

Safety Toolkit and Short Guide to General Application Regulations 2007  
Vibration Section



**Vibration**

# Introduction



## Safety Toolkit

The objective of the Toolkit is to provide guidance on the prevention of accidents or ill health at work and to provide a practical tool towards a safer workplace. It covers requirements of the Safety, Health and Welfare at Work (General Application) Regulations, 2007 as amended and is aimed specifically at small and micro businesses. It is not intended as a legal interpretation of the legislation. Legal advice should be sought where required.

Checklists provided are non-exhaustive and in no particular order

## How do I use the Toolkit?

The Toolkit is intended to assist you to monitor and improve standards of safety, health and welfare. It will assist you towards complying with the law.

1. Use the checklists to monitor how you're doing.
2. Make any required improvements.
3. If necessary, investigate further to find out what you need to do and set a timescale for achieving it.
4. Use the Action Date column to show when action taken.

Checklists provided are non-exhaustive and in no particular order.

At the end of each point in the check list reference is made to the corresponding part of the Regulations, for example (r51) indicates Regulation 51.

## Where can I get further advice?

The Health and Safety Authority's website [www.hsa.ie](http://www.hsa.ie) contains a large amount of additional information. Most of the information on the website can be accessed free-of-charge. The website has detailed guides on each section of these Regulations. Each guide contains advice on where to find further information.

The Health and Safety Authority's Workplace Contact Unit (WCU) is a helpdesk resource for employers, employees and the public. You can contact the WCU through

- ▲ Locall: 1890 289 389 (Monday to Friday, 9am to 5pm)
- ▲ Fax: 01 614 7125
- ▲ Email: [wcu@hsa.ie](mailto:wcu@hsa.ie)
- ▲ Write to: Workplace Contact Unit, Health and Safety Authority, Metropolitan Building, James Joyce Street, Dublin 1



## Vibration

Hand-held power tools cause hand-arm vibration (HAV). Whole body vibration (WBV) is caused by vibration transmitted through the seat or feet by machines and vehicles. Regular, long term exposure is linked to vibration white finger, carpal tunnel syndrome and lower back pain.

### What does this section deal with?

This section deals with the risk of exposure to vibration at work and the measures necessary to avoid adverse health effects.

The Regulations include requirements for an employer to:

- ▲ assess the vibration risk to employees
- ▲ decide if exposed above the daily exposure limit value (ELV)
- ▲ if so, take immediate action to reduce exposure below the ELV
- ▲ decide if exposed above the daily exposure action value (EAV) and if so
  - 1) introduce controls to eliminate or reduce daily exposure
  - 2) provide health surveillance to employees who continue to be exposed
- ▲ provide information and training to employees on risks and controls
- ▲ keep a record of risk assessment and controls
- ▲ review and update their risk assessment regularly

### Does this section apply to all vibration at work?

Where equipment in use first provided before 6 July 2007 does not permit compliance with the exposure limit values the regulations apply on and after

- ▲ 6 July 2010 for all work equipment
- ▲ 6 July 2014 for work equipment, used in agriculture and forestry only

### Some Important Points

- ▲ Ensure mechanical vibration is eliminated at source or reduced to a minimum
- ▲ Choose appropriate equipment generating the minimum vibration
- ▲ Provide adequate training and information on working methods
- ▲ Ensure adequate maintenance programmes
- ▲ Arrange appropriate health surveillance
- ▲ Organise work to reduce exposure
- ▲ Provide gloves to keep hands warm



## Vibration Checklist

### Interpretation

For hand-arm vibration

▲ the daily exposure limit value standardised to an eight-hour reference period is 5 m/s<sup>2</sup>

▲ the daily exposure action value standardised to an eight-hour reference period is 2.5 m/s<sup>2</sup>, and

For whole-body vibration

▲ the daily exposure limit value standardised to an eight-hour reference period is 1.15 m/s<sup>2</sup>

▲ the daily exposure action value standardised to an eight-hour reference period is 0.5 m/s<sup>2</sup>

### Requirement

Yes

No

N/A

Action  
Date

Hand and arm vibration and whole body vibration exposure shall be assessed or measured on the basis set out in schedule 6 (*r135*)

