

June 18, 2019

## COM-2019-026

Dear provider of pharmaceutical services,

The common cold is a medical condition caused by a type of virus known as rhinovirus and which is very prevalent in the community. This condition usually affects the upper respiratory tract and is self-limiting, but it has a variety of signs and symptoms that can affect patient's quality of life. The signs and symptoms of the common cold may include coughing, sneezing, nasal congestion, low-grade fever, sore throat, and fatigue. Of note, in patients with comorbidities like asthma, chronic obstructive pulmonary disease and pneumonia, the common cold can trigger severe exacerbations of these medical conditions. Treatment for the common cold is limited to symptom relief and patients will often visit their pharmacy looking for non-prescription products to manage their symptoms. Therapies available include antihistamines, decongestants, expectorants, antitussives, analgesics and antipyretics, which can be use alone or in combination. Pharmacists are an indispensable resource for the provision of counseling regarding non-prescription products for the common cold. This communication will focus on reviewing important facts regarding the proper use of non-prescription decongestant products and the pharmacist's role in this matter.

**Table 1. Systemic and Intranasal Decongestants** 

Systemic decongestants	Intranasal decongestants
Pseudoephedrine† Phenylephrine	Ephedrine
	Naphazoline
	Phenylephrine
	Propylhexedrine
	Oxymetazoline
†Of note, remember that pseudoephedrine must be maintained behind	
the pharmacy counter because of its role in the illegal production of	
methamphetamine.	

Table 2. Medical conditions that can be exacerbate with the use of non-prescription decongestants

decongestants	
Coronary Artery Disease	
Hypertension	
Ischemic Heart Disease	
Heart Failure	
Diabetes	
Glaucoma	
Benign Prostatic Hyperplasia	
Thyroid Disease	

Decongestants are adrenergic agonists or sympathomimetics that stimulates the αadrenergic receptors, which constrict blood vessels decreasing sinusoid enlargement and mucosal edema. Decongestants are classified systemic and intranasal, and are available in different dosage forms, including combination and single products and pediatric formulations. Table 1 lists systemic decongestants and intranasal decongestants.

The use of intranasal decongestants should be limited to 3 to 5 days to avoid rhinitis medicamentosa (rebound congestion).

Common adverse effects of systemic decongestants include anxiety, insomnia, nervousness, palpitations, restlessness, tachycardia. Because the use of decongestants is associated with cardiovascular stimulation, including high blood pressure, palpitations and tachycardia, they may exacerbate



conditions sensitive to adrenergic stimulation as well as other medical conditions (Table 2). Patients with these medical conditions must me advised to consult their primary care providers before using non-prescription decongestants.

## Pharmacist's role

- Before recommending any non-prescription decongestant, evaluate patient's allergies and medical conditions, and screen for potential drug contraindications and interactions.
- Aid patients in the proper use and selection of decongestant products, especially if patients have a pre-existing medical condition or are taking other medications.
  - o For patients with hypertension, pharmacists may recommend them propylhexedrine.
  - Decongestants interact with other medications, so be aware about other prescription drugs that patients may be using and advise them not to take them. Decongestants should be avoided in drugs like linezolid, ergot derivatives and monoamine oxidase inhibitors.
  - Advise patients to use caution when using combination products to avoid unnecessary use of medications and therapeutic duplications.
- Identify drugs that can cause non-allergic rhinitis in patients (e.g.  $\alpha$ -adrenergic receptor antagonists, ACE inhibitors,  $\beta$ -blockers and oral contraceptives).
- Educate regarding common adverse effects and precautions that must be taken when using decongestants.
- Remind patients to read labels prior to administration and to adhere to recommended doses and duration of use.
- Refer patients to seek further medical care from their primary care providers when warranted.

For more information regarding individual non-prescription decongestants products available at your pharmacy, please refer to products label and/or other trustworthy references.

On PharmPix we are compromised with the health and wellness of our insured. It is our priority to offer high quality services and to promote practices for health promotion and diseases prevention. If you have any doubt or wish to have more information regarding this document, you can call us to 787-522-5252, extension 137.

Regards,

## Clinical Department

## References:

 George, B., Etzel, J., & Ambizas, E. (2018). The Common Cold: A Review of OTC Options. Retrieved from <a href="https://www.uspharmacist.com/article/the-common-cold-a-review-of-otc-options?utm\_source=TrendMD&utm\_medium=cpc&utm\_campaign=US\_Pharmacist\_TrendMD">https://www.uspharmacist.com/article/the-common-cold-a-review-of-otc-options?utm\_source=TrendMD&utm\_medium=cpc&utm\_campaign=US\_Pharmacist\_TrendMD</a>

 Terrie, Y. (2018). A Guide to the Proper Use of Nonprescription Decongestant Products. Retrieved from https://www.pharmacytimes.com/publications/issue/2018/november2018/a-guide-to-the-proper-use-of-nonprescription-decongestantproducts

