



Cold and Flu

Non-Prescription Drugs and Parapharmaceuticals

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Colds and flu

- The common cold comprises a mixture of viral upper respiratory tract infections (URTIs).
- Colds are usually self-limiting; however, because symptoms are bothersome, patients frequently self-medicate.
- Self-management or getting advice and support from a pharmacist are usually much better options. Many people choose to buy over-the-counter medicines for symptomatic relief, and this is to be encouraged.
- Some of the ingredients of OTC cold remedies may interact with prescribed therapy, occasionally with serious consequences. Therefore, careful attention needs to be given to taking a medication history and selecting an appropriate product

What do you need to know- Age

- Children are more susceptible to URTI than are adults and may get complications.
- Very young children and babies are also at increased risk of bronchiolitis , pneumonia and croup, and these conditions need to be considered.
- Older people ,particularly if they are frail and have co-morbidities (e.g. diabetes), may be at risk of complications such as pneumonia.

What do you need to know-Duration

The symptoms of the common cold usually last for 7–14 days. Some symptoms, such as a cough, may persist after the worst of the cold is over, and coughing for 3 weeks is not unusual.

Clinical presentation of colds

- Symptoms appear 1 to 3 days after infection.
 - **Sore throat** is the first symptom to appear
 - Followed by **nasal symptoms** which dominate by day 2 or 3.
 - **Cough**, although infrequent, appears at day 4 or 5.

What do you need to know-Symptoms

- A. *Runny/blocked nose:*** Most patients will experience a runny nose (rhinorrhoea). This is initially a clear watery fluid, which is then followed by the production of thicker and more tenacious, often coloured mucus.
- Nasal congestion occurs because of the dilatation of blood vessels

What do you need to know-Symptoms

B. Sneezing/coughing

- Sneezing occurs because the nasal passages are irritated and congested.
- A cough may be present.

C. Aches and pains/headache

- Headaches may be experienced because of inflammation and congestion of the nasal passages and sinuses.
- People often report muscular and joint ache, and this is more likely to occur with flu than with the common cold

What do you need to know-Symptoms

D. High temperature

- Those suffering from a cold often complain of feeling hot, but in general, a high temperature (e.g., exceeding 38°C) will not be present.
- The presence of fever may be an indication that the patient has flu rather than a cold

What do you need to know-Symptoms

E. Sore throat

- The throat often feels dry and sore during a cold and may sometimes be the first sign that a cold is imminent.

F. Earache

- It is a common complication of colds, especially in children.
- This situation often resolves spontaneously, but decongestants and inhalers can be helpful.
- Sometimes the situation worsens when the middle ear fills up with fluid and is under pressure. The ear becomes acutely painful, and this is called acute otitis media (AOM). AOM is common in young children, and usually the best treatment is pain relief.

Flu

- Differentiating between colds and flu may be needed to make a decision about whether referral is needed for patients in 'at-risk' groups who might need to be considered for antiviral treatment.
- Flu is generally considered to be likely if:
 1. Temperature is 38 °C or higher (37.5 °C in the elderly).
 2. A minimum of one respiratory symptom – cough, sore throat, nasal congestion or rhinorrhoea – is present.
 3. A minimum of one constitutional symptom – headache, malaise, myalgia ,sweats /chills is present.



Table 2.5
Specific questions to ask the patient:
The common cold

Question	Relevance
Onset of symptoms	<p>Peak incidence of flu is in the winter months; the common cold occurs any time throughout the year.</p> <p>Flu symptoms tend to have a more abrupt onset than the common cold – a matter of hours rather than 1 or 2 days.</p> <p>Summer colds are common, but they must be differentiated from seasonal allergic rhinitis (hay fever).</p>
Nature of symptoms	<p>Marked myalgia, chills and malaise are more prominent in flu than in the common cold. Loss of appetite is also common with flu.</p>
Aggravating factors	<p>Headache and pain that is worsened by sneezing, coughing and bending over suggests sinus complications.</p> <p>If ear pain is present, especially in children, middle ear involvement is likely.</p>

When to refer

- Earache not settling with analgesics.
- In the very young.
- In the frail and old
- In those with heart or lung disease, for example, COPD, kidney disease, diabetes.
- compromised immune system
- With persisting fever and productive cough
- Asthma.
- Worsening of symptoms or additional symptoms during treatment.

