

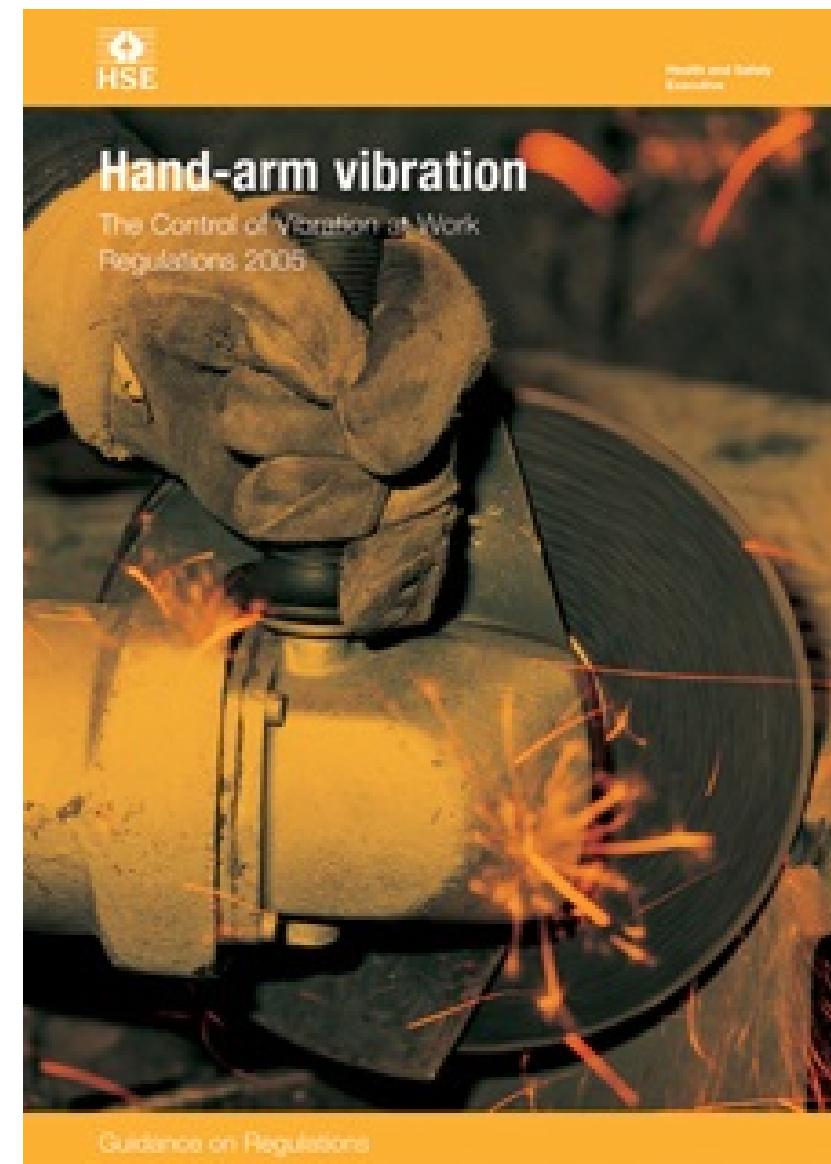
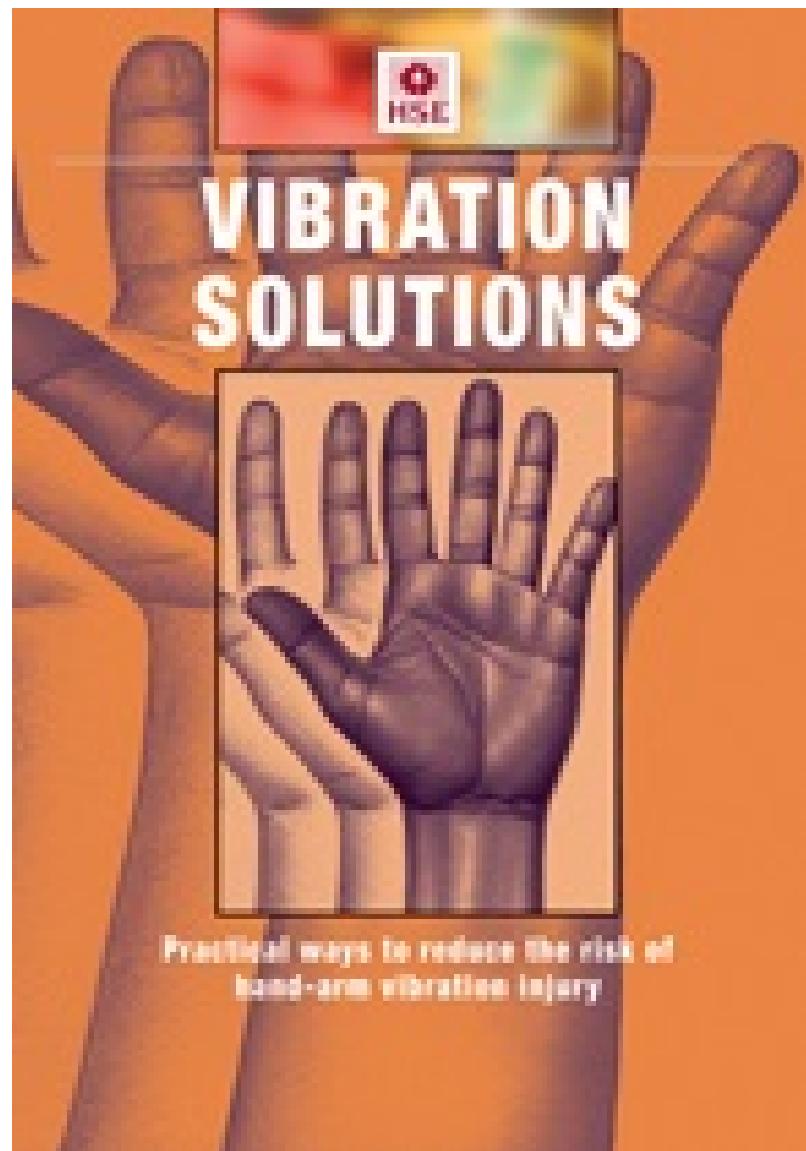
# Hand Arm Vibration Syndrome (HAVS) in fossil preparation



