

Coughs & Colds

- Upper Respiratory Tract Illness (URTIs)
- Mostly caused by virus (bacterial infections are secondary)

Include:

- Common cold (nasopharyngitis or rhinopharyngitis)
- Rhinitis (inflammation of nasal mucosa)
- Pharyngitis, Sinusitis, Epiglottitis, Laryngitis, Tracheitis

General Symptoms	<ul style="list-style-type: none"> • Local oedema (swelling) • Erythema (redness of skin due to congestion of capillaries) • Secretions • Fever
How it is Spread	<ul style="list-style-type: none"> • Symptoms result from inflammatory response of immune system from invading pathogens & toxins produced by pathogens • Involve direct invasion of mucosa lining upper airways • Mostly spread person-to-person by droplets from mouth/nose/direct contact with secretions • Viruses & bacteria have mechanisms for avoiding body's defences • Symptoms appear ~ 1-3 days after exposure • Symptoms last 7–10 days

Common Cold	<ul style="list-style-type: none"> • Rhinovirus (30-50% of cases) • Common reason to visit GP (~1/3 of visits): Peak incidence in winter but occur all year round • Child < 8 years: 5-10 colds/year • Adults: 2-4 colds/year • Symptoms usually resolve in 1 week, but up to 25% lasts 2 or more weeks 	
	Causes	<ul style="list-style-type: none"> • Body's inflammatory response to pathogen (virus) • Virus invades & dmg nasal epithelial cells = Inflammatory response (redness, heat, swelling, & pain) • Delivery of more blood & heat from body (fever) helps body's defense to function more effectively & slows growth of virus. • Fluid from blood vessels leaks into inflamed area causing oedema (nasal congestion & sneezing) and delivering antibodies. • Identified pathogens are then devoured by granulocytes. Debris is blown away from nose/coughed up from air passages. • Fluid might also drip down back of throat, spreading virus to throat & upper chest causing cough & sore throat.
	Symptoms (in order of appearance)	<ul style="list-style-type: none"> • Sore throat • Sneezing • Profuse nasal discharge (rhinitis) & congestion • Mild to moderate fever (38 – 39°C) & general malaise • Postnasal drip • Possible headache • Cough

	Differential Diagnosis	<ul style="list-style-type: none">Headache/pain worsened by sneezing, coughing & bending over (sinusitis)Ear pain – middle ear (otitis media); Common in childrenMore severe symptoms could be ‘flu’Rhinitis with no other symptoms (REFER)Under 3mths & temp >38°C (REFER)>3mths & other S_x (headache, drowsiness, seizure, difficulty breathing, vomiting, diarrhoea, new skin rash, dehydrated) (REFER)
	Treatment	<p><u>OTC Meds</u> (usually combo products that include 1< ingredient):</p> <p>Analgesics (Paracetamol, Aspirin, Ibuprofen for FEVER)</p> <ul style="list-style-type: none">Paracetamol 1000 mg in a sachet (Lemsip): Mix into boiling water to create hot lemon drink that is very soothing <p>Antihistamines</p> <p>Anti-Tussives (Cough Suppressant Drugs)</p> <p>Expectorants (Aids clearance of mucus)</p> <p>Sympathomimetics (Decongestants) – Effective for drying up runny nose (rhinitis)</p> <ul style="list-style-type: none">Pseudoephedrine (S3) (Sudafed)Inhalation (Nasal Decongestants) (e.g. Methol & Eucalyptus Inhalation): 5 mL added to ~ 600 mL hot (not boiling) water & inhale vapor <p>If Child <2yrs: No oral formulations for rhinitis (use VapoRub or fill nasal decongestants in steam vaporizer)</p> <p>Saline Nasal Sprays/Drops (FESS) – For Cold & Flu</p> <ul style="list-style-type: none">Fess Little Noses (for babies): Use 1 to 3 sprays in each nostril as often as neededFess Original: 2-3 sprays per nostril (for child); 2-6 sprays per nostril (for adult)Contains no drugs therefore can be safely used in all age groups & in pregnancyNon-irritant because buffered isotonic saline <p>Lifestyle Advice:</p> <ul style="list-style-type: none">Check temp regularly *if above 38.5 & has other S_x, go to doctorKeep hydratedEnsure all family members practice good hand hygiene.Duration is usually 7-10 daysIf cold lasts >10 days, if S_x worsen or becomes unwell, see doctorVaporiser could be used to help relieve congestion as well.Drink warm demulcents (honey/lemon)Reduce exposure to cigarette smoke.
Influenza (Flu)	<ul style="list-style-type: none">Influenza A, B & CElderly, pregnant women & people with underlying medical conditions more likely to develop secondary complications (pneumonia/inflammation of brain & heart)	
	Treatment	<ul style="list-style-type: none">Immunisation for best control

