










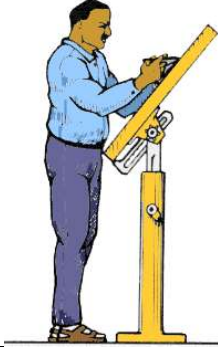


Ergonomics Principles for Reducing Awkward Postures

This can cause injury:	You can make it safer if you:
<p>Working with the Arms Raised</p> <p>Raised</p> <ul style="list-style-type: none"> Working with the hands above the head or the elbows above the shoulders more than 2 hours per day 	<p>Raise the worker:</p> <ul style="list-style-type: none"> Use height-adjustable work platforms. Use step stools or rolling stairs. 
	<p>Lower the work:</p> <ul style="list-style-type: none"> Store frequently used things below shoulder height. Bring work down and turn it on its side for better access. Lower sections of overhead conveyors for loading and unloading.
<ul style="list-style-type: none"> Repetitively raising the hands above the head or the elbows above the shoulders more than 2 hours per day 	<p>Use tools with longer handles:</p> <ul style="list-style-type: none"> Use telescoping or extension handles for non-power tools. Use extendable or adjustable fixtures for power tools. 
	<p>Design for the shortest workers:</p> <ul style="list-style-type: none"> Keep things that are used frequently below 48 inches. Limit reach distances to 26 inches. 



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This can cause injury:	You can make it safer if you:
<p>Back bending</p> <ul style="list-style-type: none"> Working with the back bent forward more than 30 degrees for more than 2 hours per day 	<p>Raise and tilt the work for better access:</p> <ul style="list-style-type: none"> Place work on adjustable tilt tables. Use bin tilters or angled box stands for loading and unloading containers. 
	<p>Lower the worker:</p> <ul style="list-style-type: none"> Use a stool to sit a little lower. Rotate between bending, sitting, kneeling and squatting. 
	<p>Use tools with longer handles:</p> <ul style="list-style-type: none"> Use telescoping or extension handles for non-power tools. Use stand-up, rolling, power equipment instead of hand tools.
	<p>Support the upper body:</p> <ul style="list-style-type: none"> Use stools or creepers with chest support pads. Place one hand down for support when leaning forward.



Ergonomics Principles for Reducing Awkward Postures

This can cause injury:	You can make it safer if you:
<p>Neck bending</p> <ul style="list-style-type: none"> Working with the neck bent more than 30 degrees for more than 2 hours per day 	<p>Raise and tilt the work for a better view:</p> <ul style="list-style-type: none"> Place work on adjustable tilt tables. Place paperwork on a document stand.  <p>Use magnifiers to make things easier to see:</p> <ul style="list-style-type: none"> Use a lighted magnifier for precision work. Use video systems instead of microscopes. Wear eye loupes.  


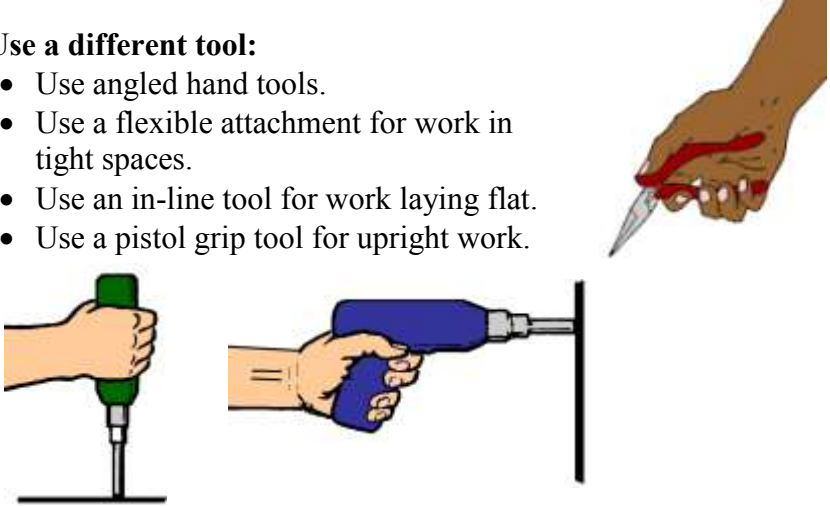
Ergonomics Principles for Reducing Awkward Postures

