

A solid blue vertical rectangular bar.

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Hand Arm Vibration Syndrome

What's the problem?

**HAVS sufferers face long term
disablement.**

**There is no cure.
Prevention is the only option.**

Hand Arm Vibration Syndrome

What's the problem?

**Disturbance to hand function caused
by transmitted vibration**

Blood Vessels

Nervous System

Muscoskeletal Damage

**Symptoms include tingling, numbness, reduced grip
or dexterity and pain, often severe.**

Hand Arm Vibration Syndrome

History

1911: Symptoms first described by Professor Giovanni Loriga in Italy

1918: Dr Alice Hamilton MD refers to “dead fingers” syndrome in 1918

1970: Dr Alice Hamilton dies, aged 101

1970: Term ‘vibration induced white finger’ coined by Industrial Injury Advisory Council



Hand Arm Vibration Syndrome

History

Dr Hamilton:

“The trouble seems to be caused by the vibrations of the tool, and cold.

If these features can be eliminated the trouble can be decidedly lessened“



Hand Arm Vibration Syndrome

History

1975: First scale published for assessing the condition - The Taylor-Pelmear scale

1985: Listed as a prescribed disease in UK

1997: UK High Court awarded £127,000 in compensation to seven coal miners for vibration white finger

2004: UK government fund set up to cover subsequent claims by ex-coalminers exceeds £100 million in payments.



HAVS Current Legislation

Interpretation

- **Health And Safety At Work Act 1974.**
- **Provision and Use of Work Equipment Regulations 1998.**
- **Management Of Health And Safety At Work Regulations 1999.**
- **Physical Agents (Vibration) Directive 2002.**
- **Control of Vibrations Regulations 2005.**
- **Supply of Machinery (Safety) Regulations 2008.**

HAVS Current Legislation

Exemptions

- **Emergency services**
- **Air transport**
- **Ministry of Defence**

The Control of Vibrations Regulations 2005

**Protect workers from harmful
effects of vibration exposure
transmitted by hand contact**

Risk Assessment

**Suitable health surveillance
should be undertaken where
risk assessment indicates a
risk to workers' health.**

Why and how to detect/report symptoms of HAVS

- **Most surveillance is carried out annually.**
- **Susceptible individuals can develop symptoms in 6 months or less.**

Hand Arm Vibration Syndrome Implications

Employee

- Health & Safety
- Disability
- Employability
- Family

Employee



Employee



Employee



Employee



Hand Arm Vibration Syndrome

Implications

Employer

- Legal
- Litigious
- Ethical
- Moral
- Insurance
- Core Skills
- Costs
- Morale
- Closure
- Prosecution
- Reputation

Hand Arm Vibration Syndrome Implications

Health & Safety Professional

- Ethical
- Moral
- Trust
- Respect
- Prosecution
- Reputation
- Career

Lawyers?

AMBULANCE CHASING?

It is reasonable to expect that this emerging market will be filled by qualified professionals.

Have you worked with Vibrating Tools in the last 30 years?

Have you suffered with
TINGLING, PINS &
NEEDLES, COLDNESS,
NUMBNESS, WHITE
PATCHES in the
hands or arms?



Have you worked with:

- Pneumatic Drill or Hammer
- Impact Drill
- Compactor (Whacker)
- Chain Saw
- Hedge Trimmer

or any hand held vibrating tool?

If so, you may be entitled to compensation. Many have already claimed receiving £1000's in compensation.

