

# Voice Disorder Risk for Educators

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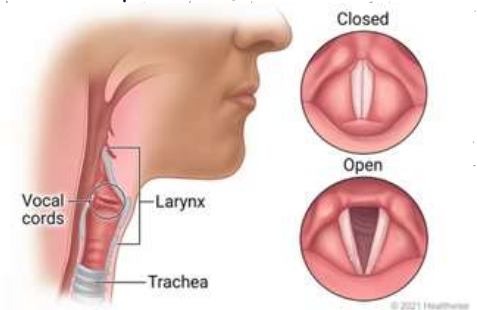


## Healthy Phonation

The respiratory system provides the power source for our voice. We constantly replenish air by the cyclical actions of our lungs during respiration. At rest, the vocal folds are open and no phonation occurs, allowing air to pass. When we inhale, lung volume expands, and there is air intake. During an exhale, lung volume decreases, and the air is expelled. During quiet breathing, it is 60% inhalation and 40% exhalation. However, when we are breathing for speech, it is 10% inhalation and 90% exhalation because we speak during the exhale. Therefore, speech breathing is characterized by a quick, deep inhale with prolonged and controlled exhale. Consequently, an individual needs to have adequate breath support to increase their loudness and produce longer utterances. When we speak, the vocal folds gently come together and vibrate. Healthy speech is characterized by well-projected sound, with the vocal folds approximating without undue pressure or air escape.

To maintain healthy phonation:

- have adequate breath support
- vocal rests when needed
- drink plenty of water (10 cups/day)
- use a voice amplifier or microphone when necessary
- check medication for side effects of dryness (xerostomia)
- reduce or avoid intake of alcohol and caffeine
- cease smoking
- avoid breathing chemical fumes
- avoid maladaptive behaviors (i.e., excessive throat clearing, whispering, and screaming)



## Risk Factors

### 1. Phonotrauma & Vocal Nodules

Phonotrauma is the misuse of vocal folds that can lead to physical abnormalities in the larynx (voice box). Classrooms are known to be noisy environments. When a teacher is yelling to be heard in a noisy environment, the vocal folds are typically vibrating in a strained, damaged way. Throat clearing too much can also cause phonotrauma. If a teacher has chronic phonotrauma, vocal nodules may develop as a result. Vocal nodules are non-cancerous growths on the vocal folds that will impact the vocal quality (the way someone's voice sounds).

## 2. Respiratory Problems


Some classrooms may have poor ventilation systems. This means when a child inevitably shows up to school sick, their germs can easily spread and cause an upper respiratory infection. As mentioned on the first page, good respiration is vital for creating our voice. If our breathing system isn't acting normal, this will in turn likely create an abnormal voice quality.

## 3. Dry Mucosa

A healthy set of vocal folds require a good amount of moisture and mucus. The school environment often has too much dry air, for example, during the wintertime when it is cold. This means that it will take more effort to produce your voice than if your voice was properly hydrated. Dry mucosa also changes your vocal quality.



### Early Signs of a Voice Disorder

<p>If you have any of the following symptoms, consider talking to your doctor about the changes you have experienced to your voice.</p>	
<p>Hoarse, rough, or breathy voice</p>	
<p>Higher or lower pitch than normal</p>	
<p>Louder or quieter speech than normal</p>	
<p>Straining your voice/struggling to speak</p>	
<p>Losing your voice partially, completely, and/or the longer you speak</p>	
<p>Tightness in your throat</p>	

## How to get your voice Evaluated

Have you checked off on any of the above signs or symptoms of a voice disorder? Please do not wait to get the help you need, we recommend you take the following steps in order to receive a voice evaluation.

### Contact your Health Insurance

It is important to contact your health insurance to ensure you receive as much coverage as possible. Many health insurances require a referral from your primary care provider for coverage purposes.

Questions to ask:

- Which SLPs/ENTs are covered within my network
- Do I need a referral from my PCP before seeing a specialist?
- Is a voice evaluation covered within my plan?

### See your primary care provider



Your primary care provider (PCP) can help to secure a referral to either an ENT (Ears, Nose & Throat doctor) or an SLP (Speech Language Pathologist) in order to receive a voice evaluation. Your PCP can be a valuable resource in helping you find an SLP who specializes in voice or an interdisciplinary voice clinic within your network.

### Schedule an Appointment with an ENT or SLP

SLPs and ENTs can both diagnose a voice disorder. An SLP will assess your vocal quality, vocal habits, and your vocal hygiene. If any structural abnormalities are found, the SLP may refer you to an ENT for further evaluation, diagnosis, and medical intervention.



## How can voice therapy help?

Some of the most commonly reported voice-related symptoms from teachers include hoarseness, vocal fatigue, increased effort to speak, loss of voice, voice breaks, and laryngeal pain or tension (Roy, Merrill, Thibeault, Gray, & Smith, 2004). If this is you, voice therapy can directly aid in managing and improving your symptoms via the interventions and approaches below. Remember, voice therapy is what you make of it! Following through with your SLP's recommended exercises and strategies requires effort and is the gateway to making speaking a pleasant experience once again.

**Education on Vocal Hygiene**

**Vocal Exercises**

**Voice Amplification**

**Respiratory Training**

**Resonance Therapy**

**Counseling**

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