This can cause injury:	You can make it safer if you:
<p data-bbox="186 325 316 367">Twisting</p> 	<p data-bbox="597 315 1404 357">Keep frequently used things directly in front of the worker:</p> <ul data-bbox="609 357 1404 472" style="list-style-type: none">• Use parts bins, document trays and other organizers to free up space.• Use a 'Lazy Susan' or turntable to bring things closer.
	<p data-bbox="597 504 998 546">Prevent twisting while lifting:</p> <ul data-bbox="609 546 1364 661" style="list-style-type: none">• Used curved conveyors to move things.• Leave enough space so that workers can move their feet instead of twisting.
	<p data-bbox="597 724 1055 766">Provide seating that moves easily:</p> <ul data-bbox="609 766 1120 882" style="list-style-type: none">• Seats that swivel or pivot.• Seats with casters for rolling.• Remove armrests that get in the way. 



Ergonomics Principles for Reducing Awkward Postures

This can cause injury:	You can make it safer if you:
<p>Reaching</p> 	<p>Keep things within easy reach:</p> <ul style="list-style-type: none"> • Place things that are used often within an 18-inch reach. • Limit other reaches to 26 inches as much as possible. • Use a turntable or ‘Lazy Susan’ to bring things closer. • Use flow racks in storage areas to bring supplies forward. • Use diverters on conveyors to move things closer to the edge.
	<p>Make work surfaces narrower or shallower:</p> <ul style="list-style-type: none"> • Limit the depth of customer service counters to between 24 and 30 inches.
	<p>Place workers on both sides of a wide work surface:</p> <ul style="list-style-type: none"> • Locate conveyors so that they can be accessed from both sides.
	<p>Use tools to pull things closer:</p> <ul style="list-style-type: none"> • Use a hook or rake to pull boxes and other large things closer. • Use a “grabber” or “reacher” to pick up smaller things. 

Ergonomics Principles for Reducing Awkward Postures

This can cause injury:	You can make it safer if you:
<p>Wrist Bending</p> <ul style="list-style-type: none"> Working with the wrists bent more than 30 degrees when combined with repetitive motions or high hand forces 	<p>Use a different tool:</p> <ul style="list-style-type: none"> Use angled hand tools. Use a flexible attachment for work in tight spaces. Use an in-line tool for work laying flat. Use a pistol grip tool for upright work. 
	<p>Change the position of the work:</p> <ul style="list-style-type: none"> Tilt or rotate the work. Redesign parts or the order in which parts are added to provide better access. Use an adjustable height work table to change the wrist angle.
	<p>Move around the work to a better position:</p> <ul style="list-style-type: none"> Walk or scoot on a rolling stool to change the wrist position. Use an adjustable height chair or stool to change the worker's height and arm position.
	<p>Redesign the process to reduce wrist bending:</p> <ul style="list-style-type: none"> Change the design of a product or the order in which parts are added to provide better access.

Ergonomics Principles for Reducing Awkward Postures

This can cause injury:	You can make it safer if you:
<p>Kneeling or Squatting</p> <ul style="list-style-type: none"> • Kneeling more than 2 hours per day 	<p>Use low rolling stools:</p> <ul style="list-style-type: none"> • Stools offer support and easy movement. • A 'kneeling creeper' supports a kneeling position.
<ul style="list-style-type: none"> • Squatting more than 2 hours per day 	<p>Raise the work:</p> <ul style="list-style-type: none"> • Do most of the work on benches or sawhorses and then lower it to the ground to finish. • Raise repair work on lifts or roll it onto raised platforms.
	<p>Change positions frequently:</p> <ul style="list-style-type: none"> • Alternate between kneeling, squatting, and sitting. • If possible, lay down on creeper or other padded surface.
	<p>Use pads:</p> <ul style="list-style-type: none"> • Wear knee pads or use knee pad inserts in work pants. • Put down cushioned kneeling pads.