

Toolbox Talk

Hand Arm Vibration

Hand-arm vibration syndrome

- Affects the blood vessels, nerves, muscles, joints of the hand, wrist and arm
- Can become severely disabling
- Vibration white finger (VWF) is most commonly known form
- VWF is reportable under RIDDOR

Signs of HAV/VWF

- Tingling and numbness in fingers
- In cold and wet, fingers go white, then blue then red
- Unable to feel with the fingers
- Pains, tingling in hands, wrists, arms
- Loss of strength in hands
- Symptoms get worse with continuing use of vibrating tools

VWF effects

- Leisure activities:
- Fishing
- Swimming
- Golf
- Washing the car
- Gardening
- DIY
- Fastening buttons or sorting coins



People at risk

- People at risk if they use:
 - Concrete breakers, chipping hammers
 - Vibrating pokers
 - Sanders, angle grinders
 - Vibratory compactors
 - Hammer drills, jigsaws
 - Scabblers, needle guns
 - Chainsaws
 - Riveting tools
- Basically any tool that causes vibration to be transmitted to the hand



Employers' duties

You should know how long people can use their equipment for

All vibrating equipment should have a vibration rating – you must know this when the tool is being used & from this you can calculate the safe time exposure

Vibration magnitude m/s ²	40	800									
	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	255	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	25	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	96	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
Daily exposure time											

Employers' duties

Prevention programme:

Choose low-vibration equipment

Alternative way to do the job

Maintain tools and equipment in good condition

Ensure employees use the correct tool for the job

Can the job be altered to reduce the grip or pressure necessary

Employers' duties

- Design work breaks to avoid long periods of vibrating tool use
- Enable employees to keep warm when working in the cold
- Advise employees to exercise fingers and hands to help blood flow
- Information and training
- Health surveillance

Employers' duties

- Make sure you know how long people can use their hand tools for - if you don't know get the tools assessed.
- Group SHE can help get them assessed for you.

Summary



- Hand arm vibration is an extremely debilitating, life changing, disease.
- Once you start to suffer the symptoms it's too late
- Know how long you can use specific tools for each day
- Report any symptoms you think you may have.