

Supporting Training Initiatives



the otc treatment clinic

Common conditions and their treatment options



This module has been endorsed with the NPA's Training Seal as suitable for use by medicines counter assistants as part of their ongoing learning. Complete the questions at the end to include in your self-development portfolio



Welcome to *TM's* OTC Treatment Clinic series. This handy, four-page section is specially designed so that you can detach it from the magazine and keep it for future reference.

Each month, *TM* covers a different OTC treatment area to help you keep up-to-date with the latest product developments. In this issue, we focus on coughs. At the end of the module are multiple choice questions for you to complete, so your progress can be monitored by your pharmacist.

You can find out more in the *Counter Intelligence Plus* training guide.

The last six topics we have covered are:

- Topical pain relief
 - Eye care
 - Head lice
 - Acne
 - Hayfever
 - Ovulation & pregnancy
- You can download previous modules from www.tm-modules.co.uk

module 210

Coughs

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for this module

OBJECTIVES: After studying this module, assistants will:

- Understand that a cough can be a symptom of a wide range of conditions
- Be aware that coughs are classified depending on their nature and duration
- Be familiar with the main conditions that cause coughing
- Be able to advise on the appropriate use of OTC cough remedies
- Know which customers should self-treat and which to refer to the pharmacist
- Be able to offer self-help tips for coping with coughs.

Customers coming into the pharmacy seeking 'something for a cough' will be a common occurrence all year round. However, as we head further into winter, we move into the peak season for coughs and other common winter ailments. With this in mind, now seems an ideal time for a quick refresher on the different types of coughs, their causes, and the products and self-care advice you can recommend to relieve them.

People often complain they 'have a cough', as if it were a condition in itself. However, a cough is actually a symptom of an underlying cause. Everyone coughs from time to time and, although irritating, coughs are rarely serious and usually clear up within three weeks. A cough is a reflex action to clear mucus and irritants from the airways. However, if the person is suffering from an infection, coughing can disperse germs into the air, helping to spread the infecting organism.

Types of cough

Different types of cough are classified based on their duration and whether they are associated with mucus being cleared from the lungs or not.

• Duration

A cough lasting less than three weeks is termed 'acute'. This is usually associated with a viral upper respiratory tract infection (e.g. cold or flu) and is self-limiting and benign. However, occasionally, an acute cough can be the first indication of a more serious underlying condition.

A cough lasting between three and eight weeks is called a 'subacute' cough. It is usually associated with a cold or other respiratory infection, but the cough continues after the initial infection has cleared up.

If a cough persists for longer than eight weeks, it is termed a 'chronic' cough and is usually an

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reflective exercise

Sally brings her four-year-old grandson Thomas to the pharmacy. Thomas is complaining of a tickly cough and a runny nose, but is not showing any other symptoms. Sally asks you for a bottle of children's codeine linctus, which she used to buy for her daughter when she had similar symptoms.

What would you recommend?

Explain to Sally that OTC liquid medication containing codeine is no longer considered suitable for people under the age of 18 years for the treatment of coughs. Dextromethorphan and pholcodine are also no longer licensed for children under six years old.

Based on the description of Thomas' symptoms, he seems to be suffering from an acute non-complicated, tickly cough. However, all requests for young children should be referred to the pharmacist. He or she will probably recommend a remedy such as simple linctus, or a product based on glycerin or honey to help relieve Thomas' symptoms.

To help make him more comfortable and speed up his recovery, recommend that Sally gives him plenty of warm drinks.

Thomas should also cover his mouth when he coughs and wash his hands regularly to help prevent the spread of the infection.

What if:

Sally mentions that Thomas is occasionally a bit breathless and often suffers from a dry cough that keeps him awake at night. She also says that he often stays at the house of a friend whose mother smokes.

These symptoms suggest that Thomas may be suffering from undiagnosed asthma and he should be referred to the pharmacist, who will likely then refer him to a doctor. A dry cough at night is a common symptom of asthma, which often worsens when exposed to a smoky atmosphere. Advise Sally that Thomas should try to avoid exposure to smoke, as well as dust and other air pollutants.

What if:

Sally mentions that she would also like a cough medicine for herself as she has been suffering from nasal congestion with a tickly cough for the past few weeks.

