Voice Dysfunction

Voice Dysfunction — Academics use their voices all day at work, whether with an entire class or with an individual student or colleague. An occupational injury common to teachers is voice dysfunction, damage of the vocal cords which cause loss or weakness of voice functions.

Prevention — Academics can prevent voice dysfunction by taking the following precautions: warm up your voice prior to teaching; do not use excessive volume; vary your teaching style so that you do not lecture for prolonged periods; and drink plenty of fluids throughout the day. The employer should provide acoustically designed workplaces which do not require over exertion of the voice cords. Lecturers and those in drama, music and physical education, in particular, are vulnerable to voice dysfunction. Workload (class size, hours of work) has an impact on this type of injury.

The voice — is an incredible tool human beings use to communicate with each other. Take special care of it.

- Never whisper if you are losing your voice. The whispering effect will further damage the cords. Use a pad and write notes if you have to communicate.
- Excessive heat and air-conditioning affect the voice by dehydrating the vocal cords. For the sake of your voice make sure your house is adequately humidified.
- Vocal nodules on the cords (calluses) are caused by one thing and one thing only bad vocal technique. Surgery can not cure bad technique.
- If anyone tells you "Voice rest will solve your vocal problem," don't believe them! Vocal problems are caused by overuse and abuse of the vocal cords. You can rest them, but if you do not learn how to use them correctly, the problem will always return!
- If you catch a cold and have to use your voice, do not take any decongestants. Their job is to dry up mucous no matter where it is in the body. Your vocal cords live in mucous. If you dry it all up, the voice will sound rough and scratchy.
- Don't clear your throat with a vengeance. Excessive throat clearing is a very bad habit. The more mucous you try to clear out the more mucous will be created to protect your vocal cords. It is a never ending battle and you can not win it. Try sipping water to move the larynx into a lowered relax position. ("Yawn sights" also work, haaaaaaaaa.)
- Smoking is the worst thing you can do to your voice.
- Never use any cough drops with menthol in them if you are going to speak. The cooling factor in menthol will freeze the cords. You want them warm and plumped, not cold and shrunk.
- No matter what size the mouth is, for you words to be heard in the back of the room is must be OPEN! To create the warm lower tones in the voice, the throat must be completely open and relaxed. (Think yawn again.)
- If your voice is your livelihood, avoid situations that cause stress and excessive vocal abuse.¹

For more information:

Laura Lozanski

Health and Safety Officer 2675 Queensview Drive Ottawa, Ontario K2B 8K2 Tel 613.820.2270 Fax 613.820.7244 Email lozanski@caut.ca

Voice of Emotion

If the eyes are the mirror of the human soul, then



the voice is the barometer of human emotion.

For some people, stress can actually cause physical changes in the voice that can lead to damage. About 7% of the adult population are susceptible to the ravages of vocal tension, and may need professional help to recognize what they are doing to hurt their voices. Speech-language pathologists are experts in this form of stress intervention.²

Voice Disorder Terminology

- Aphonia: complete loss of voice, due to physical or psychological (muscle tension) causes. This may develop suddenly or over a period of time.
- Breathiness: excessive air loss in the vocal tone, due to incomplete closure of the vocal folds as they vibrate. Poor vocal fold approximation can be caused by muscle tension, muscle weakness, vocal fold swelling such as nodules or polyps and other physical anomalies.
- **Dysphonia**: poor-sounding voice, due to any number of causes.
- Laryngitis: inflammation (swelling) of the larynx usually due to a viral or infectious illness.



