

MILLWAY'S MONTHLY H & S BULLETIN

Vibration at Work Regulations 2005

A disorder which affects the blood vessels, nerves and muscles of the hand, wrist and forearm.

Can be severely disabling.

Is better known as Vibration White Finger.



Hand-Arm Vibration is the transfer of vibration from a tool to a worker's hand and arm.

Can be caused from:



Breakers
Grinders
Drills
Cutting tools (chasing walls)
Scabblers
Powered Sanders
Impact tools
Jigsaws
Even Lawnmowers

Why VWF happens

Damage to blood vessels from vibration causes vessels to collapse, preventing oxygen to reach tissues. It is often made worse by cold.

Raynaud's Disease- A disease in which symptoms are similar to VWF.

The symptoms can include:

Tingling in the fingers (pins & needles)

Unable to feel items properly

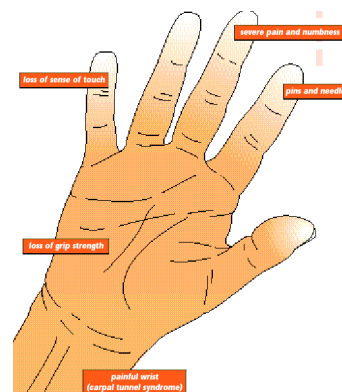
A physical loss of strength in the hands

Fingers going white (blanching),

possibly turning red

painful on recovery

effected more in the cold & wet



UK HSE HAV Exposure Ready-Reckoner

Vibration magnitude m/s ²	40	800									<div style="background-color: red; width: 20px; height: 20px; margin-bottom: 5px;"></div> Above limit value <div style="background-color: orange; width: 20px; height: 20px; margin-bottom: 5px;"></div> Likely to be above limit value <div style="background-color: yellow; width: 20px; height: 20px; margin-bottom: 5px;"></div> Above action value <div style="background-color: lightgreen; width: 20px; height: 20px; margin-bottom: 5px;"></div> Likely to be above action value <div style="background-color: green; width: 20px; height: 20px; margin-bottom: 5px;"></div> Below action value		
	30	450	900										
	25	315	625	1250									
	20	200	400	800									
	19	180	360	720	1450								
	18	160	325	650	1300								
	17	145	290	580	1150								
	16	130	265	510	1000								
	15	115	225	450	900	1350							
	14	98	195	390	785	1200							
	13	85	170	340	675	1000	1350						
	12	72	145	290	575	865	1150	1450					
	11	61	120	240	485	725	970	1200	1450				
	10	50	100	200	400	600	800	1000	1200				
	9	41	81	160	325	485	650	810	970	1300			
	8	32	64	130	255	385	510	640	770	1000		1200	
7	25	49	98	195	295	390	490	590	785	865			
6	18	36	72	145	215	290	360	430	575	720			
5.5	15	30	61	120	180	240	305	365	485	605			
5	13	26	50	100	150	200	250	300	400	500			
4.5	10	20	41	81	120	160	205	245	325	405			
4	8	16	32	64	95	130	160	190	255	320			
3.5	6	12	25	49	74	98	125	145	195	245			
3	5	9	18	36	54	72	90	110	145	180			
2.5	3	6	13	25	38	50	63	75	100	125			
2	2	4	8	16	24	32	40	48	64	80			
1.5	1	2	5	9	14	18	23	27	36	45			
1	1	1	2	4	6	8	10	12	16	20			
	15 m	30 m	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h			



HAV Exposure Calculator

HAND-ARM VIBRATION EXPOSURE CALCULATOR

Version 3

	Vibration magnitude m/s ² r.m.s.	Exposure points per hour	Time to reach EAV 2.5 m/s ² A (8)		Time to reach ELV 5 m/s ² A (8)		Exposure duration		Partial exposure m/s ² A (8)	Partial exposure points
			hours	minutes	hours	minutes	hours	minutes		
Tool or process 1	2	8	12	30	>24		0.5	15	0.4	2
Tool or process 2	6	72	1	23	5	33	0.5		1.5	36
Tool or process 3	3.5	25	4	5	16	20	1	30	1.5	37
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/s² A (8)
2.2

Total exposure points
75

Reset

REMINDERS:

Select reduced - vibration tools wherever possible

Select the best tool for the job

Vibration Reduced Breaker - *Keep the point sharp, Break a little at a time, Don't get jammed, Don't force anti-vibration handles, Stop breaker before pulling out.*

Equipment Labels



50 points per hour



100 points per hour



300 points per hour