Sally's symptoms sound like the result of a viral infection, such as a cold. Post nasal drip often occurs while suffering from a cold as mucus or phlegm drips from the nasal passages into the throat, which triggers coughing. Reassure Sally that the symptoms should disappear within a few weeks as the initial infection clears, but in the meantime, a product containing a cough suppressant and decongestant (e.g. pseudoephedrine or phenylpropanolamine) could help to relieve her annoying symptoms.

What if:

Sally complains of a cough with congestion and also suffers from diabetes.

Decongestants such as pseudoephedrine are not suitable for diabetes patients and therefore Sally should be referred to the pharmacist. He or she may recommend a cough suppressant and an inhalant or vapour rub to help ease the congestion.

indication of an underlying condition (e.g. asthma). However, many chronic coughs are 'idiopathic', meaning their cause is unknown.

A chronic cough may interfere with sleep, work or socialising. If severe, it can also lead to headaches, chest pain, urinary incontinence, sweating or, in rare cases, even fractured ribs.

● Symptoms

Coughs are often described as either 'chesty' or 'dry'. A dry cough is non-productive, meaning it doesn't cause coughing up of any mucus or phlegm. Dry coughs are usually felt as a tickle in the throat when the upper airways are inflamed, which triggers the

coughing. The common cold or flu often causes a dry cough as the brain mistakes inflammation in the throat and upper airways as a foreign object and therefore tries to remove it by coughing.

Chesty coughs are usually productive and produce phlegm. This type of cough can be helpful as it clears the phlegm from the lung passages. Sometimes, a chesty cough can be non-productive if the phlegm is too sticky to cough up.

Why do we cough?

Coughing occurs when nerve endings in the airways become irritated, causing a message to

be sent to the cough centre in the brain.

A cough begins with a deep breath in, at which point the opening to the respiratory system closes and air gets trapped in the lungs. Next, the muscles normally involved in breathing, such as the diaphragm, forcibly expel air from the lungs. Air travelling out of the lungs moves very fast, which helps to remove whatever was causing the irritation.

There are many different causes of coughs, so be sure to ask the customer about their symptoms. Use the WWHAM questions, but also enquire about the nature of the cough. For example: did the coughing begin gradually or suddenly? Do you think the onset was related to an infection, such as a cold? Are you coughing during the day? Is it worse at night? Do you have any other symptoms?

The customer's answers to these questions will help to determine who should self-treat and who should speak to the pharmacist.

When to refer

If the customer reports any of the following, refer them to the pharmacist:

- Coughing up yellow, brown, green, pink or frothy mucus
- Coughing up blood
- A raised temperature
- Wheezing or shortness of breath
- Unintentional weight loss
- Night sweats
- Swelling of the legs
- Suspicion of inhaling dust, particles or a foreign object
- A cough lasting longer than three weeks following a viral infection
- A cough getting progressively worse
- Severe coughing fits where the person gasps for breath with a whooping sound, vomits or turns blue
- Coughing at night, especially in children
- Difficulty swallowing
- A stiff neck and/or skin rash
- Pain on breathing in or coughing
- A hoarse voice that hasn't resolved
- A smoker's cough that has worsened or changed
- A young child
- They are taking prescribed medication
- They have unsuccessfully tried OTC cough remedies.

Common causes

● Infections and post nasal drip

Viral infections of the respiratory tract, such as colds, are the most common cause of acute coughs. A cough accompanied by a fever, fatigue and muscular aches or pain could be due to a flu infection.

Upper respiratory tract viral infections can also trigger post nasal drip (PND). In PND, mucus drips from the back of the nasal



The common cold often causes an acute, dry cough

passages into the throat, triggering a cough. PND can also occur with some allergies.

Other infections that cause coughs include:

Bronchiolitis – a lower respiratory tract infection that causes inflammation of the smaller airways in the lungs (bronchioles). This is often caused by respiratory syncytial virus (RSV). Children under two years are particularly susceptible and may have cold-like symptoms; fever; shallow rapid breathing; coughing and wheezing.

Croup – inflammation and swelling of the larynx, usually triggered by a viral infection.

This is a potentially dangerous condition that most commonly occurs in young children. Symptoms tend to come on at night and include a barking cough with hoarse breathing.

