

# HAND-ARM VIBRATION SYNDROME (HAVS)

## The Saga Continues ...

### ALICE HAMILTON, MD (1918)

"Among men who use the air hammer for cutting stone there appears very commonly a disturbance in the circulation of the hands which consists of spasmodic contraction of the blood vessels of certain fingers, making them blanched, shrunken, and numb ... these attacks come on under the influence of cold, and are most marked, not while the man is at work with the hammer but usually in the early morning or after work ... the fingers affected are numb and clumsy while the vascular spasm persist ... the condition is undoubtedly caused by use of the hammer ... stonemasons who do not use their hammer do not have this condition of the fingers ... the trouble seems to be caused by three factors – long continued muscular contraction of the fingers in holding the tool, the vibrations of the tool, and cold. It is increased by too continuous use of the air hammer, and by cold in the working place. If these features can be eliminated the trouble can be decidedly lessened".

(Hamilton, A. "A Study of Spastic Anemia in the Hands of Stonemasons, Effects of the Air Hammer on the Hands of Stonemasons." Bulletin #236. U.S. Bureau of Labor, Industrial Accident and Hygiene Series, #19, 1918).

### NIOSH, CURRENT INTELLIGENCE BULLETIN #38 (1983)

"In light of a recently completed comprehensive study by the National Institute for Occupational Safety & Health (NIOSH), the Institute concludes that vibrating hand tools can cause vibration syndrome, a condition also known as vibration white finger and as Raynaud's phenomenon of occupational origin. Vibration syndrome has adverse circulatory and neural effects in the fingers, the signs and symptoms include numbness, pain and blanching (turning pale and ashen). Of particular concern is evidence of advanced stages of vibration syndrome after exposures as short as one year."

(National Institute for Occupational Safety & Health, Current Intelligence Bulletin #38, "Vibration Syndrome," NIOSH Publication #83-110, 1983)

### HEALTH & SAFETY COMMISSION, UNITED KINGDOM (2003)

"The Physical Agents (Vibration) Directive was developed from an original proposal by the European Commission in 1993. This proposal was revised, amended and eventually agreed by Member States and the European Parliament and came into force on 6 July 2002. The Directive lays down the minimum standards for the health and safety of workers exposed to HAV and WBV (whole body vibration) and supports the general requirements to improve health and safety set out in the Framework Directive (89/391/EEC). Transposition of the Physical Agents (Vibration) Directive in Britain will be through the Regulations made under the Health at Work etc. Act 1974 called "The Control of Vibration at Work Regulation 2005".

(Health & Safety Executive (UK). Consultative Document: Proposals for new Control of Vibration at Work Regulations implementing the Physical Agents (Vibration) Directive (2002/44/EC) – Hand-arm Vibration, 2003).

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