Voice Disorder Terminology

- Vocal Abuse: use of vocal sounds that cause vocal strain/fatigue, voice deterioration, discomfort, and sometimes damage in the vocal structures, primarily due to excessive vocal loudness pitch, tension, or force involved in the vocal production. Common examples of vocallyabusive behaviours include: yelling, screaming, talking in noise, singing at extreme pitch or loudness levels, throatclearing, coughing, and making unusual sounds such as imitating motor noises.
- Voice Disorder: any deviation in pitch intensity or quality of the voice, and/or discomfort in the neck, throat, or other relevant physical structures during speech, which consistently interferes with communication, adversely affects the speaker or listener, or is inappropriate for the age, sex, or perhaps the culture or class of the speaker
- Vocal Fatigue: Deterioration of the voice, or progressive discomfort in vocal structures, which progresses with use.
- Vocal Misuse: Incorrect use of muscle systems involved in speech and voice production including postural misuse and misuse in muscles of the respiratory system, larynx (voice box) tongue, jaw, face, and throat. Vocal misuse commonly leads to discomfort in any of the structures involved in speech and voice production. vocal fatigue and changes in vocal quality pitch, and/or loudness. Vocal misuse may be caused by poor vocal technique and training, communication in poor acoustic environment psychological tension or conflict, gastro-esophageal reflux and/or compensation for other physical conditions that impact on one's ability to function well. Prolonged vocal misuse can cause changes in vocal fold tissues, such as chronic swelling nodules, polyps, and other benign lesions which may resolve spontaneously when the vocal misuses are corrected.

References

¹Adapted from Joni Wilson: www.joniwilsonvoice.com

²Kerrie Erle, M.Cl.Sc., Speech-Language Pathologist, President, London Speech and Language Centre: www.londonspeech.com

³Adapted from BCTF British Columbia Teachers Federation: <u>www.bctf.ca</u>

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VOICE HYGIENE — HOW TO GET THE BEST MILEAGE FROM YOUR VOICE

DON'T	DO
don't clear your throat or cough habitually	•yawn to relax your throat; swallow slowly, drink some water; hum:
•don't yell, cheer, or scream habitually	concentrate on vocal resonance sensations • use nonvocal sounds to attract attention: clap whistle, ring a bell, blow a horn
don't talk for prolonged periods at long distances	 move closer, so you can be heard without yelling; learn good vocal projection techniques reduce background noise in your
don't talk in noisy situations: over loud music, office equipment, noisy classrooms or public places; in cars buses, aeroplanes	daily environment; always face persons you are speaking with; position yourself close to your listeners; wait until students/audience are quiet and attentive; find nonvocal ways to elicit attention
don't try to address large audiences without proper amplification — you should be able to lecture at a comfortable loudness to be heard in any situation	use a microphone for public speaking; learn microphone techniques
don't use vocally abusive nervous habits of public speaking: throat-clearing, breath-holding, speaking quickly, speaking on insufficient breath, speaking on low, monotone pitch, aggressive or low-pitched fillers: Hm ah don't speak extensively during strenuous physical exercise	 monitor and reduce vocal habits that detract from your presentation; learn strategies for effective public speaking avoid loud and aggressive vocal grunts; after aerobic exercise, wait until your breathing system can accommodate optimal voice production
don't talk with a low-pitched monotone voice; don't allow your vocal energy to drop so low that the sound becomes rough and gravelly ('glottic fry') don't hold your breath as you're planning what to say; avoid tense voice onsets ('glottic attacks') don't speak beyond a natural breath	 keep your voice powered by breath flow so the tone carries, varies, and rings; allow your vocal pitch to vary as you speak keep your throat relaxed as you begin speaking; use the breathing muscles and airflow to start speech phrases: the coordinated voice onset speak slowly, pausing often at natural
cycle: avoid squeezing out the last few words of a thought with insufficient breath power	phrase boundaries, so your body can breathe naturally ³

Maintain a Healthy Lifestyle and a Healthy Environment

tension, dryness,

- Don't demand more of your voice than you would the rest of your body. Instead: allow for several periods of voice rest throughout the day.
- Don't use your voice extensively or strenuously when you are sick, or when you feel tired. Instead: rest your voice with your body it's sick too!
- Don't use your voice when it feels strained. Instead: learn to be sensitive to the first signs of vocal fatigue: hoarseness, throat
- Don't ignore prolonged symptoms of vocal strain, hoarseness, throat pain, fullness, heartburn, or allergies. Instead: consult your doctor if you experience throat symptoms or voice change for more than 10 days.
- Don't expose your voice to excessive pollution and dehydrating agents: cigarettes smoke, chemical fumes, alcohol, caffeine, dry air. Instead: keep the air and your body clean and humid: drink 8-10 cups of noncaffeinated beverages daily, more if you exercise, don't drink alcohol or caffeine; maintain 30% humidity in the air. Quit smoking!