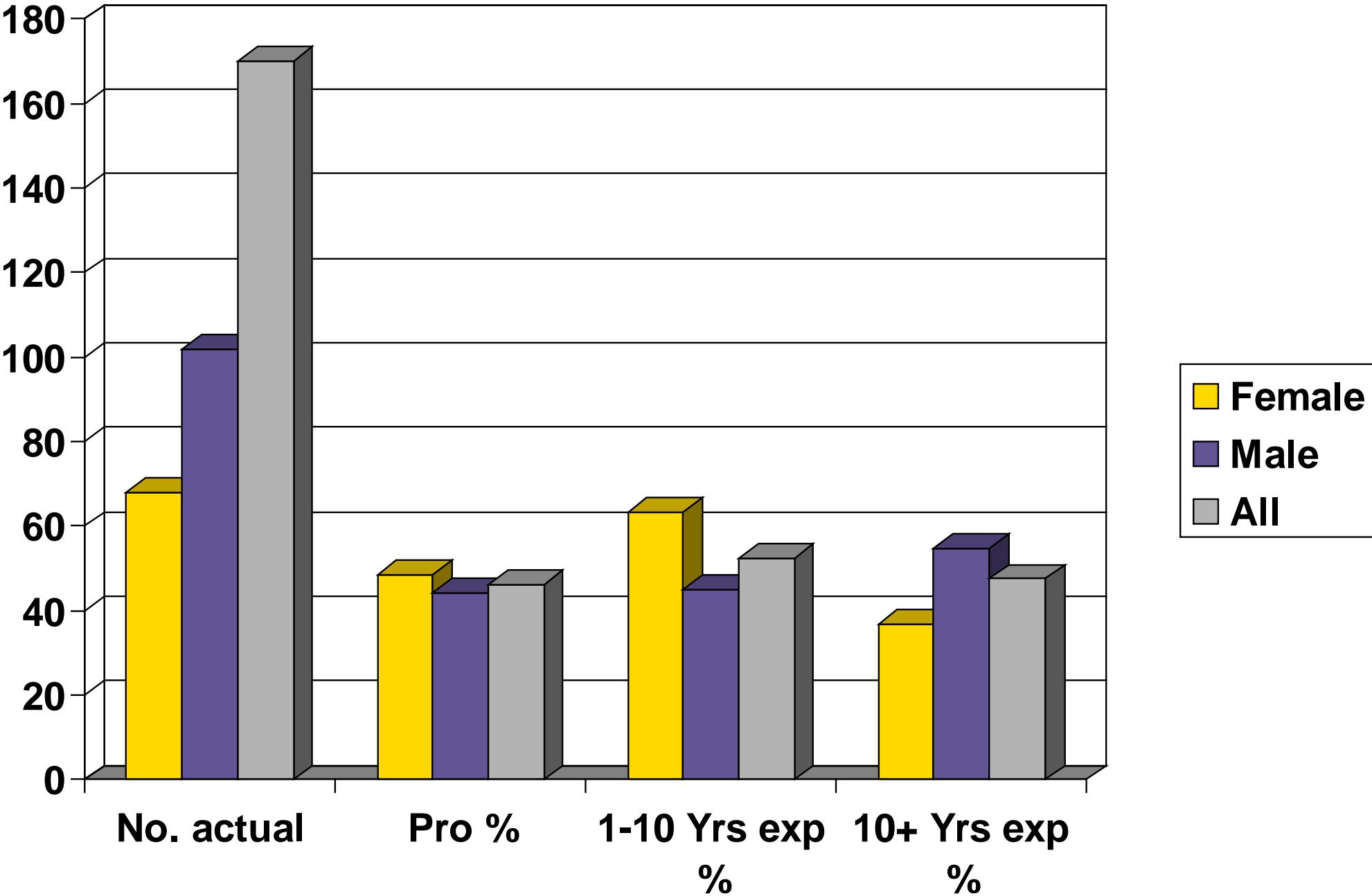
ROYAL TYRRELL  
MUSEUM

**Mark R. Graham**, Fossil Preparator,  
The Natural History Museum, London, UK  
**Darren H. Tanke**, Senior Technician II,  
Royal Tyrrell Museum, Alberta, Canada

