# **Information for Parents on E-Cigarettes**

E-cigarettes are harmful to children and young people. There are direct harms caused by e-cigarettes and e-cigarette use increases the chances that children and young people will start smoking tobacco cigarettes.

### What are e-cigarettes?

E-cigarettes (electronic cigarettes), are battery-powered devices that people use to heat liquid into an aerosol that can be inhaled. This process of inhaling the aerosol is called *vaping*.

The liquid in e-cigarettes usually contains nicotine, as well as other chemicals and flavourings.

E-cigarettes are sometimes referred to as vapes or electronic nicotine delivery systems (ENDS). Young people may refer to them by a variety names. Here are some examples, some of which are brand names:

- Vapes
- E-cigs
- Vape pens
- Mods
- Puff bars
- Pods
- Elf bar
- Lost Mary

There are two main types:

- Refillable
- Disposable

Both disposable and refillable e-cigarettes contain the same products.

### What do they contain?

E-cigarettes contain a number of chemicals, including the highly addictive substance called nicotine.

The level of nicotine varies and some e-liquids can contain as much nicotine as a pack of 20 cigarettes. Some vape product labels do not show that they contain nicotine. Some vape liquids sold as 0% nicotine have been found to contain nicotine.

While e-cigarettes may be less harmful that tobacco cigarettes, we do know that they are not harmless. Here are some of the chemicals that are in e-cigarettes:

- Nicotine
- Ultrafine particles that can be inhaled deep into the lungs
- Flavorings such as diacetyl, a chemical linked to a serious lung disease

- · Volatile organic compounds
- Cancer-causing chemicals
- · Heavy metals such as nickel, tin, and lead

Many e-cigarettes also contain flavours, which are especially appealing to children and young people. Here are some examples of the flavours available:

Strawberries and cream Grape

Pink lemonade Watermelon
Bubble gum Fizzy juice
Cotton candy Blueberry
Juicy fruit Cherry

### What is nicotine?

Nicotine is a highly addictive substance that is found in cigarettes and most e-cigarettes. It is quickly absorbed into the bloodstream, releasing dopamine.

Dopamine is the 'happy' chemical that our bodies produce. Each time a person inhales nicotine they get a rush or sense of pleasure from this release of dopamine. However, the dopamine levels drop very quickly and the body then craves more in order to feel that rush or pleasure.

Nicotine has been proven to be as addictive as cocaine and heroin and may even be more addictive. This is why it is so difficult to quit smoking or vaping when a person becomes addicted.

## What about disposable e-cigarettes, do these contain nicotine?

Yes, disposable e-cigarettes do contain nicotine. They are simply a more convenient and sometimes cheaper option compared to the refillable products.

### What about e-cigarettes that do not contain nicotine, are these harmful?

Tests conducted on a number of high street vapes in Ireland found that some vape liquids sold as 0% nicotine have been found to contain nicotine.

### Are e-cigarettes harmful for children and young people?

Nicotine affects memory and concentration. Young people are uniquely at risk for long term, long lasting effects of exposing their brains to nicotine. These risks include nicotine addiction, mood disorders and permanent lowering of impulse control.

The brain of a child and young person is still developing. This means that they are more vulnerable to the addictive power of nicotine. Using nicotine can change a child or young person's brain and make them crave more nicotine.

Nicotine can also train the brain to be more easily addicted to other drugs like cocaine.

When a person is dependent on (or addicted to) nicotine and stops using it, their body and brain has to get used to not having nicotine. This can result in temporary symptoms of nicotine withdrawal.

<u>Nicotine withdrawal symptoms</u> include irritability, restlessness, feeling anxious or depressed, trouble sleeping, problems concentrating, and craving nicotine.

Youth may turn to vaping to try to deal with stress or anxiety, creating a cycle of nicotine dependence. But nicotine addiction can be a source of stress.

What may start as social experimentation can become an addiction.

- More research is needed in Ireland but in the US the most common reason middle and high school students give for trying an e-cigarette is "a friend used them."
- The most common reason youth give for continuing to use e-cigarettes is "I am feeling anxious, stressed, or depressed."

Youth e-cigarette and cigarette use have been associated with mental health symptoms such as depression.

The <u>Health Research Board</u> (HRB) completed a number of reviews into e-cigarettes. Below are some of the findings:

- They found that e-cigarettes are associated with adolescents starting to smoke tobacco cigarettes, which could potentially lead to serious harm.
- While e-cigarettes may be less harmful than conventional tobacco, they are not harmless.
   Some of the harms identified included poisoning, burns, fractures, lung injury and exacerbations of asthma. There is also evidence that they may damage tissues of the heart and lungs.
- They contain carcinogens chemicals that can cause cancer.

### Is vaping as harmful as smoking cigarettes?

Compared to cigarettes, vaping may be less harmful. But vaping is not harm-free. We do not know the long-term health impact of vaping. As detailed above, they contain a number of chemicals, some of which are linked to cancer and other lung diseases.

# How to approach your child to discuss the dangers of e-cigarette use

Talking to your child about e-cigarette use or vaping might feel uncomfortable, but it's a very important discussion to have. Vaping is growing in popularity — In 2019, the European School Survey Project on Alcohol and Other Drugs (EPSAD) carried out a national survey on e-cigarette use among 15-16 year olds. It found that in Ireland, 39% of 15-16 year olds have tried e-cigarettes and that 18% reported as being current users of e-cigarettes.

# Here are seven suggestions for how you could start talking with your teen about vaping.

#### 1. Look for a natural conversation starter.

Maybe it's an ad for e-cigarettes, or you notice someone vaping, or you pass a vape shop. Take the opportunity to ask your child questions about vaping and whether a lot of kids at their school are trying it.

### 2. Explain that most e-cigarettes do contain nicotine.

Some children/teens believe e-cigarettes contain only water and flavourings. Marketing messages have suggested as much but share the research with your teen that proves e-cigarettes contain a nicotine solution. The Surgeon General's website or the National Institutes of Health/National Cancer Institute's website is a good place to start. Emphasise that nicotine is addictive. If you're an ex-smoker, describe how hard it was to quit because of that addiction to nicotine.

# 3. Point out the dangers of vaping without judgment and let them know you're concerned about their health.

According to the CDC, vaping exposes users to harmful chemicals and increases their risk of addiction. The CDC and other government agencies in the US are also investigating serious lung illnesses that are potentially associated with vaping. In addition, the human brain continues to develop until about age 25, and nicotine can harm that development – affecting parts of the brain that control learning, mood, and impulse control. Bottom line: Vaping is not safe.

### 4. Remind them that not everyone vapes.

It might seem that way, but most Irish young people – about four out of five - are not regular ecigarette users. Check out the <u>European Schools Project on Alcohol and other Drugs</u> Ireland survey for more information.

### 5. Have them calculate the monthly cost of vaping.

E-cigarette starter kits cost around €14. Then there are the costs of vape pods, e-liquid (or e-juice), coils, and other accessories. Disposable vapes generally cost around €8 each in Ireland. Depending on the frequency with which they are used, they tend to last around 24 hours before they are thrown away.

# 6. Reach your teen through their screen.

Electronics can offer a good way to communicate with your child. Highlight that there is misinformation on the internet and in print about vaping and encourage them to access trusted sources of information such as on the HSE and the CDC websites.

# 7. Keep the conversation going.

Talking about vaping isn't a "one-and-done" conversation – bring it up again from time to time. Discuss it calmly. If you need additional support, consider asking a healthcare professional to talk to your teen about the risks of e-cigarettes.