













A well-designed workplace ensures that tasks can be undertaken without adopting awkward postures

"Neutral" postures:

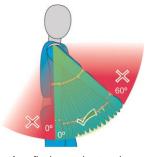
Neutral postures do not just refer to one posture or position of a joint, but to a range of postures in which the muscles work efficiently and the joint is wellaligned. Generally, neutral positions coincide with the mid-point in the movement of the joint.

Benefits of adopting neutral postures at work

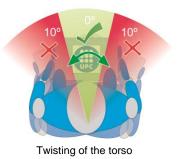
- Work can be carried out with greater efficiency (less effort and better performance).
- The **tension** in muscles, tendons, nerves and bones **is reduced**.
- Control over the task is greater.

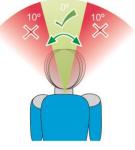
Awkward postures?

Awkward postures occur when the joints are not in neutral positions. If these postures are held for a prolonged, continuous periods of time they can cause musculoskeletal problems. In the following examples, the green areas shows the neutral postural range, whilst the red areas shows positions that are considered awkward.

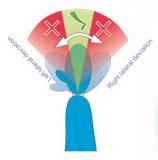


Arm flexion and extension



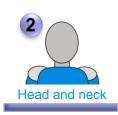


Inclination of the head



Lateral deviation of the wrist













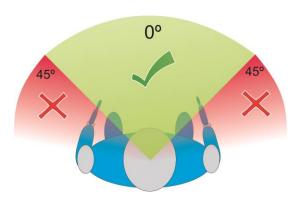


Whenever possible, your head and the neck should be aligned with your torso, or within the range of acceptable movements

FLEXIONS AND EXTENSIONS

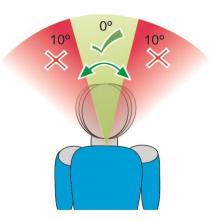
Flexion: bending the head forward **Extension:** bending the head backwards

ROTATIONS



Instead of turning your neck, move your feet in the required direction or move your body

INCLINATIONS



Try to help yourself by moving your body

If you work with a computer:



- Position the top of the monitor at eye level to avoid extensions and flexions of the neck. If you use progressive lenses, put the screen as low as possible.
- Place the monitor in front of you to avoid turning your neck. If you have to change task, turn your seat to face the task.

If you carry out other activities:

- · Work at suitable heights to avoid flexions and extensions of the neck. Use mechanical aids if necessary.
- Turn your body to face the task to avoid turning your neck unnecessarily.









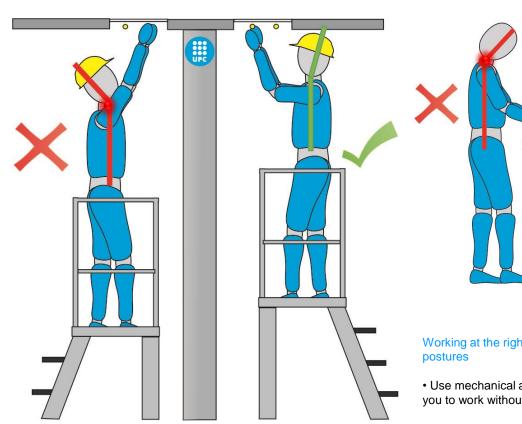








Whenever possible, organise the workplace to reduce risks



Reduce flexion of your neck by working at the right height

• If the work surface is too low, place stable objects on top of it that help you to work at the right height

Working at the right height will help you to avoid awkward

• Use mechanical aids (stepladders, platforms) that help you to work without adopting awkward postures









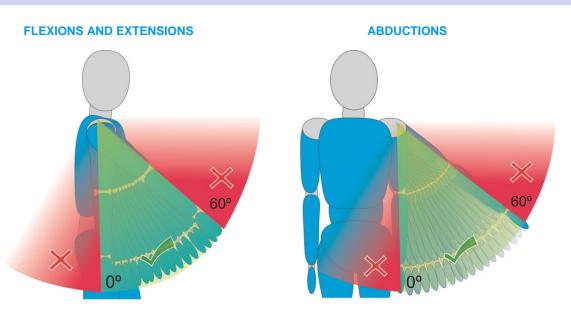






S

Whenever possible, keep your arms close to your body and your elbows below your shoulders









When you have to work at height:

- Use mechanical means (ladders) so that you can work without raising your elbows above your shoulders.
- If this is not possible, take breaks or change activity so that tensed muscle groups can relax.