# HAVS is a recognised risk/medical condition

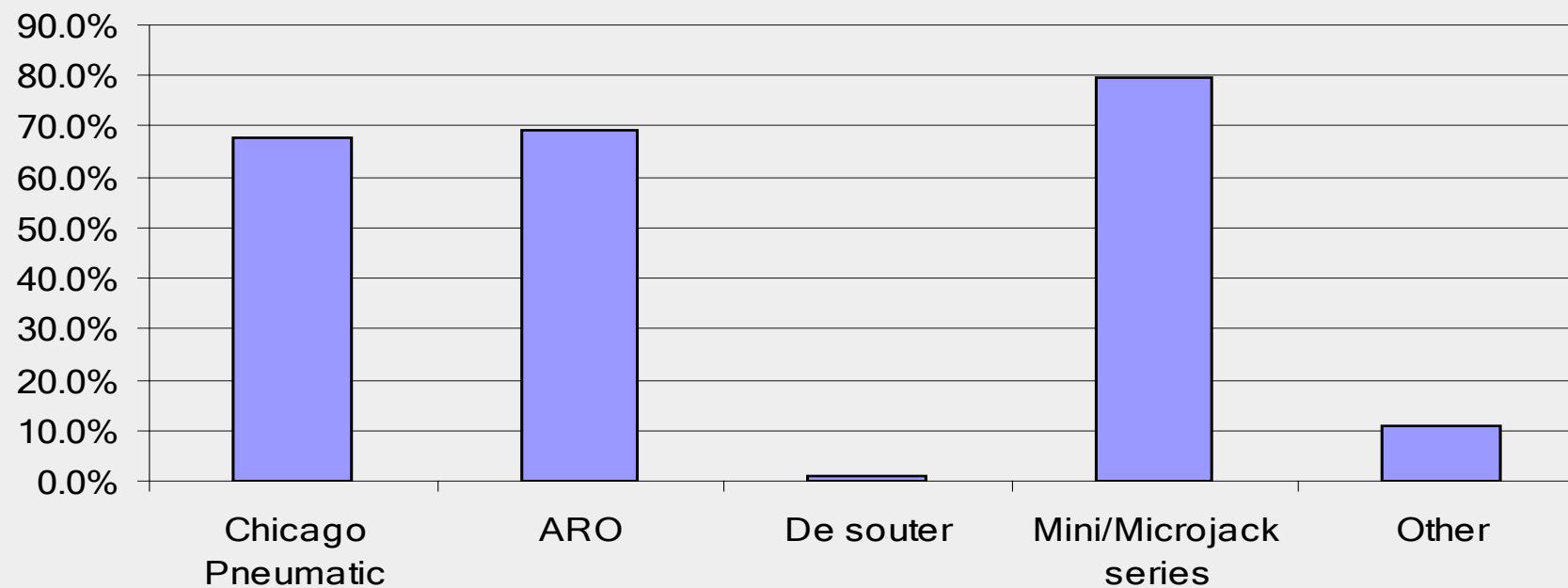


# Profile of survey respondents



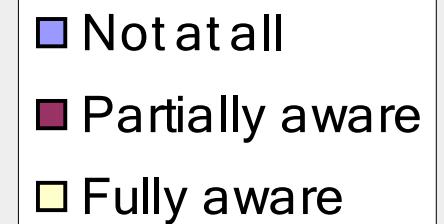
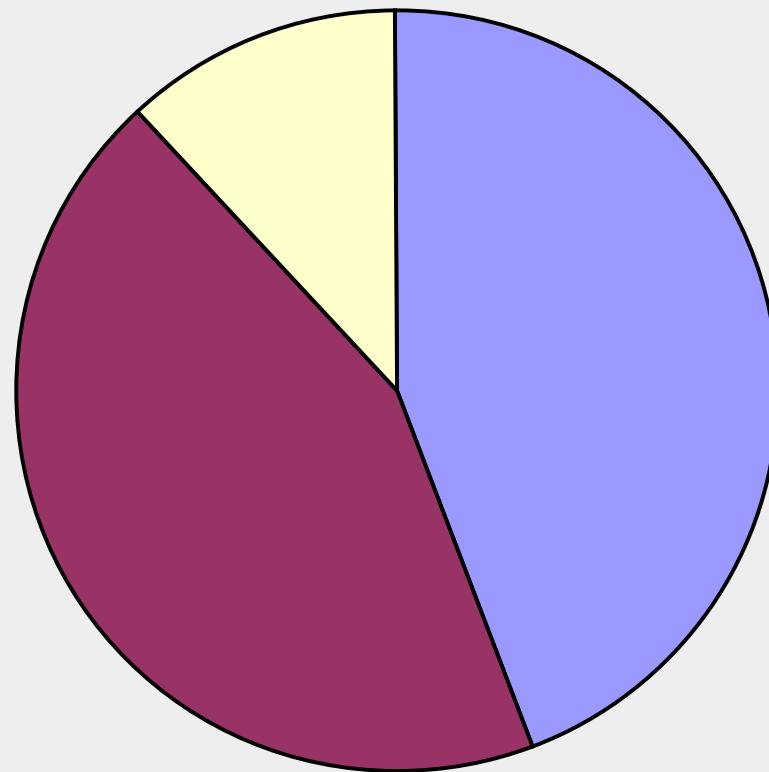


What brand(s) of air scribe(s) have you used? If other, please identify unit make/model.

