

**IMEG**

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Hearing Loss



## TOPIC 1 - HEARING LOSS

Under the War Pensions Scheme the majority of hearing loss claims relate to sensorineural hearing loss due to chronic noise exposure over usually ten or more years. Modern Health and Safety standards and practice apply in the armed forces and the AFCS only covers injury caused since 2005. As a result AFCS claims for chronic noise induced sensorineural hearing loss are uncommon. The recent and current conflicts have led to acute acoustic trauma, weapons related hearing loss from short lived exposure to high intensity noise. IMEG has considered both types of hearing loss, making specific recommendations in regard to acute acoustic trauma. We have also considered the published evidence on chronic noise induced hearing loss with particular focus on the appropriate threshold hearing loss for compensation.

The Boyce Review revalorised Table 7 awards provided for hearing loss. It maintained the current level for Items 1 and 6, which relate to total deafness, while increasing awards for all other descriptors by one tariff level. These changes were incorporated in legislation from 3 August 2010.

### TABLE 7 – SENSES

Hearing descriptors since April 2005 until Boyce recommendations.

Item	Injury	Award Level		
		2005	12 August 2008	3 August 2010
1	Total deafness and loss of both eyes, or total deafness and total blindness in both eyes, or total deafness and loss of one eye and total blindness in the other	1	1	1
6	Total deafness in both ears	6	6	6
9	Bilateral permanent hearing loss of more than 75dB averaged over 1, 2 and 3 kHz with severe persistent tinnitus	9	9	8
12	Total deafness in one ear	10	10	9
14	Bilateral permanent hearing loss of more than 75dB averaged over 1, 2 and 3 kHz, with mild or no tinnitus	10	10	9

Award Level				
Item	Injury	2005	12 August 2008	3 August 2010
16	Bilateral permanent hearing loss of 50-75dB averaged over 1,2 and 3kHz, with severe persistent tinnitus	11	11	10
18	Blast injury to ears with permanent sensorineural hearing loss in one ear of over 75dB averaged over 1, 2 and 3 kHz with severe persistent tinnitus		11	10
24	Blast injury to ears with permanent sensorineural hearing loss in one ear of 50-75dB averaged over 1, 2 and 3kHz with severe persistent tinnitus		12	11
25	Blast injury to ears with permanent sensorineural hearing loss in one ear of over 75dB averaged over 1, 2 and 3 kHz with mild or no tinnitus		12	11
26	Bilateral permanent hearing loss of 50-75dB averaged over 1, 2 and 3 kHz with mild or no tinnitus	11	13	12
33	Blast injury to ears with permanent sensorineural hearing loss in one ear of 50-75dB averaged over 1, 2 and 3 mHz with mild or no tinnitus	13	13	12
34	Blast injury to ears		14	13

In terms of AFCS claims, there has been a steady increase in claims both for hearing loss and for blast injury, with more than 300 awards paid between 1 November 2005 and 31 March 2010.

### **PARTICULAR ISSUES CONSIDERED BY IMEG**

1. Weapons related acute acoustic trauma
2. How to compensate for tinnitus
3. Scientific advances in noise induced hearing loss relevant to compensation threshold
4. Assessment of hearing

## **1. Weapons Related Acute Acoustic Trauma**

In 2008 reports emerged of acute hearing problems in both US and UK personnel returning from Afghanistan. This triggered an MOD review of hearing protection, the quality of audiometry and operator training, hearing surveillance policy and a pilot study of hearing in personnel returning from conflict zones. Concerns have been raised about the accuracy of diagnosis of noise induced hearing loss and about the causes and functional significance of notches and dips at 4kHz. This work continues.

When the AFCS Tariff was being constructed, it was considered that MOD practice on noise induced hearing loss prevention and protection applying on and after April 2005 should make claims and awards for hearing loss due to service less common and covered by the descriptors “bilateral permanent sensorineural hearing loss” and “blast injury to ears”. The tariff did not anticipate the need to cater for hearing loss due to acute acoustic trauma from weapons related impulse noise.

### **Argument**

Acute blast damage to ears from Improvised Explosive Devices (IED) and acoustic trauma due to weapons/gunshot damage are a feature of recent and current conflicts and it is important that the AFCS is properly able to reflect the consequences for hearing loss of acute acoustic trauma due to impulse noise and blast damage. Typically blast damage and acute acoustic trauma cause an acute hearing loss and tinnitus, which may be unilateral, bilateral or asymmetrical. There can be acute pain in one or both ears. Hearing loss may improve after the blast or noise, but there is often a degree of residual permanent sensorineural hearing loss. In these cases, the audiometric pattern will differ from that before deployment. The pattern is variable and classic audiometric evidence of noise induced injury (high frequency notch) may not be present. Similarly tinnitus may be present or absent and if present, temporary or permanent. AFCS claims can be made in service and in service policy of routine interval audiometry, including pre and post deployment should allow early detection of impulse-related acute acoustic trauma.

In assigning tariff levels for injuries and disabilities, the AFCS takes account of the impact on function, including consideration of whether the capacity for civilian employment is compromised and, if so, to what degree. The resultant allocation of a Guaranteed Income Payment band focuses the range of tariff award which might apply. Significant unilateral or asymmetrical loss of hearing can adversely affect the ability to detect directionality of sound and perceive speech in the presence of background noise and so limit some civilian employments. This is reflected in the Boyce recommended tariff values for blast injury to ears or acute acoustic trauma, which attract a 30% GIP for significant unilateral hearing loss and a 50% GIP where hearing loss is significant and bilateral.