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Hand Arm Vibration Syndrome

Litigation

Hand Arm Vibration Claim: Solicitor Sets Out Compensation Amounts For HAVS, Vibration White Finger, Reynaud's Syndrome, Whole Body Vibration Syndrome

1. Financial losses and expenses

2. Pain and Suffering

3. Legal Costs

1. Hand arm vibration affecting the fingers: £2,000 - £11,000

2. Disability to one or both hands: £11,000 - £25,000

'Substantial' payout to Cumbrian man whose hands damaged at work

By Jenny Barwise

Thompsons Solicitors

£30,000 payout for young man from Doncaster who had to change jobs after vibrating tools permanently damaged his hands

Hand Arm Vibration Syndrome

Litigation

Hand Arm Vibration Compensation Claim Amounts

Hand arm vibration syndrome is classed as an industrial injury and as such it is possible to make a claim for personal injury compensation if employer blame has been established for the injuries sustained.
See below compensation examples;

£15,000 compensation for a construction worker that used hydraulic breakers and wacker plates and developed vibration white finger.

£10,000 injury compensation for a construction worker using pneumatic tools such as vibrating pokers, scrablers, whacker plates and kango hammers over a 20 year period who developed hand arm vibration syndrome

£6,761 awarded to an employee of the National Coal Board that had hand arm vibration syndrome.

£4,000 out of court settlement to an engineering worker that used needle guns and grinders and developed vibration white finger.

£10,000 compensation awarded to a steel fabricator after he developed vibration white finger.

£20,000 injury compensation to a steel fabricator that used angle grinders on a daily basis after he developed a hand arm vibration syndrome condition.

Hand Arm Vibration Syndrome

Litigation

Unite member David Hopps, 65 has received a £15,000 out of court payout after developing Hand Arm Vibration Syndrome (HAVS), caused by the maintenance craftsman's use of vibrating tools at Drax Power Station.

Worker receives payout over hand injury

A STOURBRIDGE man has received a £10,000 out of court payout after his hands were left permanently damaged by using vibrating tools at work.

Keith Rowley, aged 55, was left with the debilitating condition Hand Arm Vibration Syndrome (HAVS), also known as Vibration White Finger, after using vibrating tools in his job as a fitter.

His employer General Kinematics Ltd based in Kingswinford did not admit liability - but settled the claim out of court after Keith's union, the GMB (Britain's General Union), instructed Thompsons Solicitors to pursue compensation for his injury

Vibration exposure risk assessment

Your risk assessment should:

- **Identify where there might be a risk from vibration and who is likely to be affected**
- **Contain a reasonable estimate of your employees' exposures**
- **Identify what you need to do to comply with the law eg whether vibration control measures are needed, and, if so, where and what type**
- **Identify any employees who need to be provided with health surveillance and whether any are at particular risk.**

Vibration exposure risk assessment

What to do:

- Review regularly
- After any change in circumstance
- Use a competent person
- Make lists...
- Employees
- Activities
- Tools

Vibration exposure risk assessment

What to do:

- Record the findings of your risk assessment
- Create an action plan
- Set out what you have done
- State what you are going to do
- Create a timetable of actions
- Say who will be responsible for the work

Health Surveillance

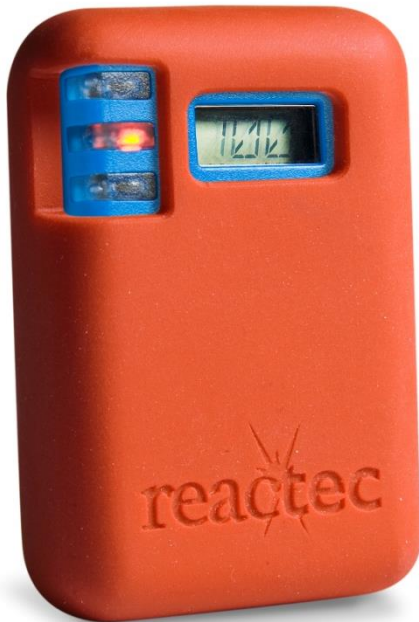
- **Is identifying HAVS sufferers merely doing the minimum ?**
- **Most surveillance is carried out annually.**
- **Susceptible individuals can develop symptoms in 6 months or less.**
- **Isn't prevention better than identification?**