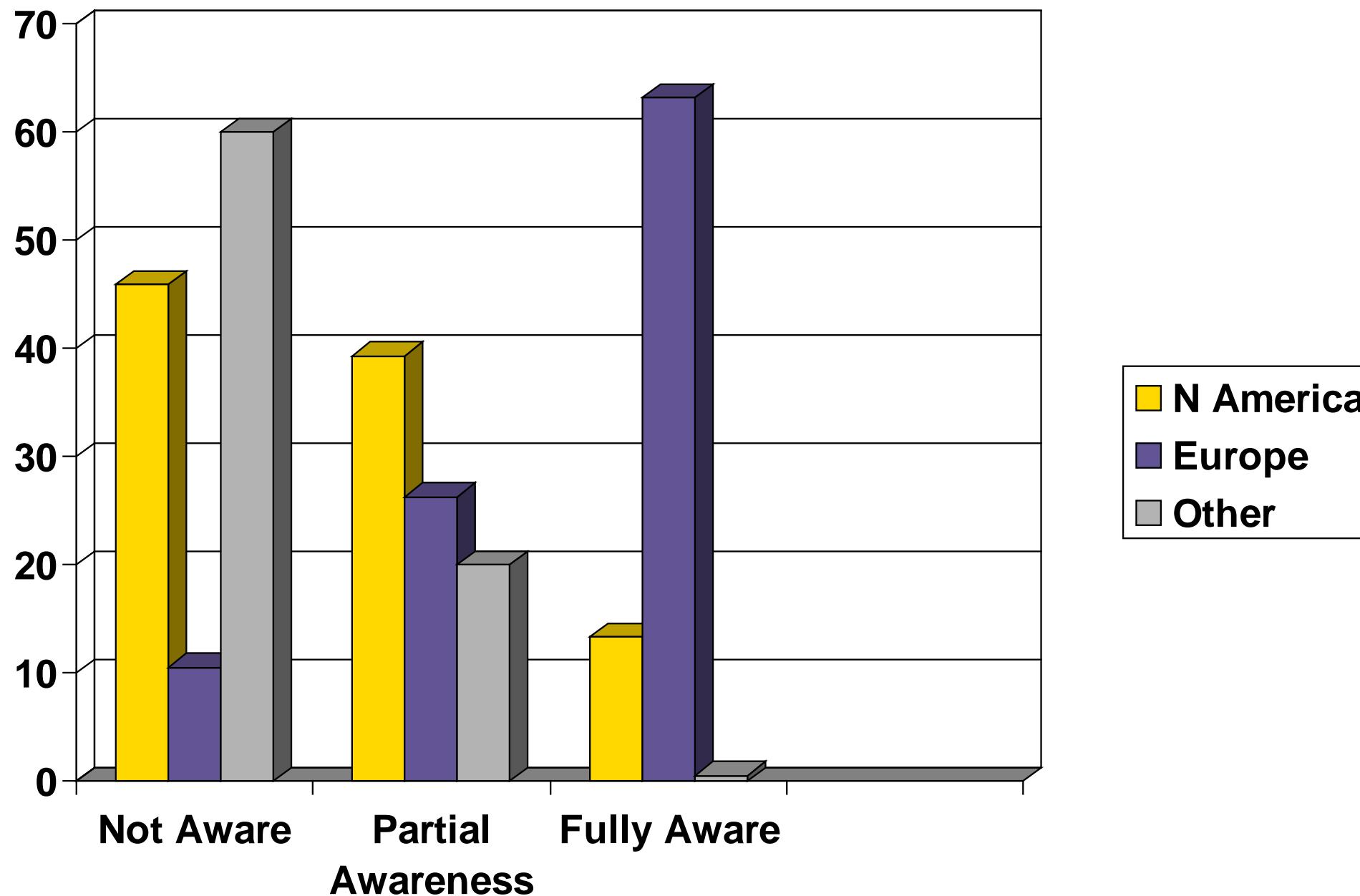


# HAVS awareness prior to survey

Prior to answering this survey, how aware were you of the medical condition HAVS? (also known as 'White Finger', 'Dead Finger' or 'Raynaud's Syndrome').

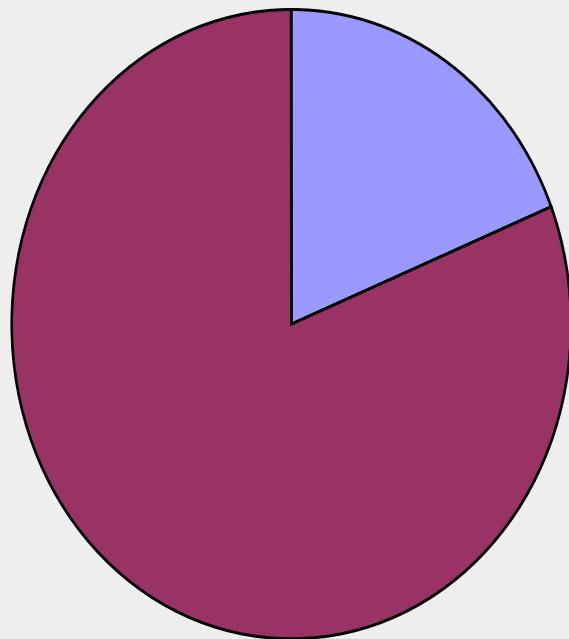


# HAVS awareness prior to survey by region



## 77.8% reported no H&S protocol in place

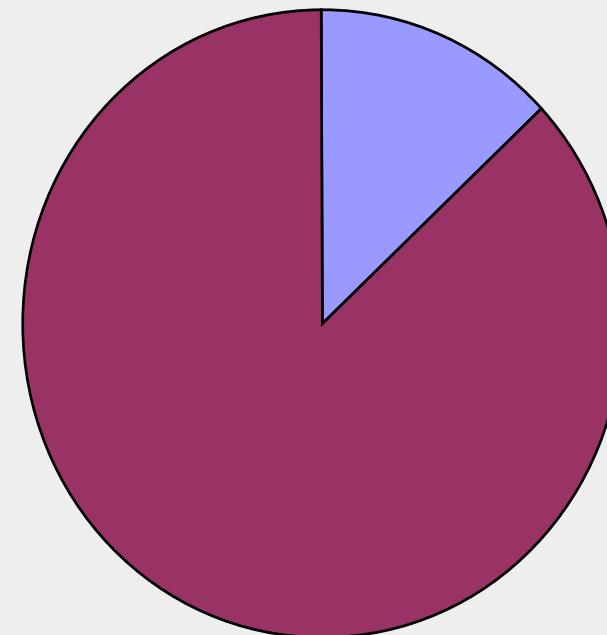
Do you or your employer have a specific health and safety protocol at your home/institution to address the HAVS issue?



