

Maximising physical and emotional health

Introduction

Although physical health factors are rarely the sole cause of voice disorders in teachers, an unhealthy lifestyle and certain illnesses significantly increase a teacher's susceptibility to vocal problems. Recent research has demonstrated, for example, that poor general health and vitality are associated with an increased risk for voice problems. A poor diet and inadequate amounts of sleep and exercise are the most common factors associated with reduced general health and vitality. Reduced general health and vitality, in turn, will be reflected in the health of the teacher's voice. When a person is unwell and lacking in energy, for example, they will put less energy into their voice so that it may sound weak and monotonous.

The specific illnesses that can contribute to the development of voice problems include gastro-oesophageal reflux, allergies, and viral or bacterial infections affecting the respiratory system.

Reflux may lead to voice problems when acid spills over from the oesophagus and burns the linings of the larynx. Common signs of reflux include coughing at night, throat clearing and hoarseness on waking, slow voice warm-up time, and acid regurgitation.

Allergies and infections of the respiratory system such as hayfever, sinusitis, the common cold and 'flu, laryngitis and pharyngitis may cause swelling and inflammation of the vocal folds, increased coughing and throat clearing, and the production of thick, sticky mucous which collects on the vocal folds. This swelling and inflammation of the vocal folds, coughing and throat clearing and the accumulation of thick mucous mean that the vocal folds cannot vibrate normally and that the sufferer is likely to use the voice in a strained way in an attempt to improve the voice.

Tobacco smoking and other **recreational drug use** (eg. marijuana, cocaine, excess alcohol), and a **high caffeine intake** (eg. coffee, tea, cola drinks) can also damage the mucous membranes of the vocal folds and larynx. These substances all have a drying effect on the mucous cover of the vocal folds. In addition to the drying effect, alcohol and cocaine use can cause inflammation (redness) of the vocal folds and smoking may also cause shortness of breath, coughing and a lowering of the pitch of the voice. Finally, many **medications** used in the treatment of health conditions can have an adverse effect on the larynx. Inhaled corticosteroids used in the treatment of asthma, for example, can sometimes lead to an inability of the vocal folds to

close normally because of their negative effect on the vocal fold muscles.

Similarly, antihistamines used in the treatment of allergies often have a drying effect on the larynx, hormonal medications used to treat endometriosis can lead to a lowering of voice pitch, and some medications used to treat hypertension cause chronic coughing which is damaging to the voice.

Many types of stress and emotional reactions such as anxiety and depression can also have a negative effect on the voice. The areas of the brain responsible for the regulation of emotion are the same as those involved in voice production so that it is not surprising that a person's emotional state is often reflected in their voice. When a person is feeling sad or stressed their friends will often be able to detect these feelings through the sound of their voice. Further, when a person is feeling stressed; the muscles of the larynx and throat are often tensed. This excess tension in the larynx and throat leads to strained voice production, an increase in the effort required to produce voice and deterioration in voice quality.

Improving physical health

An obvious way to maximise your physical health is to simply eliminate the risk factors outlined above. That is, improve your diet, get more exercise and sleep, stop smoking, and avoid using recreational drugs and caffeine. Community resources such as the QUIT Program which is designed to assist individuals to stop smoking, may also be of value to teachers who wish to improve their health.

A series of specific strategies are outlined below to assist teachers in improving their physical health so that their resistance to voice problems is increased.

Reflux

- Do not eat later than 2 hours prior to bed
- Avoid foods which promote reflux (eg. alcohol, coffee, spicy and acidic foods)
- Raise the head of your bed at least 8 cm
- Take antacids (eg. Mylanta) or over-the-counter anti-reflux medications (eg. Zantac)
- If the reflux is severe, consult your doctor for full diagnostic investigations and prescription of anti-reflux medications where appropriate

Allergies and infections of the respiratory system

- Restrict the amount of speaking or singing you do when you have a throat infection
- Avoid all but essential talking, and avoid loud talking and speaking over background noise at work and at home when you have a throat infection
- Increase your water intake whenever you have a fever or any infection of the respiratory system
- Avoid using medicated throat lozenges (use non-medicated lollies instead)
- Have steam inhalations once or twice each day to clear thick mucus and keep the vocal tract lubricated (there is no need for additives in the water)

Caffeine

- Limit your caffeine intake as much as possible
- Substitute water, herbal teas, lemon juice for caffeinated drinks
- For every cup of caffeine you have, drink an additional two glasses of water

Medications

- Consult your doctor if medications for any health condition seem to affect your voice or throat (it may be possible to use an alternative medication or to reduce the dosage)
- Be wary of medications which contain anaesthetics to numb pain in the throat (because the effect may be to reduce your ability to detect when you are straining your voice)
- Avoid frequent use of aspirin (because it can predispose you to vocal fold haemorrhage)

Other physical health strategies

- Avoid foods which may make mucus secretions thick and sticky (e.g. full cream dairy products, highly spiced foods, nuts, chocolate)
- Try to breathe through your nose rather than your mouth (the nose warms and filters the air more effectively)
- Women may need to take extra care of their voices in the few days just before and at the beginning of the menstrual period (changes in oestrogen levels at this time may lead to swelling of the vocal folds)
- Avoid smoky environments (passive smoking can have similar effects on the vocal folds as smoking itself)

Improving emotional health

An obvious way to maximise your emotional health is to work on reducing the stress levels associated with work and/or your life outside of work. Again, reducing stress and negative emotions is not easy without some assistance. Reading this information sheet is, however, not an effective way for you to learn to manage your stress levels.

Teachers experiencing high stress levels should consider undertaking stress management or relaxation classes, accessing the DEECD's **Employee Assistance Program (EAP)**, and/or consulting their doctor. School principals, the school leadership team and the Department's **Regional OHS/WorkCover Advisors** will be able to provide teachers with advice as to the availability of stress management and EAP counselling services.