

# **Vibrations**



There is a good chance that colleagues who do heavy work use machines to ease the work. But some machines cause new complaints, because the vibrations of these devices have an effect on the body. This can cause health problems to the back, joints and muscles. That is why you must include this health and safety risk in the Risk Assessment (RA).

# Do not take vibrations too lightly

Figures show that an estimated one in six employees has to deal with mechanical vibrations at work. This is particularly the case in the construction, transport, industry, agriculture, forestry, aviation and maritime sectors. Do you work in one of these sectors? Then it is definitely important to check whether you should include vibration risks in the RA!

## Two types of vibrations

The Working Conditions Legislation distinguishes two types of vibrations: body vibrations and hand-arm vibrations. Both forms can cause damage to the human body. Bear in mind that the chance of damage due to vibrations increases the more and more colleagues have to deal with the vibrations.







# What are body vibrations?

Body vibrations are named thusly because the vibrations of certain devices - such as vibratory plates, chain saws or pneumatic hammers - affect the body. This can cause complaints to the back, joints and muscles. Body vibrations occur when the mechanical vibrations or shocks are transmitted to the person via the feet or the seat. Do you and your colleagues regularly experience body vibrations? Then be alert to the following risks:

- Body vibrations and shocks mainly cause damage to the lower back and spine.
- Body vibrations can cause damage to the placenta in pregnant colleagues.
- Vibration can also cause visual perception to be disturbed (for example, if a meter can no longer be read by vibration) or if hand-eye coordination is impeded. The risk of missing certain operating handles increases.

## Appropriate measures against body vibrations

As a prevention officer you can take the following measures if colleagues are exposed to body vibrations:

- Consider whether it is necessary for colleagues to be charged with vibrations and shocks.
- Advise your employer to choose the least vibrating device when purchasing machines and means of transport.
- For vehicles, ensure regular maintenance of the driver's seat and replace if necessary. Also adjust the seat suspension properly.
- Advise colleagues to alternate work with less burdensome tasks.

## What are hand-arm vibrations?

If you or your colleagues use vibrating or thrusting hand tools - for example, a grinder, chain saw or pneumatic hammer - there is hand-arm vibration. The use of this tool can cause neurological damage in the fingers and hands. You can also suffer from disturbances in the blood circulation.





# Watch out for white fingers!

Do your colleagues work with vibrating or bumping hand tools and do they regularly suffer from white finger tips? Then they might have Raynaud's syndrome, also known as "the white-finger syndrome." In that case, poor blood circulation will cause the white fingers. In the long term, this can lead to irreversible damage to bones, joints, blood vessels or nerves in the hands and arms. Intervene immediately!



## Measures for hand-arm vibrations

You can take the following measures if colleagues are confronted with hand-arm vibrations in their work:

- Check whether it is necessary for your colleagues to be charged with vibrations and shocks.
- Let them do the work if possible with other, non-vibrating work equipment.
- Use gloves to keep hands warm (which appears to result in less injury) and to partially absorb vibrations.
- Use hydraulic instead of pneumatically driven work equipment.
- Advise colleagues to stop smoking. Smoking enhances the vasoconstricting effect.
- Regularly take breaks.
- Alternate the work with less stressful tasks.

Thanks to: inpreventie.nl

#### PHOTO PROVIDED BY:

https://pulsarinstruments.com/en/post/top-tips-HAVS-prevention

https://www.wpsafety.co.uk/blog/hand-arm-vibration-update