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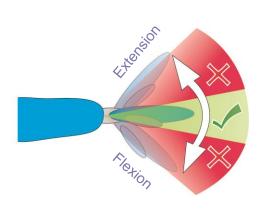




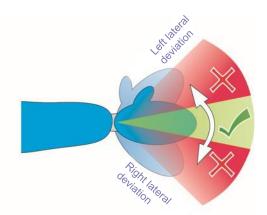


Whenever possible, your forearm, wrist and hand should be aligned

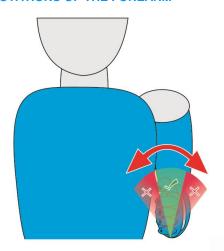
FLEXIONS AND EXTENSIONS OF THE WRIST



LATERAL DEVIATIONS OF THE WRIST



ROTATIONS OF THE FOREARM



The use of portable electric tools is recommended to avoid awkward postures



If you work with a computer:

- Do not use the legs on the back of the keyboard, to avoid extending your wrists for prolonged periods.
- Support your forearms and wrists on the table to ensure neutral, relaxed postures.
- Reduce the use of laptops as they cause lateral deviations of your wrists (due to the small keyboard size).

If you carry out other activities:

• Whenever possible, use portable electrical tools.













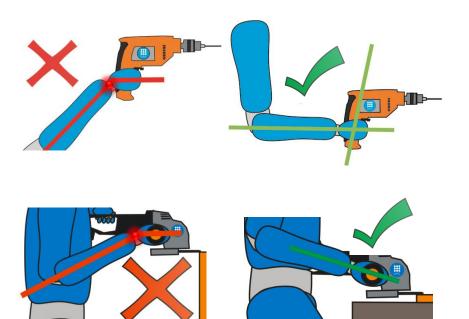




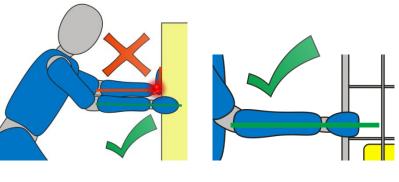
Aligning your forearm, wrist and hand will reduce muscle effort

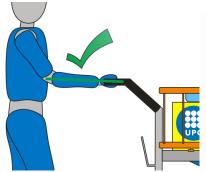
Whenever possible, use portable tools to minimise awkward postures and the effort required.

Your forearm, wrist and hand must be aligned.



When you push or pull a load, do it at the right height. This will prevent you from adopting awkward postures.



















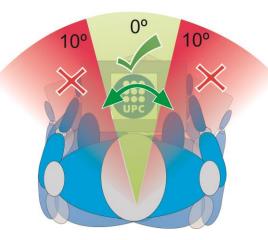


Whenever possible, avoid excessive flexions, rotations and inclinations

FLEXIONS AND EXTENSIONS

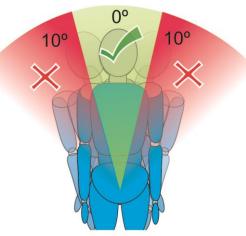
Bend your legs when you need to bend your back

ROTATIONS



If you have to turn, move your entire body and point your feet in the direction in which you have to carry out the task

INCLINATIONS



Use movements of your body to avoid inclinations



If you work with a computer:

- Support your back well by using the chair's backrest.
- Use a swivel chair to avoid twisting your torso.
- Do not bend to reach objects that are far from you. Move close to them with your chair (take advantage of the chair's wheels).









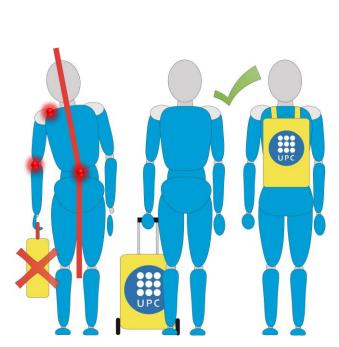




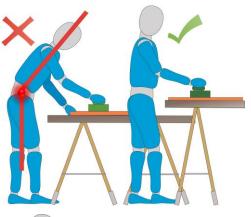




Balance your torso and work at the right height



Try not to handle loads with just one arm. If possible, use mechanical aids with wheels.





If you work at the right height, you will avoid bending your torso and consequently you will avoid overexerting your lumbar region.



A standing-sitting posture allows you to alternate between the two positions.

















Other postures that could cause musculoskeletal injuries

Working in a crouching position

When tasks require you to work in a crouching position:

- Use kneepads or mats.
- Alternate between knees.
- Use means (such as footstools) so that you do not have to kneel.

Use systems that enable you to work comfortably.

Working in a static position

When you work in a static position:

- Try to have one leg in front of the other and alternate between legs.
- If possible, support your foot on a raised surface.

Alternate between tasks that require static positions and dynamic tasks that enable you to relax your tensed muscles.



Carry out static work on a work table.

Introduction















Organisation of tasks and breaks

Forearm, wrist and hand

GENERAL RECOMMENDATIONS



ORGANISATION OF TASKS

Jobs should be planned to alternate between postures and to use different muscle groups.

TASK 1

TASK 2

TASK 3