E-cigarettes- Do you know someone who wants to make the switch?

There is a lot of unknown and a lot of myth when it comes to e-cigarettes. Being a health champion or someone who wants to stop smoking for themselves, you might have concerns about these myths and it can be barrier to you or your customers wanting to start their quit attempt.

Four out of 10 smokers and ex-smokers wrongly think nicotine causes most of the tobacco smoking-related cancer, when evidence shows nicotine actually carries minimal risk of harm to health. Although nicotine is the reason people become addicted to smoking, it is the thousands of other chemicals contained in cigarette smoke that causes almost all of the harm. PHE's 2018 evidence review also found that to date, there have been no identified health risks of passive vaping to the health of bystanders. The UK has some of the strictest regulation for e-cigarettes in the world.

More widely known as Vaping as there is no combustion within an e-cigarette, it's actually evaporation, hence the term 'vape'. Most e-cigarettes have:

- a mouthpiece, or cartridge
- a heating element
- a rechargeable battery
- electronic circuits

As the user sucks on the mouthpiece, a sensor activates a heating element that vaporises a flavoured, liquid solution held in the mouthpiece. The person then "vapes," or inhales, the aerosol solution. The solution, also known as e-liquid or e-juice is made by extracting nicotine from tobacco and mixing it with a base, usually propylene glycol, and flavouring. Propylene glycol is used in inhalers, for example, for asthma. There is a huge range of flavours to choose from, with names such as tobacco, watermelon, and berry-mint, even chicken!

The most recent evidence

Smokers are almost twice as likely to quit successfully if they use e-cigarettes rather than more traditional nicotine replacement therapies (NRT), a large randomised trial published in *The New England Journal of Medicine* has shown.

The study, which was double blind, led by Queen Mary University of London, found that 18% of e-cigarette users were biochemically validated to be abstinent after a year, compared with 9.9% who used other forms of NRT such as gum or skin patches.

The 886 participants attending NHS stop-smoking clinics in London, Leicester and East Sussex, were assigned at random to receive either an e-cigarette starter pack with one or two bottles of e-liquid or another NRT product of their choice for up to three months. All participants also received weekly one-to-one behavioural support. The therapist giving the support did not know if the participant had a placebo or was given nicotine as part of the study.

The study found that among participants who did not achieve full abstinence, more e-cigarette users achieved a biochemically validated reduction in smoking of at least 50%. E-cigarettes also provided higher satisfaction and were rated as more helpful than NRT.

Prior to this, PHE had released a short video highlighting from their review that vaping is 95% less harmful than tobacco. It is an experiment which reveals the amount of sticky black tar that accumulates in the lungs of a heavy smoker, collected in a bell jar. By contrast, the same nicotine intake through vaping releases only a trace of residue. One assessment of the published data on emissions from cigarettes and e-cigarettes calculated the lifetime cancer risks. It concluded that the cancer potencies of e-cigarettes were largely under 0.5% of the risk of smoking.