

THE **PROFESSIONAL**

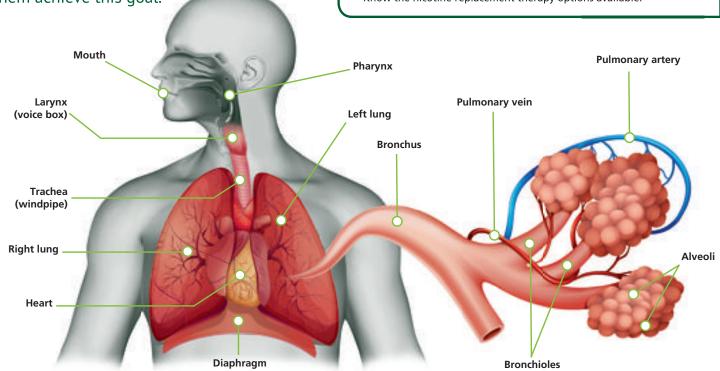
MODULE 22: FEBRUARY 2017

cessation

Approximately one in five adults in Great Britain smoke cigarettes, but almost two in three of them would like to quit. There's plenty of opportunity for pharmacy to help them achieve this goal.



- · Understand why smoking is bad for health
- Be able to advise smokers on steps they can take to increase the success of a quit attempt
- Know the nicotine replacement therapy options available.



In order to get to grips with why smoking is bad for health, it is useful to understand the respiratory system.

When someone takes a drag on a cigarette, tobacco smoke is inhaled through the mouth, pharynx and larynx into the trachea. The trachea splits into two bronchi, one for each lung, and these tubes divide further until they are just 1mm wide. These are the bronchioles, which are composed of smooth muscle.

The bronchioles split further until they are only one cell thick. At this point - which marks the end of the breathing tubes - are alveoli. Here, gaseous exchange takes place via the large network of tiny capillaries that carry deoxygenated blood from the heart via the pulmonary artery and newly oxygenated blood to the heart via the pulmonary vein. This is also the point at which the components of tobacco smoke, which include nicotine, carcinogens, tar and other toxins, are able to get into the blood and the body.

This module is suitable for all members of the pharmacy team who wish to increase their knowledge of common conditions and treatment options. This module has been endorsed with the NPA's Training Seal as suitable for use by pharmacy teams as part of their ongoing learning. This module can also form part of your Team Tuesday training





Understanding the problem

The problem most commonly associated with smoking is lung cancer, but tobacco is hugely damaging to health in many other ways, from the very first puff.

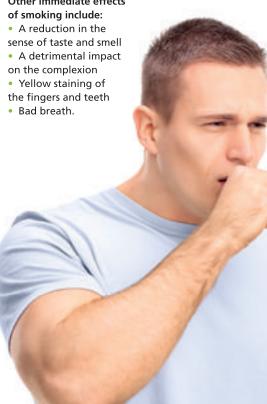
Immediate effects

Immediately upon inhaling cigarette smoke, carbon monoxide binds to haemoglobin in the bloodstream instead of oxygen. This means that the body's cells are starved of the oxygen they require and is part of the reason why smokers get more breathless when they exercise. During pregnancy, smoking can deprive a baby of oxygen, so if a woman smokes while she is pregnant, her baby may be born below its expected birthweight.

To compensate for the lack of oxygen, the heart rate increases, as does blood pressure. However, blood flow to the extremities (the hands and feet) is reduced, making the person feel cold. At the same time, the brain and the nervous system are stimulated, which can create a jittery feeling.

Smoking also affects the cilia – tiny hair-like structures in the trachea and bronchi - making them unable to perform their usual function of moving mucus and other particles up and away from the lungs. This puts the smoker at a higher than usual risk of respiratory infections and can cause a cough to develop as the body tries to clear the chest of unwanted substances by an alternative mechanism.

Other immediate effects



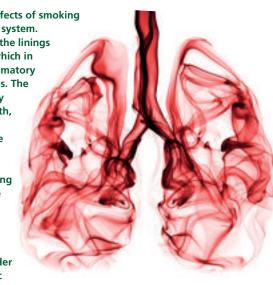


DID YOU KNOW?

Approximately 100,000 people die in the UK each year from smoking-related causes.

Long-term effects

Many of the long-term effects of smoking are felt in the respiratory system. Cigarette smoke irritates the linings of the breathing tubes, which in time can cause the inflammatory disorder chronic bronchitis. The symptoms of this typically include shortness of breath, chest pain and coughing. The tar in cigarette smoke can coat the inside of the alveoli, breaking down their structure and reducing the surface area available for gaseous exchange. The result is emphysema, which causes sufferers to feel breathless. This and chronic bronchitis fall under the umbrella term chronic obstructive pulmonary disease (COPD).



Tar - and many of the other chemicals in cigarette smoke - can cause cancer, not just in the lungs, but also in other parts of the respiratory system, such as the throat and mouth. From here, it may spread to other areas of the body.

Other long-term effects of smoking include:

- Cardiovascular issues such as stroke and heart disease
- Circulatory disorders
- Decreased fertility and sexual function
- Gastrointestinal ulcers
- Mental health conditions
- Brittle bones
- Premature skin ageing.



Fast facts

- Carbon monoxide replaces oxygen in the bloodstream when people smoke, causing breathlessness
- Chest pain, shortness of breath and coughing are all symptoms of chronic bronchitis
- Tar and other chemicals in cigarettes can cause mouth and throat cancer, as well as lung cancer.