Nonpharmacologic Therapy

- Nondrug therapy includes:

1. Maintenance of fluid intake
2. Adequate rest
3. A nutritious diet as tolerated
4. Increased humidification with steamy showers, humidifiers, or vaporizers.
5. Saline nasal sprays or drops soothe irritated mucosal membrane and loosen encrusted mucus.
6. Saline gargles ease sore throats
7. Tea with lemon and honey and chicken soup are soothing and increase fluid intake.
8. Medical devices such as Vicks Breath Right nasal strips lift the nares open, enlarging the anterior nasal passage and temporary relief nasal congestion and stuffiness resulting from colds or allergies.



Hygiene advice

- it is worth giving advice on how to prevent the transmission of infection.
- basic good hygiene measures may help to prevent spread. These include:
 1. washing hands frequently with soap and hot water when the person has symptoms of the common cold or comes into contact with someone who has symptoms.
 2. Avoid the sharing of towels.
 3. for children, discouraging the sharing of toys with an infected child.

Management

- The pharmacist's role is to select appropriate treatment based on the patient's symptoms and available evidence, taking into account the patient's preferences:
- Antitussives: Dextromethorphan and pholcodine
- Expectorants: Guaifenesin
- Nasal decongestants: Ephedrine, oxymetazoline, phenylephrine, pseudoephedrine, and xylometazoline
- Antihistamines: chlorphenamine, diphenhydramine, doxylamine, promethazine, and triprolidine



Table 2.6
Practical prescribing: Summary of cold medicines

Name of medication	Use in children (age, years)	Very common ($\geq 1/10$) or common ($\geq 1/100$) side effects	Drug interactions of note	Patients in whom care is exercised	Pregnancy & breastfeeding
<i>Antihistamines</i>					
Diphenhydramine	>6	Dry mouth, sedation, constipation	Increased sedation with alcohol, opioid analgesics, anxiolytics, hypnotics, antidepressants	Glaucoma, prostate enlargement	Pregnancy – standard references state OK, although some manufacturers advise avoidance. Breastfeeding OK because amount secreted into breast milk is small. It may, however, reduce milk supply.
<i>Systemic sympathomimetics</i>					
Phenylephrine	>12	Insomnia	Avoid concomitant use with MAOIs and modobemide due to risk of hypertensive crisis. Avoid in patients taking beta blockers and TCAs.	Control of hypertension and diabetes may be affected, but a short treatment course is unlikely to be clinically important.	Best avoided in pregnancy because mild foetal malformations have been reported. Breastfeeding OK because amount secreted into breast milk is small. It may, however, reduce milk supply.
Pseudoephedrine	>6				

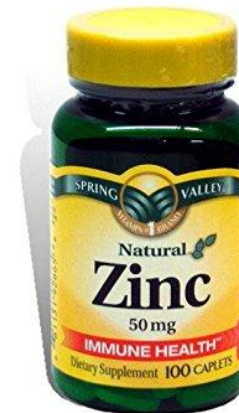


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<i>Topical sympathomimetics</i>					
Oxymetazoline	>12	Possible local irritation in ~5% of patients	Avoid concomitant use with MAOIs and moclobemide due to risk of hypertensive crisis.	None	Pregnancy – not adequately studied, avoid. Breastfeeding OK
Xylometazoline	>6 (Otrivine Child Nasal Drops)				
Ephedrine	>12				
Anticholinergic (ipratropium, xylometazoline)	>18	Nosebleeds, nasal irritation, dryness	Avoid concomitant use with MAOIs and moclobemide due to risk of hypertensive crisis.	Narrow-angle glaucoma, urinary retention	Manufacturers recommended avoiding
MAOI, Monoamine oxidase inhibitor; OTC, over-the-counter; TCA, tricyclic antidepressant.					

Complementary Therapy

- Numerous complementary therapies are marketed for the treatment of colds:
 1. Echinacea... conflicting evidence of effectiveness
 2. Zinc.... Two systematic reviews have found limited evidence that *zinc gluconate* or *acetate lozenges* may reduce continuing symptoms at 7 days compared with placebo. It is therefore generally not recommended that people take zinc supplements for colds.



Complementary Therapy

3. Vitamin C

- A systematic review found that high-dose vitamin C (over 1 g/day) taken prophylactically could reduce the duration of colds by a slight amount (about 8%).
- Although it is relatively cheap and safe, general advice is that there is not much to be gained from taking extra vitamin C for colds.