

# REVIEW OF LEGAL SUITS INVOLVING HAND-ARM VIBRATION

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## 1. INTRODUCTION

While Carpal Tunnel Syndrome is a household word, Hand-Arm Vibration Syndrome has been largely unknown to the American industrial community until recently. Increased awareness of vibration-induced trauma to the upper extremities has led to an increased number of legal suits filed on behalf of workers over the past decade. Additional reasons for the increase in legal suits include overall awareness of ergonomic hazards in the workplace, passage of standards of the United States and in Europe, and increased worker awareness of the symptoms of Hand Arm Vibration Syndrome.

The legal community's increased awareness of the potential hazards of hand vibration exposure is also related to the possibility of significant settlements, particularly in areas that are not covered by no-fault workers compensation. This presentation will outline the characteristics of these lawsuits, the medical issues involved, and the strategies of both defense and plaintiff attorneys as noted in a particular occupational medicine practice. Specific lawsuits will not be referenced, in order to protect employee and company confidentiality.

## 2. LAWSUIT CHARACTERISTICS

As would be expected, most legal suits have involved industries where the use of intensely vibrating hand-held tools is still required. While legal claims have been made in many industries ranging from energy to manufacturing companies, the most common suits have been in the maritime and railroad industries. This is not surprising, as these industries are not covered by limits in workers compensation, thus allowing for higher settlements. Furthermore, these two industries have been often been less progressive in accepting vibration as workplace hazard, and have often denied outright that vibration is a hazard at all.

It is interesting to note, in contrast, that hearing loss programs have been in place since the 1970's, that noise is well accepted as a hazard and is closely monitored by periodic testing, and that there is a strong emphasis on noise protective equipment. Analogous programs for vibration exposures are, for the most part, nonexistent in the same companies.

Unfortunately, the observation has been made that it takes one or two multi-million dollar losses from such cases, to bring about modification of safety policies to include vibration prevention as part of safety program. A legal claim of this kind does, however, require the establishment of causal relationship between the employment tasks and the alleged medical pathology.

A number of particular medical patterns have been noticed in these cases. It is common to see that individuals with upper extremity complaints are often initially diagnosed with carpal tunnel syndrome or other entrapment disorders, as well as with various tendinopathies of the upper extremities. It is not uncommon to see multiple surgeries performed, before the patient and his insurance providers appreciate the nature of the residual medical symptoms and problems. Often, patients undergo surgery with only partial relief of the symptoms, as the pathology from hand-arm vibration syndrome is simply not appreciated by their treating practitioners.

In reviewing the medical records, vibration is often not noted as part of the occupational work history by either the primary provider or the surgeons. In addition, there is widespread lack of physician knowledge or appreciation for vibration-related upper extremity traumas. In many States, compensation schedules do not include an official specific statute for this condition to determine permanent partial disability ratings.

The most common medical presentation is carpal tunnel syndrome plus lateral epicondylitis, followed by residual numbness in the fingers, hand weakness and various levels of Raynaud's symptoms. While some cases tend to try to include cervical pathology as additional claims, these larger claims are rarely successful, as there are usually alternative explanations, such as direct trauma or degenerative changes that explain the neck pathology.

Confounding factors that may cause similar neurological or vascular symptoms may be present in the worker such as diabetes, collagen vascular disease or other neuropathies, but often the severity and progression of disease is more than one would expect from the confounding factors alone. Furthermore, one can never ignore smoking as a contributory factor. Of interesting note, it appears that females doing similar jobs with high vibration exposure have been noted to develop symptoms considerably faster and earlier than their male counterparts.

## 3. LEGAL STRATEGIES

For a successful lawsuit, the plaintiff strategy must not only establish the diagnosis, but must also establish that there is sufficient exposure history from the nature and duration of the employee's occupation.

Furthermore, it must be ascertained that there are not alternative or additional factors, in terms of other diagnoses, that would explain the same condition. In addition, non-work-related vibration exposures need to be ruled out.

The more difficult cases involve workers who have had similar vibration exposures from employment with various companies in the course of their careers. Attribution of causal factors and allocation of responsibilities among the

various jobs worked can often be difficult. One cannot simply rely on the medical evidence to establish the causal relationship.

There must also be strong evidence that the vibration exposure has been long enough and sufficient to cause the pathology observed, taking into account the current standards. This involves thorough, reliable and accurate tool testing by someone qualified to perform this task in a defensible manner.

Often in a case for damages, multiple diagnoses are claimed to be caused by, and related to the job, to accentuate the level of disability. This requires not only employment of physicians knowledgeable in vibration-related pathologies, but also engineering expertise with the skills and experienced to determine levels of vibration exposure. On-site inspection by both medical and generic experts is often very helpful in evaluating the case.

Defensive strategy revolves around finding alternative explanations for the pathology, from other medical conditions, from non-work-related exposures, or by establishing that the diagnoses are not correct. It is helpful in establishing a medical defense to find evidence of alternative medical diagnoses that can cause similar medical presentation and symptoms. Establishment of alternative medical diagnosis or explanation can often lead to dismissal or minimization of damage in such cases. This requires a thorough investigation of the injured worker's entire medical and work history, as well as medical testing.

While contesting limited work history and vibration exposure in the course of employment can be difficult, time-consuming and costly, it can be a very effective way of dismissing the claims, if it can be shown that insufficient vibration exposure had actually occurred. In contrast, simply denying that vibration can cause problems has not proven to be effective defense and can often lead to further problems, for example, the employer may be charged to have failed to properly warn the workers of the vibration hazard. Similarly, the claims of lack of knowledge also have not proved to be effective, in light of the plethora of the literature available concerning this problem.

#### 4. CONCLUSION

Injury claims from hand-arm vibration are becoming more common. It appears some companies are initially led to believe that they can summarily dismiss these lawsuits as an initial strategy based on internal and external counsel. This strategy only seems to cost time and money, but the problem remains.

In the absence of strong regulatory control of vibration exposure for workers, these lawsuits provide a strong incentive for companies to modify their policies and workplace practices toward this hazard, to avoid legal entanglements in the future.

These legal suits may therefore have had a beneficial effect for the working population in general, as many companies are finally finding that it is more cost-effective to

provide prevention and a proper work environment than to continue to fight or lose lawsuits.

The growth in the number of these claims in the future will be affected by awareness of the problems. But growth in claims may be mitigated by the decreasing number of workers exposed to the high levels of hand-arm vibration. Fortunately, while the number of jobs requiring high vibration exposure to the upper extremities is decreasing, awareness of the problems is increasing, standards concerning vibration exposure are improving, and industries are more commonly accepting the value of ergonomic prevention. Therefore, these legal cases should become less frequent in the future.

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