Stopping smoking

There is no smoker who won't benefit from kicking their habit. Stopping smoking lowers the risk of developing smoking-related health problems and slows the deterioration of any issues that have already arisen, improving quality of life as a consequence. The health of family and friends will also improve as a result of not being exposed to second-hand smoke, and the financial savings can be considerable.

There is a free NHS Smokefree app, which contains quit tips, support and motivation.

Nicotine replacement therapy

The main tool provided by pharmacies to help people quit smoking is nicotine replacement therapy (NRT). These products replace the addictive nicotine in cigarettes, but at a much lower level and without all the other harmful chemicals that are present in tobacco smoke, such as carbon monoxide and tar. NRT helps control cravings and reduces withdrawal symptoms such as moodiness, irritability and difficulty concentrating.

There are lots of different formulations available, from patches, gum, microtabs, oral films and lozenges to inhalators and sprays for the mouth or nose. There is no evidence than any one form is more effective than another, so it really comes down to personal preference. Someone who thinks they might miss the hand-to-mouth action of smoking might do well with a cigarettelike inhalator device, whereas patches that can be put on and not thought about for the rest of the day might be better for someone who works in an environment where it is difficult to take breaks. Combining products can also be helpful for some people, particularly very heavy smokers. For instance, a patch can be worn for a gradual dose of nicotine and a spray can provide rapid craving relief.

The idea is to reduce the dose of NRT after eight to 12 weeks and then stop altogether, though it is better for both health and wealth to continue on NRT for as long as the individual feels necessary rather than going back to smoking.

POM products

Pharmacies may be able to supply Champix (varenicline) or Zyban (bupropion) if there is a patient group direction (PGD) in place to support a smoking cessation service. Discuss the options available with your pharmacist and who might be referred for the service.

E-cigarettes

These simulate cigarette smoking and deliver nicotine. There are mixed views about their use, and none are licensed as yet, but some customers may use them to help cut down their smoking habit. By law, e-cigarettes must not be supplied to people under the age of 18. If customers ask about e-cigarettes, explain the options available and refer to the pharmacist, if required.

Self care tips

Suggest the following tips to help smokers succeed in their quit attempts:

- Set a guit date and stick to it
- Make a plan that includes how to handle situations where temptations lie, and stick to it
- List your reasons for quitting and have the list handy for when extra encouragement is needed
- Identify when cravings are likely to hit and have some strategies to cope with these times (for example, exercise can help reduce cravings)
- Get rid of all smoking reminders, such as ashtrays and lighters
- Plan what to do with the time and money freed up by stopping
- Get support from friends, family members and quit advisors.



SIGNPOSTING

For more information, you can:

- Use your Counter Intelligence Plus training guide
- Visit NHS Live Well: nhs.uk/Livewell/smoking/Pages/Motivateyour-
- Go to NHS Smokefree: nhs.uk/smokefree
- The National Centre for Smoking Cessation and Training: ncsct.co.uk.

ESTYOURSELFONLINE

GOOD PRACTICE KNOWLEDGE IS IMPORTANT WHEN ADVISING CUSTOMERS



Questions

1) Where does gaseous exchange occur in the respiratory system?

- The trachea
- b) The larvnx
- The bronchioles
- The alveoli

2) What statement is TRUE in relation to the effects of smoking?

- It can cause obesity in the long-term
- It improves gaseous exchange and increases oxygen in
- It increases the movement of cilia in the lungs, enabling mucus to be moved away from the lungs
- It can increase the risk of cardiovascular disease

3) Which of the following NRT products would be most suitable for a social smoker who likes the physical habit of smoking?

- A 24-hour patch
- b) Microtabs
- A nasal spray
- An inhalator

4) Which advice is NOT appropriate for someone giving up smoking who wants to manage their cravings?

- Nicotine replacement patches release nicotine in quick, short bursts to manage sudden cravings
- Nicotine replacement products contain nicotine to help control cravings
- Exercise may help to reduce cravings
- Prepared strategies can help to deal with times when cravings are likely to hit

5) Which of the following statements about chronic bronchitis is FALSE?

- Symptoms include chest pain, shortness of breath and coughing
- It falls under the umbrella term chronic obstructive pulmonary disease (COPD)
- Nicotine in cigarettes causes the breakdown of the alveoli walls
- d) Smoking increases the risk of developing chronic bronchitis

6) After how long could customers consider reducing their initial NRT dose?

- Two to four weeks
- Eight to 12 weeks
- Three to four months
- 10 to 12 months



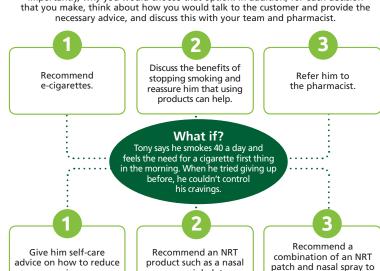
Scenario

Tony is in his 50s and wants to purchase some NRT. He has been recently diagnosed with diabetes and has been discussing smoking cessation with his GP. He has tried stopping without any products in the past, but this was unsuccessful.



What would you recommend?

For each part of this scenario, think about the decision you would make and, importantly, why you would choose that option. In addition, for each decision



cravings.

spray or inhalator.

patch and nasal spray to manage cravings.

What if?
Tony says he is worried about weight gain, as he needs to watch his weight with his diabetes

Give lifestyle advice on healthy eating, cutting down on alcohol and increasing exercise.

Refer him to a weight

management service

Refer him to the pharmacist.



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