■ Yes  
■ No

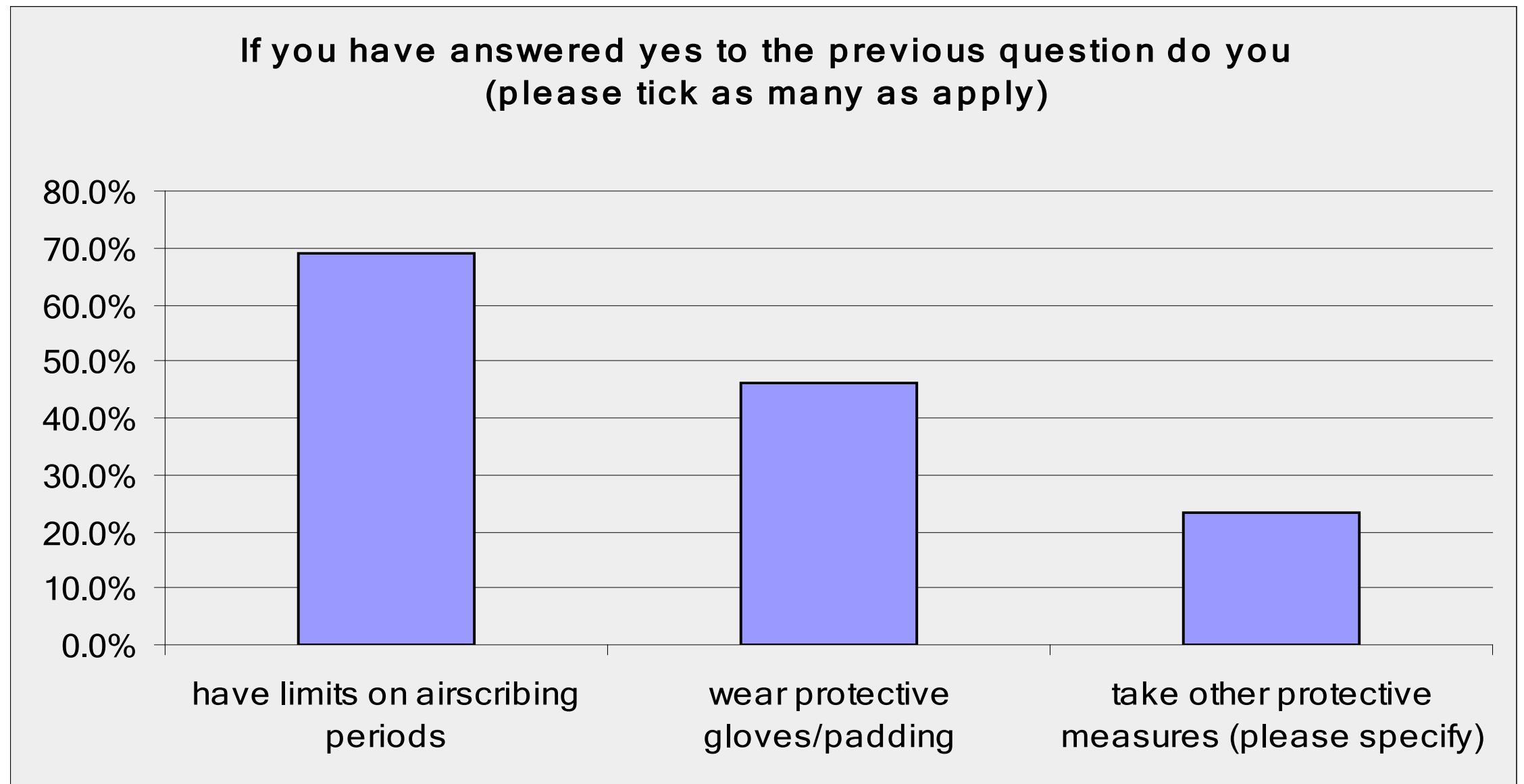
85% have received no HAVS training

Have you ever received any training regarding HAVS?