		<ul style="list-style-type: none"> • Bed rest until body temp. has been in normal range for 48 hrs • Maintain fluids • Treat troubling symptoms (Paracetamol & Aspirin (adults)) 																		
	<table> <tr> <th>Question/Feature</th><th>Cold</th><th>Flu</th></tr> <tr> <td>Onset of symptoms</td><td>onset within 1 to 3 days - occurs any time during the year</td><td>onset tends to be abrupt: 1 to 3 hours - peak incidence is in winter</td></tr> <tr> <td>Nature of symptoms</td><td>mildly debilitating, malaise and myalgia may not be present, cough is productive, no shivering or chills</td><td>marked myalgia, shivering, chills, malaise, aching of limbs, insomnia, non-productive cough and loss of appetite. debilitating and person usually cannot get out of bed – third party presents to pharmacy</td></tr> <tr> <td>Fever present</td><td>mild</td><td>high</td></tr> <tr> <td>Duration</td><td>2 – 3 days</td><td>up to 10 days</td></tr> <tr> <td>Nasal Symptoms</td><td>runny nose</td><td>dry nose & throat</td></tr> </table>	Question/Feature	Cold	Flu	Onset of symptoms	onset within 1 to 3 days - occurs any time during the year	onset tends to be abrupt: 1 to 3 hours - peak incidence is in winter	Nature of symptoms	mildly debilitating, malaise and myalgia may not be present, cough is productive, no shivering or chills	marked myalgia, shivering, chills, malaise, aching of limbs, insomnia, non-productive cough and loss of appetite. debilitating and person usually cannot get out of bed – third party presents to pharmacy	Fever present	mild	high	Duration	2 – 3 days	up to 10 days	Nasal Symptoms	runny nose	dry nose & throat	
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Cough	<ul style="list-style-type: none"> • Excess secretions & foreign bodies cleared from body by combination of coughing & upward beating of cilia that move mucus & foreign bodies to be expelled/swallowed • NEVER recommend product with both expectorant & suppressant in same bottle. 																			
	Acute: <3 wks	Subacute: 3-8 wks																		
	Chronic: >8 wks (REFER)																			
	<ul style="list-style-type: none"> • >2wks could be 'post-viral' cough/secondary bacterial infection (sinusitis or Bronchitis) (REFER) • >3 months: chronic bronchitis, tuberculosis or carcinoma (cancer) 																			
	Chesty/Productive Coughs (chesty)	Dry/Non-Productive Coughs (dry, tickly)																		
	<ul style="list-style-type: none"> • Body is trying to expel secretions that impair body's ability to resist infection – don't suppress!! 																			
• Treatment	Expectorants: ammonium salts, guaifenesin & senega Mucolytics: bromhexine	<ul style="list-style-type: none"> • Anti-tussives (cough suppressants): Pholcodine, dextromethorphan, dihydrocodeine (S3) & codeine (S4) 																		
	REFER	<ul style="list-style-type: none"> • Duration of cough > 14 days • Chest pain • Persistent fever • Stridor/other respiratory noises (croup/whooping cough) • Wheeze (asthma, acute bronchitis) • Shortness of breath (asthma, acute bronchitis, cardiovascular) • Discoloured sputum (infection, CV or cancer) • Pain on inspiration (Pleurisy/pneumothorax) 																		
Acute Cough	Causes	<ul style="list-style-type: none"> • Usually caused by viral URTI • More prevalent in winter • Children (0-4 yrs): 4X more likely to get URTI than adults • Pertussis: Indigenous children (0-4 yrs) have a rate ratio 1.6x that of non-indigenous children 																		

	Symptoms	<ul style="list-style-type: none">Typically present with sudden onset associated with feverSputum production is minimalSymptoms often worse in the eveningAssociated cold symptoms often present –cough & cold symptoms usually last 7-10 days	
<ul style="list-style-type: none">Croup	Causes	<ul style="list-style-type: none">Symptoms triggered by recent viral infectionParainfluenza virus & rhinovirusesAffects children 3mth – 6 yrs (highest incidence: 1-2 yrs)	
	Symptoms	<ul style="list-style-type: none">Occurs in late evening & nightDescribed as a barking or seal-like coughIn between coughing, child may be breathless & struggling to breathe properlyTypically, symptoms improve during day & recur again at nightMajority of children symptoms resolve in 48 hrs	
	Treatment	Mild	Can be managed at home Warm moist air (e.g. vapouriser or take child into bathroom & turn on shower (steam))
		Severe	<ul style="list-style-type: none">If child has stridor – send parents to Department of Emergency Medicine, RCH or Mater Children<ul style="list-style-type: none">Oral/inhaled prednisolone (reduce swelling)Nebulised adrenaline (reduce swelling)
<ul style="list-style-type: none">Postnasal Drip	<ul style="list-style-type: none">Characterised by sinus/nasal discharge that flows behind nose & into throat (usually productive cough)Usually follows common coldAsk patient if swallowing mucus or notice if they are clearing their throat more often than usual		
	Treatment	Decongestant (e.g. pseudoephedrine) to dry up nose & expectorant cough mixture if required	
<ul style="list-style-type: none">Allergy Related	<ul style="list-style-type: none">Cough is non-productiveWorse at nightUsually associated with other symptoms such as sneezing, nasal discharge/blockage, conjunctivitis or itching oral cavity, nocturnal snoring		
	Treatment	<ul style="list-style-type: none">Antihistamines (sedating/non-sedating)Anti-tussive (cough suppressant) e.g. pholcodine	
Sore Throat	<ul style="list-style-type: none">Pain can range from scratchiness to severe painOften associated with common coldExtremely common presentation to pharmacy & GPsUp to 90% viral; other 10% bacterial (Streptococcus pyogenes)Strep throats most prevalent in school aged children (5-15 yrs) & very rare in adults & young childrenStrep throats often associated with markedly swollen glands & may see pus on tonsils (REFER)		
	Treatment	Oral Analgesics (Paracetamol/Aspirin): Gargling soluble preparations & then swallowing slowly is very effective) Throat Sprays or Gargles & Lozenges	

		<ul style="list-style-type: none"> Ingredients: Topical anaesthetics (lignocaine, benzocaine), anti-inflammatory (flurbiprofen in Strefen), antibacterial agents (chlorhexidine, dequalinium chloride (Cepacol), benzalkonium chloride Lozenges (e.g. Strepsils, Soothers) promotes antibacterial action
Streptococcal Sore Throat	<ul style="list-style-type: none"> Affects pharynx & tonsils Highly contagious – spread through close contact with infected person 	
	Treatment	Penicillin