The Value of Continuous Monitoring

- **Efficient and timely analysis of data.**
- **Swift Identification of over exposure.**
- **Early Intervention and Prevention.**
- **Involves Workforce.**
- **Contributes to Workforce Safety Awareness.**
- **Aids change Management.**

HAVS Management Tools

HAVmeter



HAVi



HAVS Management Tools

HAV- pro



HAWS Management Tools

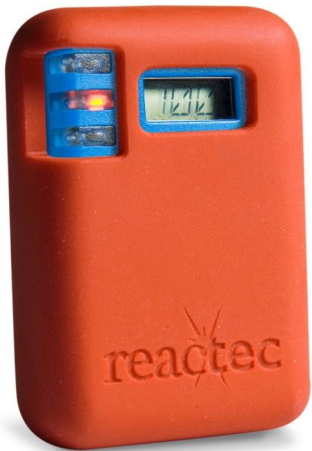
.....and paper

			10-Jan-05		11-Jan-05		12-Jan-05		13-Jan-05		14-Jan-05		15-Jan-05		16-Jan-05	
Equipment	Vmag m/s ²	Points per Hr	Exp hrs/min	Points per day	Exp hrs/min	Points per day	Exp hrs/min	Points per day	Exp hrs/min	Points per day	Exp hrs/min	Points per day	Exp hrs/min	Points per day	Exp hrs/min	Points per day
290 T-Hed gascutter Double Sided 24"	5.6	63			2.40	230										
290 T-Hed gascutter Double Sided 24"	5.6	63							2.00	188						
400 T-Blower Back Pack BB	2.5	13					6.00	75								
400 T-Blower Back Pack BB	2.5	13							5.00	63						
400 T-Blower Back Pack BB	2.5	13									4.00	50				
290 T-Hed gascutter Double Sided 24"	5.6	63	3.1	193												
Weekly Exposure	805	Sum		200		230		75		200		50				

Benefits of HAVS Management



Benefits of HAVS Management



- Reduced Labour Costs
- Accurate HAV data
- Accurate Trigger Time Data
- Timely & salient reporting
- Increased Productivity
- Supports Tool Management

Benefits of HAVS Management

Simple to use



Benefits of HAVS Management



Reporting

1. Vibration Exposure by Operator From 05/03/2012 To 09/03/2012

Northern Division Ground Works Civil Engineering

Operator	Date	Day Of Week	Maximum Daily Exposure		Exposure Points
			EAV	ELV	
120000 - JAMES GREEN	05/03/2012	Monday	100	400	0.0
	06/03/2012	Tuesday	100	400	5.4
	08/03/2012	Thursday	100	400	0.0
	09/03/2012	Friday	100	400	138.1
120002 - ERIC LETHURG	05/03/2012	Monday	100	400	0.0
	06/03/2012	Tuesday	100	400	68.0
	07/03/2012	Wednesday	100	400	0.0
	08/03/2012	Thursday	100	400	68.3
	09/03/2012	Friday	100	400	60.2
120008 - FRANK STEWART	05/03/2012	Monday	100	400	12.9
	06/03/2012	Tuesday	100	400	400.3
	07/03/2012	Wednesday	100	400	400.3
	08/03/2012	Thursday	100	400	70.8

Vibration Exposure by Operator From 05/03/2012 To 09/03/2012

Southern Division Ground Works Civil Engineering

Operator	Date	Day Of Week	Maximum Daily Exposure		Exposure Points
			EAV	ELV	
120004 - JOHN HUME	05/03/2012	Monday	100	400	0.0
	08/03/2012	Thursday	100	400	220.9
120005 - PAUL SMITH	05/03/2012	Monday	100	400	0.0
	06/03/2012	Tuesday	100	400	135.2
	07/03/2012	Wednesday	100	400	222.3
	09/03/2012	Friday	100	400	156.3
120009 - PHILIP BUCHANAN	05/03/2012	Monday	100	400	0.0
	06/03/2012	Tuesday	100	400	242.3
	07/03/2012	Wednesday	100	400	109.8
	08/03/2012	Thursday	100	400	401.3
	09/03/2012	Friday	100	400	159.9

