Introduction
Many people, particularly those who use their voices extensively in their jobs or leisure activities, suffer from voice problems. The most common symptoms are discomfort in the throat, impaired voice quality such as hoarseness, a change in the pitch of the voice, voice loss, and difficulty in projecting the voice. These symptoms can occur in association with structural changes on the vocal folds like swelling, inflammation, vocal nodules, polyps, but in many cases the vocal folds appear perfectly normal. In only a very small number of cases are voice problems caused by a serious disease.

The usual cause will be a combination of small problems related to the way the person uses his or her voice, the physical environment in which the voice is used and increased levels of stress and tension. Sometimes an unhealthy lifestyle or illnesses such as hay fever, reflux and sinus problems can also contribute to the problem. Because most voice problems are caused by a combination of factors which are not serious or difficult to eliminate, most can be easily prevented or remedied if detected early.

Symptoms of voice problems
There are many possible symptoms of voice problems. The earliest symptoms are felt as discomfort in the throat. Throat discomfort can take many different forms:

**Throat discomfort symptoms**
- A feeling of fatigue
- Dryness
- Scratchiness or a tickling sensation
- An ache, soreness or pain
- A feeling of tightness or pressure
- A feeling that talking is an effort
- Shallow breathing
- Sensation of a lump in the throat
- Burning sensation
- Frequent need to clear the throat

Later symptoms may be impairments of breath control, pitch, loudness, voice quality, and projection or resonance:

**Breath control symptoms**
- Audible inspiration or ‘gasping’ on inspiration
- Running out of breathing
- Shallow breathing
- Using the shoulders and upper chest when breathing in

**Pitch impairments**
- Pitch is too high
- Pitch is too low
- Monotone voice - inadequate variation in pitch

**Loudness impairments**
- Voice is too soft
- Voice is too loud
- Monoloud voice - inadequate variation in loudness

**Voice quality impairments**
- Strained voice - too much muscle tension in the larynx
- Rough voice - vocal folds do not vibrate smoothly
- Breathy voice - vocal folds do not close adequately and air escapes
- Glottal fry or creaky voice - vocal folds stay closed for too long and the pitch is too low
- Falsetto - immature, high pitched, breathy voice in an adult male
- Voice breaks or cracks
- Voice loss - voice disappears so that only a whisper is possible
- Pitch breaks - sudden and dramatic rises in pitch
- Loudness breaks - sudden and dramatic drops in loudness

**Resonance impairments**
- Weakness or difficulty projecting the voice
- Muffled or throaty voice
- Immature resonance

When should you be concerned about any of these symptoms?
Unfortunately, there is no simple answer to this question. Nearly everyone experiences minor throat discomfort or small changes in breath control, voice quality, pitch, loudness, or resonance from time to time.

When these changes are very slight, last for only a few minutes and do not recur every day, there is usually nothing to be concerned about. When these changes are associated with a viral infection of the throat or sinuses, as long as the voice symptoms disappear when the infection resolves, there is rarely a need to be concerned.
Teachers who have a limited understanding of the basic anatomy and physiology of voice production and little knowledge of the principles of voice care may be at greater risk of developing voice problems. Similarly, teachers are likely to be at risk if they misuse their voices by yelling or use inefficient voice production techniques such as upper chest breathing.

Further, teachers are likely to be at risk for voice disorders if they have health problems such as reflux, allergy, poor general health and high stress levels; or use their voices in environments which are not conducive to safe voice production like rooms with poor acoustics.

Each of these categories of causal and contributing factors is covered in further detail in the specific information sheets provided with this Voice Care Program.

Causes and contributing factors for vocal problems

There are many possible causes of voice problems and many contributing factors which, although not direct causes, increase a person’s risk for developing a voice problem. Although there is now a considerable body of research which has delineated many of these causal and contributing factors, much more research needs to be conducted before we know what the main causal factors are for specific individuals.

It is also clear that individuals vary widely in their susceptibility to voice problems and that a factor which causes a voice problem in one person may have no adverse affect on another. For these reasons, we have listed below a broad range of possible factors without differentiating between those which may be direct causes and those which merely increase a person’s risk of developing voice problems.

The main categories of causal and contributing factors are:

- Understanding of voice production and voice care principles
- Voice use patterns
- Voice production techniques
- Health and stress patterns
- Characteristics of the physical environment

If the voice symptoms are more than very slight, last for hours or days, recur regularly and do not result from a viral infection, it is important to implement voice care strategies. In addition, from a medical point of view, the usual guideline is that any hoarseness or voice loss which persists for two weeks or more should be investigated by a medical doctor, preferably an Ear, Nose and Throat specialist.