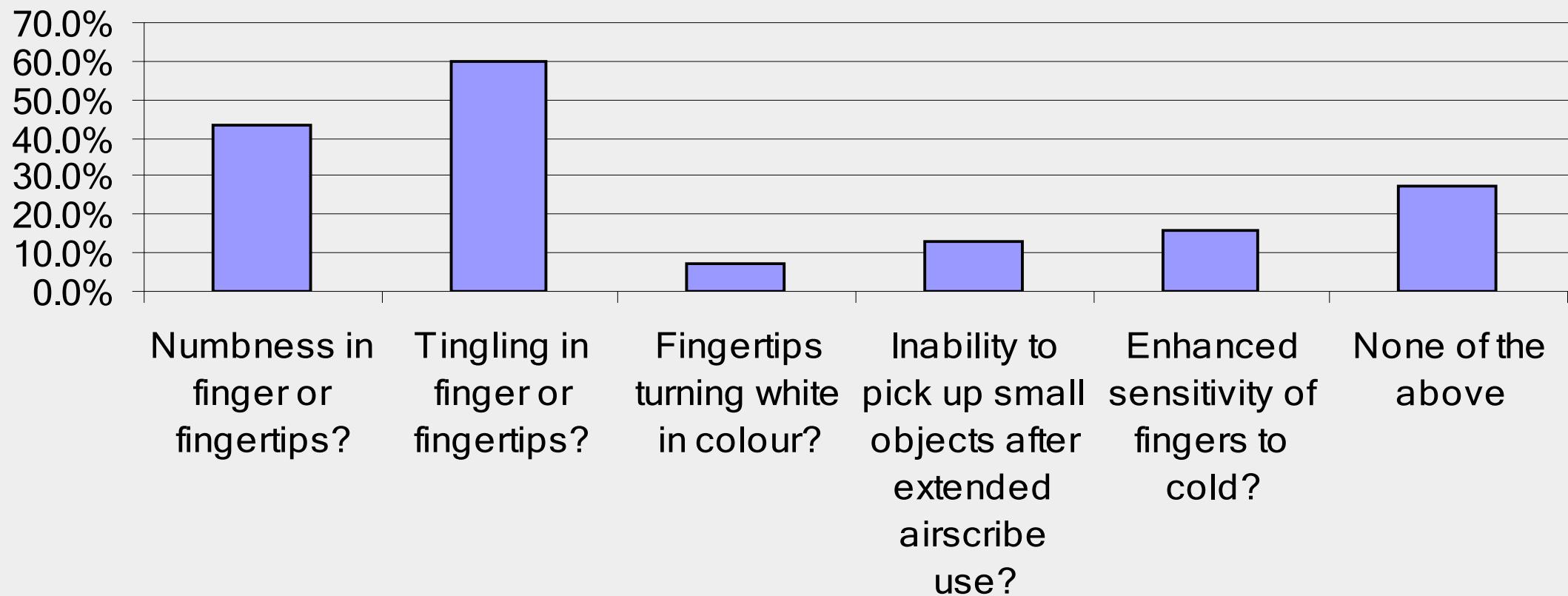
■ Yes  
■ No

# Protective measures taken by those that do have HAVS protocols in place



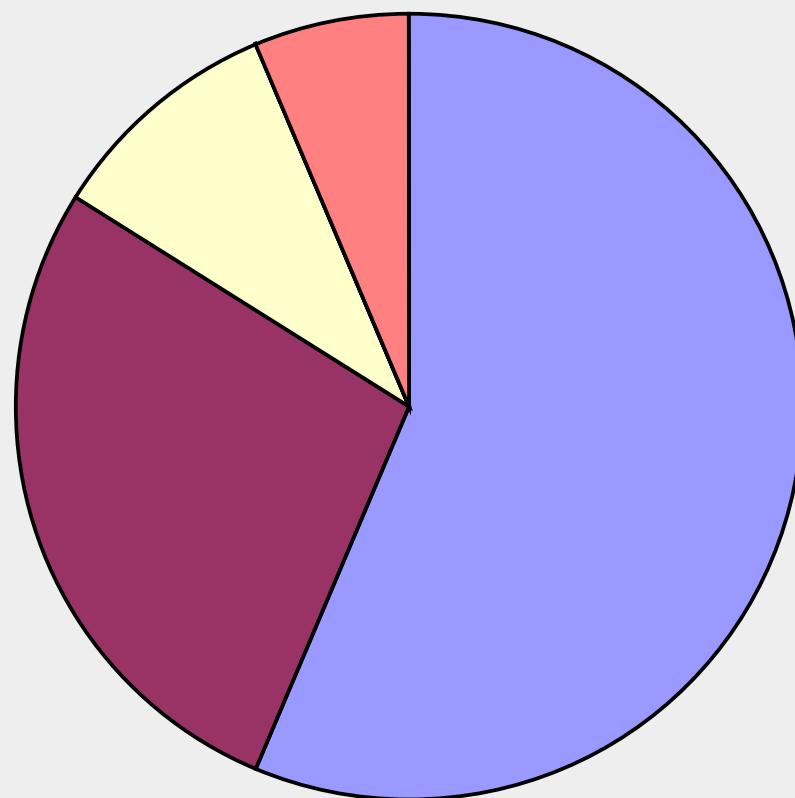
## 73% of respondents have experienced symptoms (multiple choice questions)

Please indicate whether you have experienced any of the following symptoms (hand cramping is excluded from this question):



## For how long do symptoms persist?

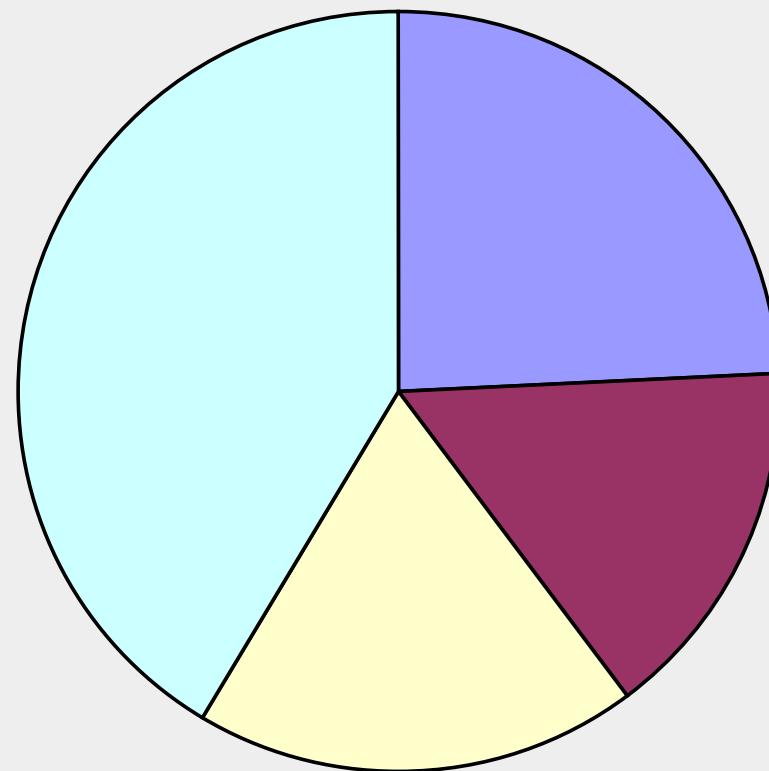
If you experience HAVS symptoms do these usually go away after:



- A few minutes
- A few hours
- A few days
- A few weeks
- A few months
- It is permanent

# Our survey results confirmed the 'several years' lead time for symptoms

If you have experienced HAVS symptoms would you say the effects:



- were immediate when you first started using these tools
- started after several weeks
- started after several months
- started after several years

