



## Sprays and gargles for a sore throat

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### Introduction

Several throat sprays and gargles are available to relieve the pain and symptoms associated with a sore throat. Patients often require assistance in choosing the correct product, and counselling on how to use these products safely and effectively. Information on throat sprays and gargles, their properties and tips on how to use them is provided in this article.

### Gargles and mouthwashes

Oral rinses are effective in coating the inside of the mouth and the base of the tongue. When treating a sore throat, products containing a local anaesthetic or analgesic are recommended for their pain relieving effects. Since most sore throats are caused by viral (90%) or bacterial (10%) infections, products often contain antiseptics to help clear these minor infections.

Rinsing and gargling with a salt water solution is an old standby remedy for a sore throat. Although the efficacy thereof is uncertain, there is no harm in using a mixture of half a teaspoon of salt dissolved in a cup of warm water as a rinse.

**“Several throat sprays and gargles are available to relieve the pain and symptoms associated with a sore throat.”**

A summary of the active ingredients used in sprays and gargles and their properties is provided in Table I.

### How to gargle

Advice on how to gargle is as follows:

- The instructions from the product package insert (on dilution and quantities to use for rinsing and gargling) should be discussed with the patient to ensure that he or she understands whether or not, and how to, dilute, products
- The recommended volume as per the package insert, usually from 5–30 ml, must be used, and the mouth rinsed for around 30–60 seconds
- The patient should spit out the solution, and then use fresh solution or the same solution to gargle for another 30–60 seconds
- He or she must take a deep breath and tilt the head back as far as possible
- The mouth should be opened as far as possible, and the patient should breathe out slowly through the throat, but fast enough to prevent the liquid from running down it and causing choking or gagging

**Table I:** A summary of the active ingredients used in sprays and gargles

Active ingredient	Properties
Benzylamine	Analgesic, anti-inflammatory and antipyretic
Benzocaine	Local anaesthetic
Cetylpyridinium chloride	Antiseptic
Chlorhexidine gluconate	Antiseptic
Hexetidine	Antiseptic
Hydrogen peroxide 1.5%	Antiseptic and deodorant
Phenol	Antiseptic and local anaesthetic
Povidone iodine	Antiseptic and anti-inflammatory
Thymol	Antiseptic

- When the patient runs out of air, he or she should tilt the head back to rest the neck muscles and take another breath. The process may need to be repeated 3–4 times to achieve the recommended contact time of 30–60 seconds
- The solution should be spat out in the basin after gargling. It should not be swallowed
- When using a strong solution with alcohol or hydrogen peroxide, the mouth needs to be rinsed out after use. Other solutions are kept in the mouth without rinsing, in which case the patient should refrain from eating or drinking for approximately 10 minutes

Patients younger than 12 years of age are usually unable to gargle without swallowing and if necessary, they should use the solution for rinsing only. Children younger than 6 years of age should not use oral rinses.

### Throat sprays

The same ingredients used in mouthwashes and gargles are also used in spray formulations. Throat sprays are effective in coating the back of the throat. They are not recommended for patients younger than 6 years of age and should be used according to the manufacturer's directions in the package insert.

### Precautions to consider

Before recommending any products to a patient, potential allergies to any of the ingredients should be identified. Chlorhexidine gluconate can cause reversible brown staining of the teeth and tongue, and should not be used for the long term. Povidone iodine may be absorbed systemically and should not be used for longer than 14 days. Products containing high concentrations of alcohol can cause a dry mouth, damage cells and cause oral sores in the mouth over time. Phenol should not be used in patients who suffer from a swollen, inflamed epiglottis as it can lead to breathing difficulties which can be life threatening.

**“Throat sprays are effective in coating the back of the throat.”**

Patients should be referred to a doctor if a sore throat is accompanied by any of the following:

- Difficulty breathing
- Drooling because of difficult swallowing
- Swelling of the neck or tongue
- White blotches on the throat
- A skin rash
- Symptoms lasting for longer than 7–10 days, despite treatment.

### Conclusion

Most sore throats resolve without treatment. The correct use of throat sprays and gargles can be helpful in alleviating pain. Gargles and throat sprays enable direct topical application to reduce the risk of systemic side-effects, but should not be used in smaller children as they are prone to swallowing the solution.

### Bibliography

1. Stead W. Patient information: sore throat in adults (Beyond the Basics). UpToDate [homepage on the Internet]. 2014. c2016. Available from: <http://www.uptodate.com/contents/sore-throat-in-adults-beyond-the-basics>
2. Wald ER. Patient information: sore throat in children (Beyond the Basics). UpToDate [homepage on the Internet]. 2015. c2016. Available from: <http://www.uptodate.com/contents/sore-throat-in-children-beyond-the-basics>
3. Farrer F. Sprays and lozenges for sore throats. *S Afr Pharm J*. 2013;80(5):8–11.
4. Van Schoor J. Using gargles and mouthwashes. *SA Pharmacist's Assistant*. 2011;11(2):26.
5. Blenkinsopp A, Paxton P, Blenkinsopp J. Colds and flu. Symptoms in the pharmacy: a guide to the management of common illness. 6<sup>th</sup> ed. New York: Wiley-Blackwell; 2009.
6. Louw PLR. Using mouthwash breath. MD [homepage on the Internet]. 2016. c2016. Available from: <http://www.breathmd.com/mouthwash.php>
7. Rossiter D, editor. South African medicines formulary. 11<sup>th</sup> ed. Cape Town: Health and Medical Publishing Group; 2014.