- Simple overview of operative exposure
- Instances where EAV/ ELV are exceeded highlighted automatically
- Records kept indefinitely
- Information defensible in court
- Quick & easy to produce

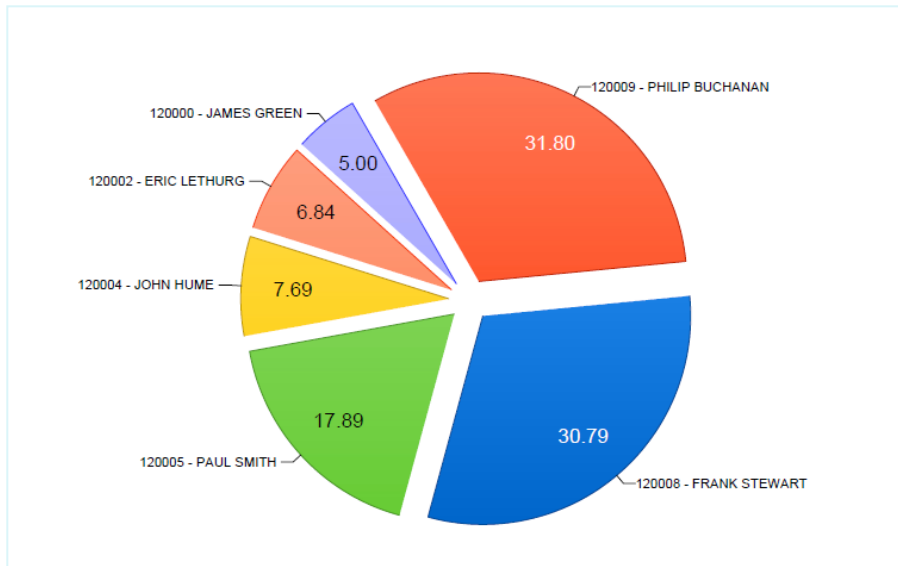
Reporting

6. Operator Tool Log From 05/03/2012 To 09/03/2012

Asset No.	Description	Connected	Disconnect	Vibration m/s ²	Trigger Time	Exposure Points	Total Points
Operator 120000 - JAMES GREEN							
05/03/2012							0.0
06/03/2012							5.4
0279	HILTI TE76P-ATC HAMMMER	15:00:45	15:02:09	15.00	00:00:43	5.375	
08/03/2012							0.0
09/03/2012							138.1
A0030055	SDS HAMMER HR2400	08:11:17	09:08:32	15.47	00:09:28	75.520	
A0030055	SDS HAMMER HR2400	11:38:47	11:47:35	15.47	00:05:55	47.200	
A0030055	SDS HAMMER HR2400	12:48:10	13:08:15	15.47	00:01:51	14.759	
Operator 120002 - ERIC LETHURG							
05/03/2012							0.0
06/03/2012							68.0
0279	HILTI TE76P-ATC HAMMMER	09:50:28	10:17:48	15.00	00:03:55	29.375	
0279	HILTI TE76P-ATC HAMMMER	11:30:25	11:39:14	15.00	00:02:20	17.500	
0279	HILTI TE76P-ATC HAMMMER	15:27:28	15:49:08	15.00	00:02:49	21.125	
07/03/2012							0.0
08/03/2012							68.3
N1783	5 ANGLE GRINDER	12:34:13	13:19:10	7.22	00:13:05	22.734	
N1783	5 ANGLE GRINDER	14:44:27	15:16:31	7.22	00:06:41	11.614	
N1783	5 ANGLE GRINDER	15:21:38	17:01:52	7.22	00:19:44	34.289	
09/03/2012							60.2
N1783	5 ANGLE GRINDER	08:28:04	10:26:01	7.22	00:29:51	51.868	
N1783	5 ANGLE GRINDER	11:58:25	12:06:45	7.22	00:04:58	8.631	
Operator 120008 - FRANK STEWART							
05/03/2012							12.9
N1783	5 ANGLE GRINDER	09:12:01	10:31:36	7.22	00:07:26	12.917	
06/03/2012							400.3
0011	HILTI TE76P-ATC HAMMMER	09:29:05	09:54:26	15.00	00:11:53	89.125	
0279	HILTI TE76P-ATC HAMMMER	10:17:49	10:21:07	15.00	00:02:17	17.125	
0011	HILTI TE76P-ATC HAMMMER	11:15:27	11:46:25	15.00	00:10:48	81.000	
0011	HILTI TE76P-ATC HAMMMER	12:47:33	12:56:58	15.00	00:07:00	52.500	
0011	HILTI TE76P-ATC HAMMMER	14:59:57	15:36:46	15.00	00:21:24	160.500	
07/03/2012							400.3
0279	HILTI TE76P-ATC HAMMMER	09:05:22	10:21:08	15.00	00:27:57	209.625	
0279	HILTI TE76P-ATC HAMMMER	11:45:56	11:56:30	15.00	00:06:44	50.500	
0011	HILTI TE76P-ATC HAMMMER	13:06:47	13:22:39	15.00	00:14:13	106.625	
0011	HILTI TE76P-ATC HAMMMER	15:30:36	16:31:25	15.00	00:04:28	33.500	
08/03/2012							70.8
N1783	5 ANGLE GRINDER	09:42:15	12:34:10	7.22	00:27:10	47.206	