Where employees exposed to risks, make a risk assessment (*r136*)

In carrying out the risk assessment, assess daily exposure to mechanical vibration by

▲ observation of specific working practices (*r136*)

▲ reference to probable vibration corresponding to equipment in working conditions (*r136*)

▲ if necessary, measurement of mechanical vibration on the basis set out in schedule 6 (*r136*)

Ensure assessment planned and at suitable intervals (*r136*)

In risk assessment, give particular attention to

▲ level, type and duration of exposure, including intermittent or repeated (*r136*)

Requirement	Yes	No	N/A	Action Date
▲ exposure limit values and exposure action values specified (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ effects of vibration on employees at particular risk (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ indirect effects from interactions between vibration and workplace or other work equipment (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ any information from manufacturers (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ replacement equipment designed to reduce vibration (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ extension of exposure beyond normal hours under employer's responsibility (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ specific conditions such as low temperatures (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ information from health surveillance (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ record in safety statement (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ findings of the risk assessment (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ steps taken to to review assessment and measurement (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Review assessment and, if necessary, measurement at suitable intervals and, in particular, where significant change or no longer valid (r136)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Having regard to the general principles of prevention ensure mechanical vibration is eliminated at source or reduced to a minimum (r137)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Adapt any measure to take account of employee at particular risk (r137)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
If risk assessment indicates exposure action value is exceeded, reduce exposure by technical and/or organisational measures taking into account				
▲ other methods of work which reduce exposure (r138)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Requirement	Yes	No	N/A	Action Date
▲ choice of equipment of ergonomic design with least possible vibration ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ auxiliary equipment to reduce risk of injury, such as seats and handles ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ maintenance for equipment, workplaces, workstations and systems ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ design and layout of places of work and workstations ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ adequate information and training ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ limitation of duration and intensity of vibration ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ work schedules with adequate rest periods ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ clothing to protect employees exposed to cold and damp ( <i>r138</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Subject to transitional periods and exemptions in Reg 134 and 142 ensure				
▲ vibration not above relevant exposure limit value ( <i>r139</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ if exposure limit value exceeded reduce exposure below exposure limit value and identify reason and amend technical and organisational measures to prevent it being exceeded again ( <i>r139</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Provide employees exposed to risk and/or their representative with information, instruction and training, including				
▲ technical and organisational measures taken ( <i>r140</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ exposure limit values and exposure action values ( <i>r140</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ results of risk assessment and measurement and potential injury from equipment ( <i>r140</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Requirement	Yes	No	N/A	Action Date
▲ why and how to detect and report injury (r140)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ circumstances in which health surveillance is available and its purpose (r140)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ safe working practices to minimise exposure (r140)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Appropriate health surveillance available to employees for whom a risk assessment reveals risk, including employees exposed to mechanical vibration in excess of an exposure action value (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Ensure that				
▲ results of health surveillance taken into account in preventive measures (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ health record for each employee who undergoes health surveillance made and maintained (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ health record or copy kept available to permit appropriate access, taking into account any confidentiality concerns (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ on request, an employee is allowed access to his or her personal health record (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ the Authority is provided with copies of such health records as it may require (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ if employer ceases to trade, the Authority is notified in writing and all health records made available to the Authority (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Where employee is found to have identifiable illness or adverse health effect which is the result of exposure at work to mechanical vibration, employer shall				
▲ review the risk assessment (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ review the measures provided to eliminate or reduce the risk (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Requirement	Yes	No	N/A	Action Date
▲ take account of the advice of the registered medical practitioner or competent person, or inspector, in implementing measures to eliminate or reduce risk, including the possibility of assigning alternative work where there is no risk of further exposure (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ arrange continued health surveillance and review health of any employee similarly exposed (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
▲ take account of recommendations of registered medical practitioner or competent person regarding further medical examination (r141)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

*This is a guidance document and using the checklist should help you comply with the Regulations. The checklists are non-exhaustive and in no particular order. Further guidance can be found at [www.hsa.ie](http://www.hsa.ie)*