### **Recommendations**

- I. The impact on capacity for civilian employment when applied to the other Table 7 hearing descriptors, including Items 6 and 12 which refer to total deafness, indicates that awards for Items 6 and 12 and also for 9 and 16 should be increased above that recommended by Lord Boyce.
- II. It is recommended that the existing blast damage to ears descriptors are expanded to include hearing loss due to acute weapons related acoustic damage and that new descriptors are added for asymmetrical losses.

Item	Injury	Tariff at 3 Aug 2010	IIMEG Level – March 2011
1	Total deafness and loss of both eyes, or total deafness and total blindness in both eyes, or total deafness and loss of one eye and total blindness in the other	1	1
6	Total deafness in both ears	6	2
9	Bilateral permanent hearing loss of more than 75dB averaged over 1, 2 and 3 kHz	8	6
12	Total deafness in one ear	9	8
16	Bilateral permanent hearing loss of 50 - 75dB averaged over 1, 2 and 3kHz	10	8
18	Blast injury to ears or acute acoustic trauma due to impulse noise with permanent sensorineural hearing loss in one ear of over 75dB averaged over 1, 2 and 3kHz*	10	10
24	Blast injury to ears or acute acoustic trauma due to impulse noise with permanent sensorineural hearing loss in one ear of 50 - 75dB averaged over 1,2 and 3kHz*	11	11
34	Blast injury to ears or acute acoustic trauma due to impulse noise*	13	13

\* implies that hearing loss in the other ear or in Item 34, in both ears, is less than 50dB averaged over 1, 2 and 3 kHz

III. To acknowledge bilateral compensable damage proposed new descriptors are:

- Level 7 “Blast injury to ears or acute acoustic trauma due to impulse noise with permanent bilateral sensorineural hearing loss of 50-75 dB averaged over 1, 2 and 3 kHz.”
- Level 5 “Blast injury to ears or acute acoustic trauma due to impulse noise with permanent bilateral sensorineural hearing loss of over 75 dB averaged over 1, 2 and 3 kHz.”
- Level 6 “Blast injury to ears or acute acoustic trauma due to impulse noise with bilateral permanent sensorineural hearing loss of 50-75 dB averaged over 1, 2 and 3 kHz in one ear and over 75 dB averaged over 1, 2 and 3 kHz in the other.”

## **2. How to Compensate for Tinnitus**

### **AFCS Current Approach**

At present hearing descriptors and awards on Table 7 are differentiated on the basis of the presence or absence of tinnitus. There is presently no category on Table 7 for tinnitus alone.

### **Argument**

Tinnitus is common in adults in the UK and can have many origins. There is no generally accepted reliable or objective means of assessment. Internationally, no fault compensation schemes have varying approaches to tinnitus, which range from exclusion from compensation to payment of a fixed sum when certain criteria are met, as to its duration, severity e.g. disturbs sleep, and where it accompanies a type and level of hearing loss, which itself attracts an award. The latter is the approach of the War Pensions and Industrial Injuries Schemes. In the UK tinnitus is not recognised as a lone disability for social security benefits.

### **Recommendations**

- I. It is proposed that tinnitus is taken into account in all awards for hearing loss. Table 7 descriptors should be revised with removal of reference to tinnitus. For each descriptor, awards will be made on diagnosis and measured audiometric impairment and the award previously applicable in cases with severe tinnitus will now apply to all cases.
- II. No award should be made under the AFCS for tinnitus alone.
- III. As in the other AFCS tables where hearing loss is accompanied by psychological symptoms, in the absence of a discrete diagnosis, they are accounted for in the primary award. If service has caused a discrete psychological diagnosis, an additional award may be made.

## **3. Scientific Advances in Noise Induced Hearing Threshold Relevant to Compensation Threshold**

### **Recommendation**

IMEG has reviewed the scientific evidence on noise induced hearing loss published in the peer-reviewed literature, with particular attention to papers since 2000. It has not identified any advances in scientific understanding of particular relevance to compensation threshold, but wishes in 2011 to have the opportunity to more fully consider the issues and perspectives, including any new or emerging scientific evidence.

## **4. Assessment of Hearing**

Claims for hearing loss require first a reliable diagnosis. This must rely on an accurate history with, as available, supporting documentary evidence of the relevant incident.

### **Recommendation**

IMEG recommends that claims determination of AFCS hearing loss claims must be based on an accurate diagnosis and reliable measures of assessment of hearing. To detect the audiometric pattern and level of hearing loss, quality assured audiometry, carried out on calibrated equipment

by trained operators. Where audiometric tests are inconsistent with clinical findings, more objective tests of hearing function should be obtained such as cortical evoked response audiometry (cERA) and otoacoustic emissions testing.

## **5. Other Tariff Revisions**

Because the effects of physical trauma to the ear have been claimed under AFCS two further descriptors are proposed:

“Acute physical trauma to ear causing conductive or permanent sensorineural hearing loss in one ear.” Level 13

“Acute physical trauma to ear causing conductive or permanent sensorineural hearing loss in one ear of 50 - 75dB averaged over 1, 2 and 3 kHz.” Level 11

“Acute physical trauma to ear causing conductive or permanent sensorineural hearing loss in one ear of over 75dB averaged over 1, 2 and 3 kHz.” Level 10