and Communities??

- Support teachers so they can teach- what does that look like?
- Create a consistent approach in schools and communities
- PD for teachers
  - simple- facts and tools to walk away with
  - avoid negative/ scare tactics and the word DON'T or NO
- Community- information nights- neutral space, invite YP, take politics out, provide grassroots tools-



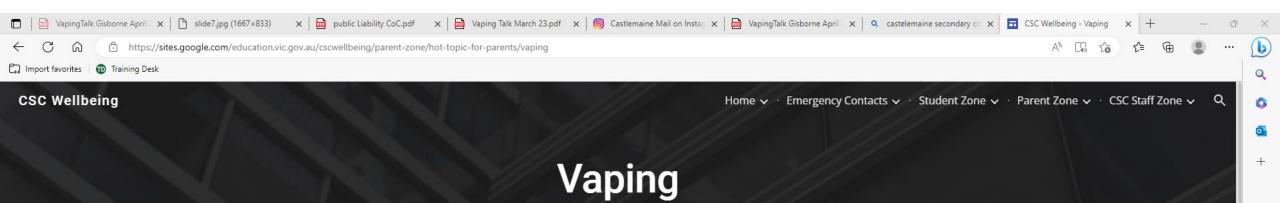


- Mentor groups- 30 minute information sessions and school expectations- effective
- **Contact families-** fact sheets/ podcasts/ website resources
- <a href="https://sites.google.com/education.vic.gov.au/cscwellbeing/parent-zone/hot-topic-for-parents/vaping?authuser=0">https://sites.google.com/education.vic.gov.au/cscwellbeing/parent-zone/hot-topic-for-parents/vaping?authuser=0</a>

• Wellbeing referral

reducing or cessation of vaping options. Review of any signs of addiction <u>20220912 vape\_check-40-a4-version-22.pdf</u> Referral to school GP or AOD/ QUIT if needed

• **1 day suspension-Internal education-** harms of vaping- google classroom session with exam Risks, potential harms, side effects, decoding vaping marketing, reasons to NOT vape, laws



#### Vaping & E-cigarettes

#### What are e-cigarettes?

Electronic cigarettes (e-cigarettes) are battery-powered devices that come in many forms. They all heat liquids, called e-liquids, into an aerosol that users breathe in. They may contain nicotine, flavourings and a range of harmful and toxic chemicals. Many e-liquids come in flavours that are attractive to young people, such as mango, lime and mint. The ecigarette heat may also produce toxic substances.

They are also known as e-cigs, electronic nicotine delivery systems (ENDS), electronic non-nicotine delivery systems (ENNDS), alternative nicotine delivery systems (ANDS), personal vaporisers, e-hookahs, mods, vape pens, vapes and juuls (pronounced 'jewels').

Using e-cigarettes is often called 'vaping'.

#### **Recommendations for parents**

As a parent and caregiver, you have an important role in protecting children from e-cigarettes.

The best way to protect your children is to never smoke or vape in the house, car or other places where there may be children nearby. Passive