Whooping cough (pertussis) – a bacterial infection caused by *Bordetella pertussis*. The initial symptoms are similar to a cold (i.e. a runny nose, fever and mild coughing). The illness then progresses to include bouts of severe coughing. The sufferer may find it difficult to breathe while coughing and gasp for air, producing the characteristic 'whoop' sound. They may also turn red in the face, vomit and have nosebleeds or even seizures while coughing. This type of cough can continue for several weeks following treatment of the initial infection.

Tuberculosis (TB) – caused by the bacterium *Mycobacterium tuberculosis*. Symptoms include fever, tiredness, weight loss, night sweats and persistent coughing, which may include

blood-streaked phlegm. Occasionally, the disease can affect the lymph nodes, the skin and the bones. TB can be fatal if not treated.

● Asthma

Asthma is characterised by widespread, reversible narrowing of the airways within the lungs. It is a common cause of chronic cough in adults and children.

In some sufferers, a night-time cough is the only symptom, while others suffer wheezing and shortness of breath. Coughing usually stops if the asthma is appropriately managed.

● Gastro-oesophageal reflux disease (GORD)

Not just related to heartburn and indigestion, GORD can cause chronic cough in adults and children. Reflux occurs when the acidic contents of the stomach are pushed upwards into the oesophagus. This irritates the oesophageal lining and triggers coughing. This can be difficult to diagnose as many sufferers of GORD-related cough don't complain of heartburn-type symptoms.

● Chronic lung conditions

Conditions such as chronic bronchitis, bronchiectasis and emphysema can all affect a person's ability to clear mucus from their lungs, resulting in symptoms including chronic cough and shortness of breath.

● Smoking

Only a small percentage of chronic cough

sufferers have lung cancer. However, the link between smoking and lung conditions, such as chronic bronchitis, is well established.

Smokers often assume a cough is just due to their habit and therefore may be slow to seek treatment. Any change or worsening in a smoker's cough could be a cause for concern and should be referred to the pharmacist.

When advising smokers on their cough symptoms, take the opportunity to discuss smoking cessation options. The symptoms of coughing ease quickly after quitting and often stop within three to nine months. Breathing and wheezing will also improve.

● Other causes

In rare cases, a cough is a symptom of a serious condition such as heart failure, a pulmonary embolism (a blood clot in the lungs) or cystic fibrosis.

Coughing can also occur following exposure to irritants such as smoke, paint fumes, highly scented aerosols or a small foreign object getting stuck in the airways. A cough can also be a nervous habit, or may be linked to emotional or psychological problems, particularly in children.

self-care tips

- Drink plenty of fluids, ideally water. People with coughs and colds should increase their fluid intake by around two litres a day, unless otherwise advised by a healthcare professional
- Warm liquids can be soothing. Honey is a demulcent, meaning it coats the throat and relieves irritation. Add to hot water, tea or lemon infusions
- Steam inhalation, with or without an added inhalant, can help to ease productive coughs. The steam helps to liquefy lung secretions and the warm, moist air is comforting. Avoid scalding by using hot but not boiling water. A vaporiser or a hot, steamy shower may also help
- Avoid dust, air pollutants and very dry atmospheres
- Quit smoking and avoid second-hand smoke
- If cough is troublesome at night, sleep on extra pillows or raise the head of the bed by a few inches
- Try to stay in an environment with a constant temperature as moving from hot to cold can exacerbate symptoms.

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Treatment

There's no quick way of getting rid of a cough caused by a viral infection. They will usually disappear after the immune system has fought off the virus. Antibiotics should not be used to treat viruses as they are only effective at killing bacteria. Antibiotics should only be prescribed if the customer develops a secondary bacterial infection (e.g. pneumonia).

OTC cough products

There are many different OTC cough remedies available. However, strict restrictions make many unsuitable for children younger than six years old. If a customer asks for a cough treatment for a child younger than six, recommend a simple cough syrup, such as paediatric linctus, or one that contains glycerin or honey (e.g. Calcough Infant Syrup, Tixylix Baby Syrup).

For adults, the range of remedies available is vast, which can be daunting for some customers. To simplify their buying decision, consider the active ingredients in the product and relate them to the customer's symptoms.

Customers may favour certain brands or dislike some liquid flavours. Ask if they've successfully tried any remedies in the past.

In all cases, customers should be advised to read the manufacturer's instructions carefully and not to take a product that may cause drowsiness if they plan to drive or operate machinery.