N1783	5 ANGLE GRINDER	14:22:01	14:43:33	7.22	00:10:00	17.377	
N1783	5 ANGLE GRINDER	15:16:35	15:21:37	7.22	00:03:48	6.603	

- Detailed information of what tools are being used and when
- Easily investigate which tools causing over exposure
- Staff productivity analysis
- Potential for comparison of task completion rates between squads

Reporting



- Easy to read pie chart showing individuals share of exposure as percentage of the team
- Useful ongoing management tool
- Allows supervisors to balance out total exposure among team

Best Practice

Local Authorities supporting continuous monitoring

Swansea City and Borough Council
Bassetlaw District Council
Sunderland City Council
Basingstoke and Deane Borough Council
The City of Edinburgh Council
Hinckley and Bosworth Borough Council
North Ayrshire Council
North Lanarkshire Council
Scottish Borders Council
Braintree District Council
Harrogate Borough Council
Weymouth and Portland Borough Council
Flintshire County Council
Stirling Council
Wirral Metropolitan Borough Council
Hyndburn Borough Council
West Dunbartonshire Council
Norfolk County Council
Dundee City Council
Peterborough City Council
St Edmundsbury Borough Council
Hampshire County Council
Wigan Metropolitan Borough Council
Stoke on Trent City Council
Wrexham County Borough Council

Southampton City Council
Dumfries and Galloway Council
Leicester City Council
Glasgow City Council
Pendle Borough Council
Northumberland County Council
Forest of Dean District Council
Sandwell Metropolitan Borough Council
Newcastle City Council
St Helens Council
Vale of Glamorgan Council
Falkirk Council
Tendring District Council
Durham County Council
Nuneaton and Bedworth Borough Council
Tameside Metropolitan Borough Council
North Lincolnshire Council
Powys County Council
East Lindsey District Council
South Holland District Council
Rhondda Cynon Taff County Borough Council
Conwy County Borough Council
Perth and Kinross Council
West Lothian Council
Carmarthenshire County Council

Argyll and Bute Council
Bridgend County Borough Council
Merthyr Tydfil County Borough Council
Coventry City Council
Caerphilly County Borough Council
Suffolk County Council
Blaenau Gwent County Council Borough Council
Rushcliffe Borough Council
Hartlepool Borough Council

Best Practice

Organisations Supporting continuous monitoring



End
Thank you