#### Listen to the Podcast: How to talk to teens about vaping

2

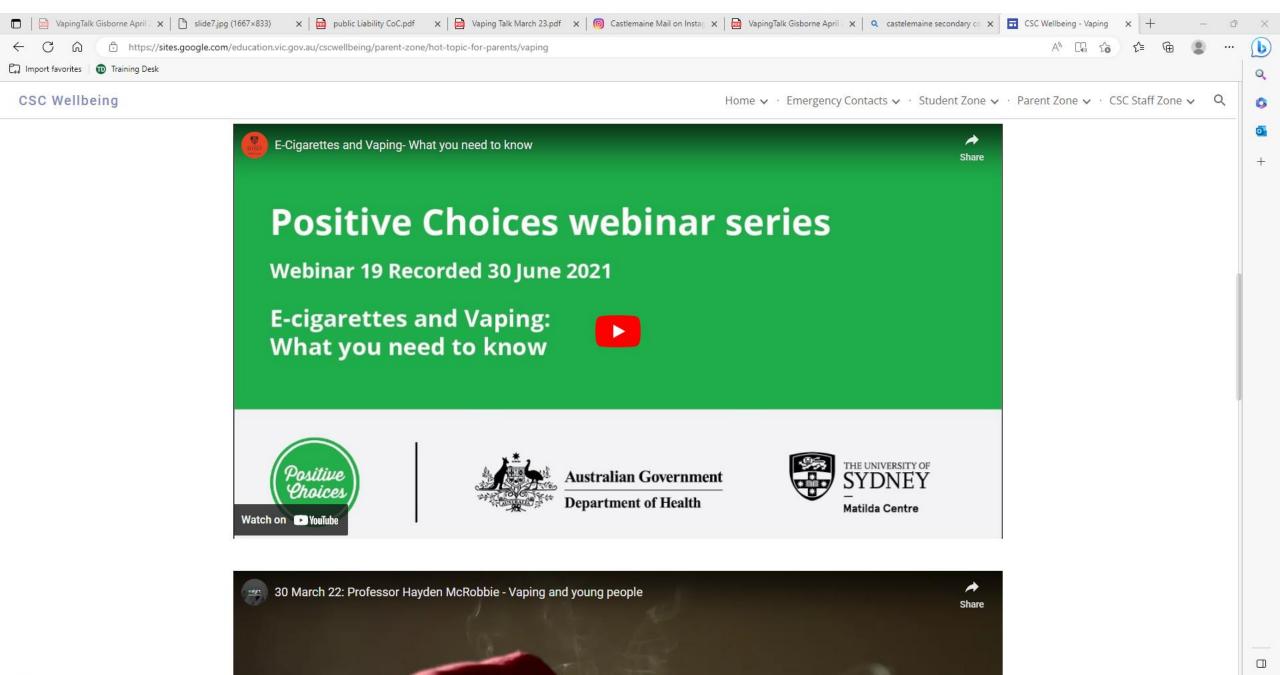
#### How to talk to teens about vaping

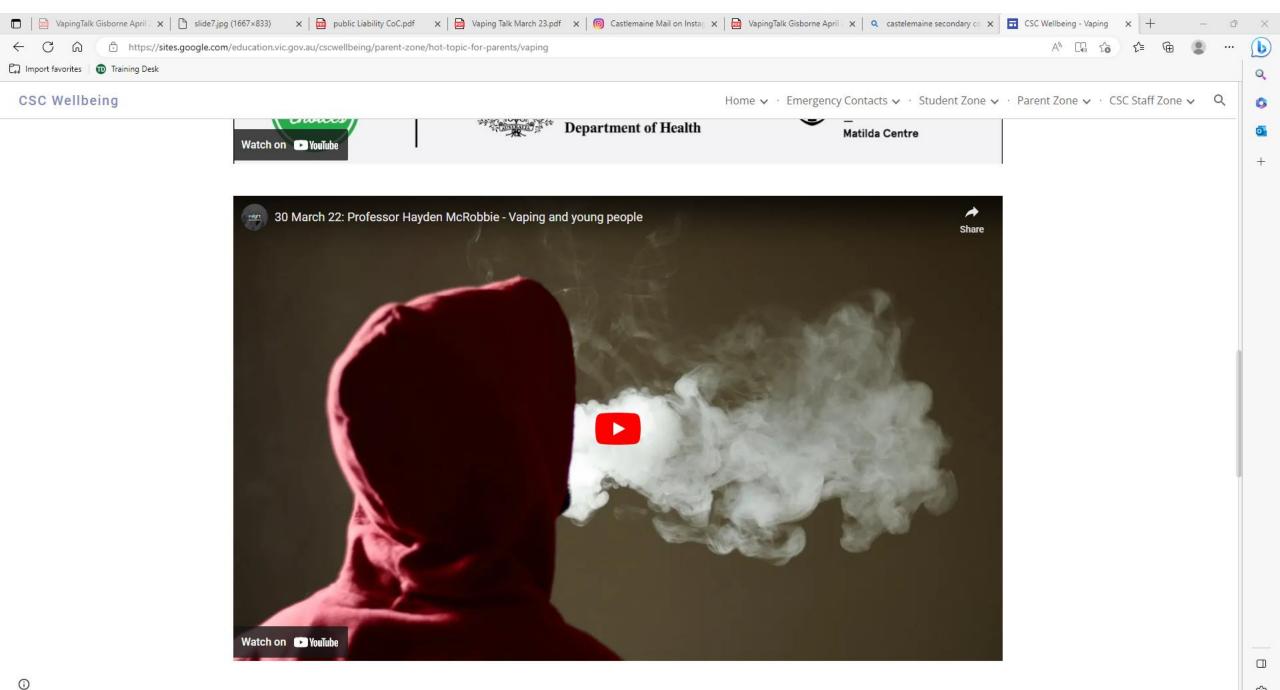
Turns out vaping isn't all that harmless. New research has found that vaping can cause acute lung injury, seizures and addiction. Teenagers are right in the thick of this vape cloud, so how do you talk to them about the harms of getting hooked?

