

## Voice Loss

*Industrial Injuries Advisory Council (IIAC). Position Paper 16. March 2006.*

### **Occupational Voice Loss**

Voice loss is a very general term including a wide range of impairments. There is detailed guidance on the prevention of voice loss but this is based on expert opinion and is untested in field research. IIAC concluded that diagnosis, causation and impairment were all too uncertain to warrant inclusion as a prescribed disease.

A request had been made that IIAC consider the prescription of occupational voice loss (disorder) for the purposes of industrial injuries disablement benefit. It had been proposed that teachers, telemarketing staff and performers may be at risk. Some claims were that there had been permanent voice loss (disorder).

The medical term for voice problems is dysphonia. The condition is not just an inability to speak but also includes pain, tension, croakiness, irritating cough, inability to modulate, poor or no vocal power and breathing difficulties.

Dysphonia can occur for many reasons. In some instances a clear reason (pathology and cause) can be identified however it is not possible to identify a condition with unique clinical features which is specifically associated with heavy vocal use. Therefore the IIAC had to decide if there was more than a doubling of risk of this outcome in any occupational group or groups.

Voice disorder symptoms of some sort or another were more frequently reported by teachers, student teachers, professional singers, telemarketers and aerobics instructors. Symptoms could include, difficulty projecting the voice, throat dryness, frequent throat clearing, rapid tiring, but not specifically voice loss. Self reported outcomes are always suspect; those who use the voice as a work tool will tend to notice problems more than those who don't. Objective tests of vocal changes or pathologies have not been used in well-designed epidemiological investigations of occupational groups. There are no clear associations between occupation and voice-related pathology.

### ***CONCLUSION***

*40. The current evidence relating to an association between voice loss and particular types of work is insufficient to satisfy the requirements for prescription. However, this is a relatively new field of investigation and there is a need for further research which addresses questions of definition and measurement in relation to both the disorder and the exposure. The Council will keep the emerging literature on this subject under review.*

### **Comment**

The degree of change in voice or vocal structures required to form the basis of a diagnosis is highly uncertain. Nodules on the vocal cords would certainly lead to audible changes, but would this be regarded as harm? The pathology may have nothing to do with work.

Under current rules, a 14% disability would be required before any disablement benefits could be awarded. There has been no assessment of voice loss and its relationship with disability. Guidance from other jurisdictions (e.g. California) is available.

In 2001 we reported on a seminar about call centre work (Vol.1#11). It was pointed out that the muscles which control the voice are subject to the same fatigues and aches and pains as any other muscles. Causes include poor posture and tension. At the time, voice loss was not a common problem in call centres. Staff turnover was typically 18% per annum.

In 2005 HSE published a guide to preventing permanent job loss in cases of sickness absence. Their leading case study is of a teacher whose hoarseness led to painful speech and a GP diagnosis of "aphonia due to work-related overuse".

Voice loss can be caused by chemical and dust inhalation exposures; these effects would usually be reversible. Voice disorder is also a common symptom in rhinosinusitis. In the USA between 3% and 9% of people report a voice abnormality at any one time.

Some survey tools include loss of voice as an indication of somatisation disorder.

Voice-activated software will probably become more common, it may preferentially be provided to those with a history of aches and pains associated with keyboard use. A proportion of those people who find keyboards uncomfortable would probably be vulnerable to voice loss if required to use voice-activated software. Not because the use of voice activated software requires straining, but because these people are more innately susceptible.

HSE guidance on call centres, LAC 94/1 (rev) v11, gives detailed practical advice on protecting against dysphonia.

