
HOARSENESS

Hoarseness (also called dysphonia) is an abnormal change in the quality of your voice, making it sound raspy, strained, breathy, weak, higher or lower in pitch, inconsistent, fatigued, or shaky, often making it harder to talk. This usually happens when there is a problem in the vocal cords (or folds) of your voice box (larynx) that produce sound. Your vocal cords are separated when you breathe, but when you make sound, they come together and vibrate as air leaves your lungs. Anything that alters the vibration or closure of the vocal cords results in hoarseness.

WHAT ARE THE SYMPTOMS OF HOARSENESS?

If you have any of these symptoms for hoarseness, you should see an ENT (ear, nose, and throat) specialist, or otolaryngologist, as soon as you can:

- Hoarseness that lasts more than four weeks, especially if you smoke
- Severe changes in voice lasting more than a few days
- Voice changes, such as raspy, strained, breathy, weak, higher or lower in pitch, inconsistent, fatigued, or shaky voice
- Difficult breathing
- Pain when speaking
- Vocal professionals (singer, teacher, public speaker) who cannot do their job

WHAT CAUSES HOARSENESS?

Acute laryngitis—The most common cause of hoarseness is acute laryngitis. A cold, viral infection in your breathing tract, or voice strain can make your vocal cords swell. You can seriously damage your vocal cords if you talk while you have laryngitis.

Non-cancerous vocal cord lesions—Nodules, polyps, and cysts usually develop after prolonged trauma to the vocal cords from talking too much, too loudly, or with bad technique.

Pre-cancerous or cancerous lesions—Pre-cancer or cancerous lesions on the vocal cords can also cause hoarseness. If it lasts four weeks or more, or if you are at a higher risk of developing throat cancer (i.e., you smoke), you should have your voice box evaluated by an ENT specialist.

Neurological diseases or disorders—Hoarseness can occur with Parkinson's disease or after a stroke. A rare disorder called spasmodic dysphonia can also create hoarseness or uneasy breathing. A paralyzed vocal cord, usually after surgery, viral illness, or injury, may also cause a weak, breathy voice.

Vocal cord atrophy—As we age, our vocal cords become thinner (decreased bulk) and floppy (decreased tone). This is not due to talking too much or too little, it's just a fact of life. A raspy voice that changes from day to day with decreased power is common.

Vocal cord hemorrhage—You can lose your voice after yelling or other strenuous vocal activity if a blood vessel/blood blister breaks, filling the vocal cord with blood. This is a vocal emergency and should be treated with complete voice rest and examination by an ENT specialist.

Are There Related Factors or Conditions?

Reflux—Reflux is when acidic or non-acidic stomach contents move from the stomach up into your swallowing tube (the esophagus). Classic heartburn and indigestion are symptoms of gastroesophageal reflux (GERD), which is caused by acid. If the stomach acid travels up the esophagus and spills into the throat or voice box (called the pharynx/larynx), it is known as laryngopharyngeal reflux (LPR).

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Smoking—Most importantly, smoking increases the risk of developing throat cancer. Smoking can also cause permanent changes to your vocal cords that can lead to swelling, which lowers the pitch of your voice and can block the airway in severe cases. Smokers who develop hoarseness should see an ENT specialist right away.

Other—Other related factors such as allergies, thyroid problems, trauma to the voice box, and, occasionally, menstruation can contribute to hoarseness.

WHAT ARE THE TREATMENT OPTIONS?

An ENT specialist needs to obtain your medical history and look at the voice box (larynx) with special equipment before they can determine what's causing your hoarseness and recommend treatment options. They may pass a very small, lighted flexible tube with a camera (called a fiberoptic scope) through your nose to view your vocal cords. Most patients tolerate these procedures well. Sometimes, it helps to measure voice irregularities, how the voice sounds, airflow, and other characteristics to help decide how to treat your hoarseness.

Appropriate treatment depends on the cause of your hoarseness.

Acute laryngitis—Supportive care and voice rest are usually the recommended courses of action for acute laryngitis. Antibiotics and steroids are often not needed, and your primary care physician can manage this. If your hoarseness lasts beyond typical cold symptoms, however, you should see an ENT specialist.

Non-cancerous vocal cord lesions—Treatment for non-cancerous vocal cord lesions includes learning proper voicing technique with voice therapy, adequate hydration, and sometimes surgery.

Pre-cancerous or cancerous lesions—Surgery is needed to

diagnose and treat pre-cancerous or cancerous lesions. Sometimes, other cancer treatments are needed, such as radiation therapy or chemotherapy.

Neurological diseases or disorders—Determining why your vocal cords are paralyzed helps your doctor decide the best course of action. Sometimes, vocal cord augmentation is needed. For patients with Parkinson's disease, special voice techniques can help, but evaluation is also very important. Mumbled speech (called dysarthria) after a stroke or from a degenerative neurologic disorder can be addressed with speech therapy or the use of assistive communicative devices. Other disorders can be treated with botulinum toxin, or Botox®, injections.

Vocal cord atrophy—Treatment for vocal cord atrophy includes voice therapy and, sometimes, vocal cord injection, but reassurance from your doctor that your hoarseness is not due to cancer may be all that you need for peace of mind.

Vocal cord hemorrhage—Treatment usually includes resting your voice and avoiding blood thinners. Surgery is rarely needed.

Are There Potential Dangers or Complications?

Depending on the cause of your hoarseness, long-term concerns range from permanent hoarseness, inability to effectively communicate with others, loss of work for vocal professionals, to major surgery or, in severe cases, death from cancer and cancer-related treatments. That's why it's very important to see an ENT specialist to be evaluated for persistent hoarseness.

General vocal wellness tips include:

1. Avoid speaking in loud environments.
2. Be aware of how much and how loudly you are talking.

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3. Use a microphone or other type of voice amplification if your job requires a lot of talking (like teaching or public speaking).
4. Drink plenty of water, usually around 60 ounces daily. This helps thin out mucus.
5. Avoid large amounts of caffeine, such as caffeinated coffee, tea, and soda.
6. Stop smoking and avoid secondhand smoke. This is a good idea for all smoked products.

WHAT QUESTIONS SHOULD I ASK MY DOCTOR?

1. What is the cause of my hoarseness?
2. Are any of my medications drying me out?
3. When should I see a specialist?

References

1. Stachler RJ, Francis DO, Schwartz SR, Damask CC, Digoy GP, Krouse HJ, McCoy SJ, Ouellette DR, Patel RR, Reavis CCW, Smith LJ, Smith M, Strode SW, Woo P, Nnacheta LC. Clinical Practice Guideline: Hoarseness (Dysphonia) (Update). *Otolaryngol Head Neck Surg*. 2018 Mar;158(1_suppl):S1-S42.

2. Stachler RJ, Francis DO, Schwartz SR, Damask CC, Digoy GP, Krouse HJ, McCoy SJ, Ouellette DR, Patel RR, Reavis CCW, Smith LJ, Smith M, Strode SW, Woo P, Nnacheta LC. Clinical Practice Guideline: Hoarseness (Dysphonia) (Update) Executive Summary. *Otolaryngol Head Neck Surg*. 2018 Mar;158(3):409-426.