#### How to talk to teens about the health risks of using e-cigarettes?

Talking with teens about risky behaviours is an important way for parents to help keep them safe. Parents are already good at talking to their teens about alcohol, smoking and drugs. E-cigarettes should be included in the conversation.

The earlier and more often you speak with young people about ecigarettes, the more likely they are to listen. It's important for parents to educate themselves, so they know the facts and what to say when the topic comes up.

















# Vaping is weird... you walk past a group of dudes who look like gangsters but smell like strawberry muffins....

### **Resources for Parents/Carers**

- The parents website-video how to talk to teens about vaping
- QUIT- myth buster infograph
- Better Health channel
- Health direct- https://www.healthdirect.gov.au/e-cigarettes-vaping
- Cancer Council
- DARTA-Paul Dillon- Drug and alcohol research and Training Australia (DARTA)- includes podcast- https://darta.net.au/wordpresscontent/uploads/2022/03/DoingDrugsPodcastS01E03.mp3
- Get your head out of the cloud- (lung.org/quit-smoking/helping-teens-quit/talk-about-vaping)
- Flavors Hook Kids (flavorshookkids.org)
- Make smoking History.org/dangers-of-vaping
- The Dept of Health
- Vape free schools vaping facts NZ https://vapingfacts.health.nz/vapefree-schools/
- Netflix series Broken- episode 'the big vape'
- Lung Foundation Australia
- The Royal Children's hospital https://www.rch.org.au/kidsinfo/fact\_sheets/E-cigarettes\_and\_teens/
- <u>https://www.abc.net.au/4corners/vape-haze:-the-new-addiction-of-vaping/13948226 four corners doc</u>
- Vape Australia

### Resources

- NSW Health-www.health.nsw.gov.au/tobacco/pages/vaping-teachers.aspx
- Blurred mind academy (rehab programs)
- The parents website
- Australian National University- e cigarettes are harmful and addicting youth- report 7 April 2022
- Griffith University April 2022- teens at risk from lack of education and research on vaping
- Busting vaping myths
- The royal children's hospital Melbourne 5 minutes
- https://www.facebook.com/watch/?v=5897168250324819
- NDARC national drug and alcohol research centre
- Teen.smokefree.gov designed to help teens stop smoking and vaping.- links to a quitting app, a vaping quit plan and social media.
- <u>nicotine test kits</u>. Urine tests that detect nicotine in the body.
- <u>marijuana test kits</u>

## Non Nicotine substances in e cigarettes

- E liquids -nicotine, solvent carriers (propylene glycol, ethylene glycol and glycerol), tobacco-specific nitrosamines, volatile organic compounds (including toluene, phenols, xylenes, ethyl acetate, ethanol, methanol, pyridine, acetylpyrazine, 2,3,5-trimethylpyrazine, octamethylcyclo-tetrasiloxane, benzene, ethylbenzene, styrene), 3 phenolic compounds, flavourings as well as tobacco alkaloids.
- Formed by chemical reactions in the heating element: aldehydes (predominantly acetaldehyde and formaldehyde, acrolein (propenal), propionaldehyde (propanal), (methyl)benzaldehyde and isobutyraldehyde), free radicals and reactive oxygen species and furans.
- Originating from the device: metals, with the following having been reported in aerosols: aluminium, antimony, arsenic, boron, cadmium, chromium, copper, iron, lanthanum, lead, nickel, potassium, silver, tin, titanium, zinc.

# Why is Nicotine an issue??

- Parasympathomimetic drug-binds to nicotinic receptorsrelease of major neurotransmitters- physiological effects body wide
- Harm parts of the brain that control attention, learning, mood, impulse control
- Increases heart rate, blood pressure, heart muscle changes, reduces insulin sensitivity
- Has both stimulatory and relaxant properties.
- One of the most addictive substances known to humanity. It is the primary agent responsible for addiction in tobacco.
- Nicotine toxicity symptoms e.g.; nausea and vomiting, disorientation- "Nic sick"
- Repeated exposure leads relatively rapidly to tolerance