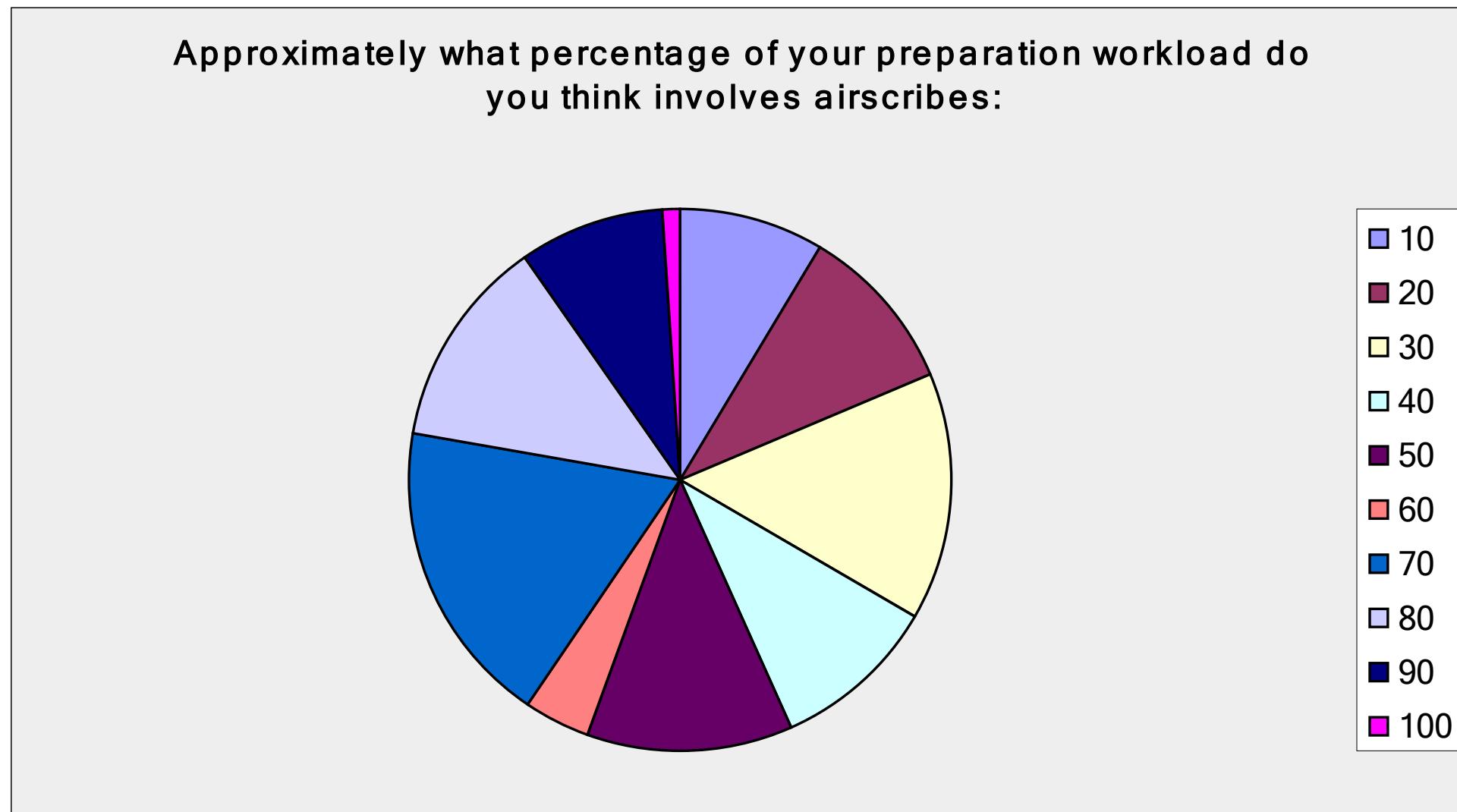
## Symptoms may take 10 years to develop

“The hand-arm vibration syndrome causes changes in sensory perception which can lead to permanent numbness of fingers, muscle weakness and, in some cases, bouts of white finger. It is caused by working with vibrating tools. **It would be unusual for you to develop hand-arm vibration syndrome unless you had used vibrating tools for at least ten years.** If you stop working with vibrating tools it may prevent mild symptoms from getting worse”.