● For dry, non-productive coughs

Demulcents – dry, tickly coughs are usually felt in the throat. Therefore soothing products,

such as lozenges, pastilles and linctuses, are often effective at easing symptoms. Demulcents (e.g. Benylin Tickly Coughs Non-drowsy, Covonia Dry & Tickly Cough Linctus) coat the throat and relieve irritation.

The relief they bring may be temporary, but these products are convenient for families since many of them are suitable for children as well as adults. People with diabetes should be aware that these products often contain sugar, with common ingredients including glycerin, liquid glucose, syrup and honey.

Cough suppressants – dry, tickly coughs are uncomfortable and can be annoying. They are often treated using suppressants, which are generally split into two groups:

1) Centrally acting suppressants – these target the area of the brain that controls the cough reflex. They cause few side effects or interactions with other medicines. Ingredients available OTC include dextromethorphan (e.g. Robitussin Dry Cough Medicine, Covonia Original Bronchial Balsam) and pholcodine (e.g. Care Pholcodine Linctus, Potters Pholcodine Cough Pastilles). None of these products are suitable for children under six. Products that contain codeine should not be used by people under 18 for the treatment of coughs.

2) First generation antihistamines – older type antihistamines suppress the cough reflex and help to dry up secretions. This is useful if the cough is accompanied by a cold or runny nose.

Drowsiness is a common side effect of these treatments, which can be helpful if the cough is disrupting sleep. Other possible side effects

include dry mouth, constipation, difficulty passing urine and blurred vision.

OTC versions of these medicines include ingredients such as diphenhydramine (e.g. Benylin Dry Coughs Original, Covonia Night Time Formula). Patients with glaucoma and prostate problems should not use these types of treatments. It is also important to note that antihistamines can interact with other medicines, such as antidepressants and those that cause drowsiness.

● For chesty, productive coughs

Expectorants – increase bronchial secretions and reduce the stickiness of mucus, making it easier to cough up.

Common OTC expectorants include: guaifenesin (e.g. Robitussin Chesty Cough Medicine, Benylin Chesty Coughs Non-Drowsy); ipecacuanha (e.g. Covonia Herbal Mucus Cough Syrup) and squill (e.g. Buttercup Original Cough Syrup). None of these products are suitable for children under the age of six.

● Cough products with decongestants

Some OTC cough remedies contain decongestants such as pseudoephedrine or phenylpropanolamine (e.g. Robitussin Chesty Cough with Congestion, Adult Meltus Chesty Coughs with Congestion). These products can be useful if the customer is also suffering from nasal congestion. Anyone with high blood pressure, heart problems, glaucoma or diabetes should be referred to the pharmacist before recommending these products. They are not suitable for children younger than six.

assessment questions: coughs

For each question, select one correct answer. Discuss your answers with your pharmacist.

1. Which of the following statements is TRUE?

- a) An acute cough is usually associated with a viral upper respiratory tract infection ☐
- b) An acute cough usually lasts between three and eight weeks ☐
- c) A chronic cough is rarely an indicator of an underlying condition ☐
- d) Coughs are classified based on their duration only ☐

2. Which of the following statements is FALSE?

- a) The common cold often causes a dry cough ☐
- b) A dry cough is productive and causes coughing up of mucus or phlegm ☐
- c) Dry coughs are usually felt as a tickle in the throat when the upper airways are inflamed ☐
- d) Phlegm can sometimes be too sticky to cough up ☐

3. Which of the following symptoms does not need to be referred to the pharmacist?

- a) Coughing up blood ☐
- b) A cough lasting longer than three weeks following a viral infection ☐
- c) Coughing up clear phlegm ☐
- d) Severe coughing with vomiting ☐

4. Which of the following are common causes of cough?

- a) Post nasal drip ☐
- b) Asthma ☐
- c) Smoking ☐
- d) All of the above ☐

5. Which of the following is recommended for chesty coughs?

- a) A demulcent to coat the throat and relieve irritation ☐
- b) A centrally acting cough suppressant to control the cough reflex ☐
- c) An expectorant to increase bronchial secretions and reduce mucus stickiness ☐
- d) A first generation antihistamine to suppress the cough reflex and help to dry secretions ☐

6. Which of the following is NOT a common self-care tip?

- a) Drink caffeine and alcohol to ease irritation ☐
- b) Sleep on extra pillows or raise the head of the bed a few inches ☐
- c) Avoid dust and other air pollutants ☐
- d) Quit smoking and avoid second hand smoke ☐