Source: <http://www.patient.co.uk>

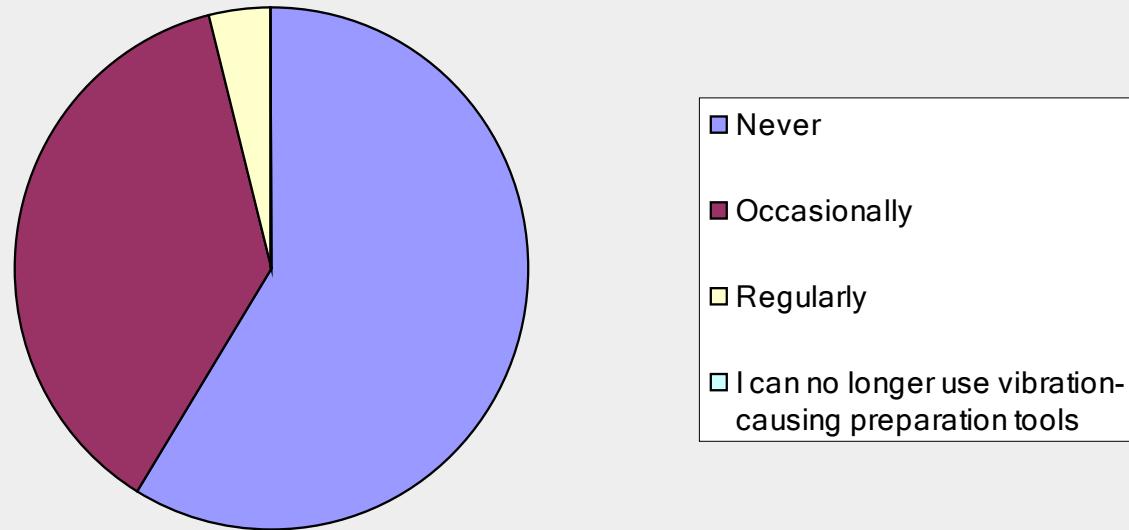
# Approx % time spent using airpens

10 20 30 40 50 60 70 80 90 100%  
18 12 20 10 22 11 24 23 10 3 = 153

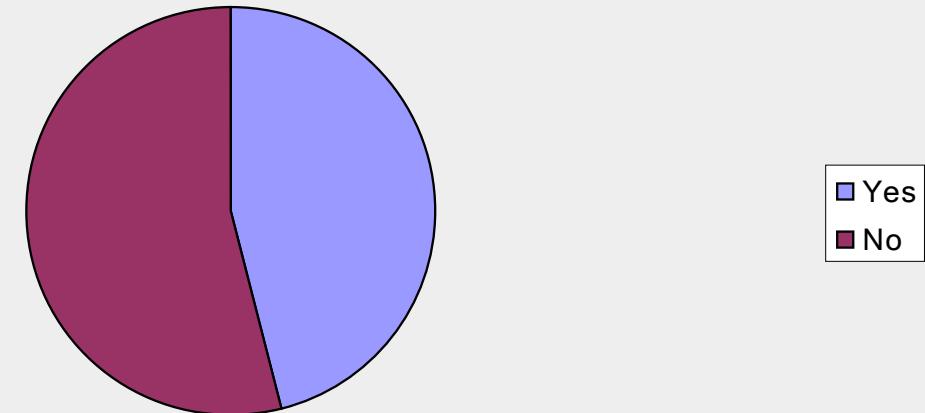


# Impact of HAVS, project control and airscribing periods

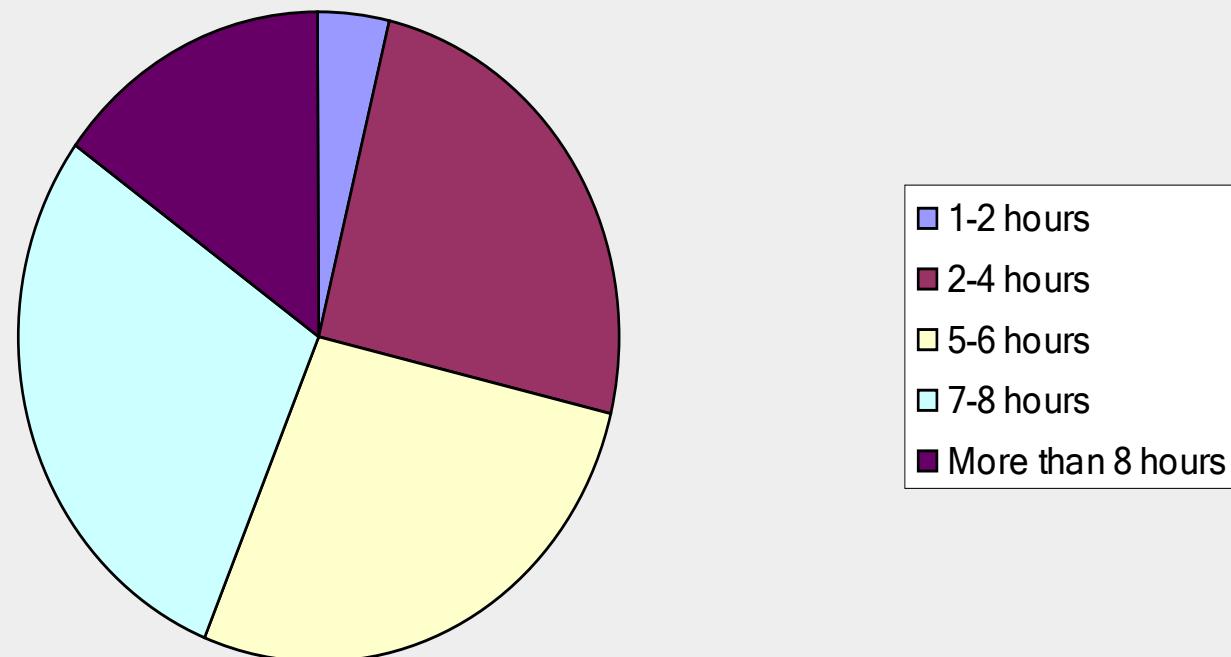
Has HAVS impacted your work as a fossil preparator?



Are your preparation projects deliberately spaced in such a way so as to minimise or alternate use of airscribes (i.e. project 1 hard rock needing airscribes, project 2 soft rock, no airscribes etc.)



What is the longest time you have spent in a day airscribing?



# HAND-ARM VIBRATION EXPOSURE CALCULATOR

Version 3 June 2005

	Vibration magnitude m/s <sup>2</sup> r.m.s.	Exposure points per hour	Time to reach EAV 2.5 m/s <sup>2</sup> A(8)		Time to reach ELV 5 m/s <sup>2</sup> A(8)		Exposure duration		Partial exposure m/s <sup>2</sup> A(8)	Partial exposure points
			hours	minutes	hours	minutes	hours	minutes		
Tool or process 1										
Tool or process 2										
Tool or process 3										
Tool or process 4										
Tool or process 5										
Tool or process 6										

Instructions for use:

Enter vibration magnitudes and exposure durations in the white areas.

To calculate, press the Enter key, or move the cursor to a different cell.

The results are displayed in the yellow areas.

To clear all cells, click on the 'Reset' button.

For more information, click the HELP tab below.

Daily exposure m/s <sup>2</sup> A(8)	Total exposure points

Reset

# Padded gloves & airscribe collars offer comfort only, not protection against HAVS



**Be aware and safeguard yourself!**

