

# Ergonomics

FOR STATE AGENCY AND PUBLIC UNIVERSITY OFFICE ERGONOMIC ASSESSORS



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saif.com

## In the zone: Your Workstation

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Even when you have a seated position at work that results in less strain and pain, it is still important to change that position often, as well as stand to work if possible and walk often during the work day. Even a good seated posture can cause strain after a while. A split workstation (sit-to-stand) is an economical way to encourage movement between a seated and standing posture.

When performing ergonomic evaluations, keep in mind the open torso-to-thigh angle is a better seated posture, as it results in the least strain on the low back. A more stressed, but common, seated posture is leaning forward while slouching, like hunching over a desk.

Many people continue to believe the proper seated posture is the 90-90-90 position, a straight back with upper legs parallel to the floor, which creates 90-degree (or right) angles. However, this posture flattens the natural curve of the lumbar spine and increases the effort required of muscles to remain sitting upright. Research shows unnecessary body stresses are generated by these right angles. An erect sitting posture is typically not sustained for long before the body gravitates toward poor posture and the risk of fatigue and discomfort.

To recreate the low back curve and lessen stress on the spine, use a chair with a seat pan that tilts forward to open up the torso-



to-thigh angle. The more open the angle between the upper body and thighs, the less strain to the back. There are two options to open this angle. Move the seat pan into an open angle (declined) position where the seat pan is tilted downward. Or, put the chair into the Grandjean (reclined) position so the seat back is moved beyond 90 degrees to a more comfortable 110 to 130 degrees. Either of these positions help re-establish the lumbar curve. Be cautious to note the more a chair back is reclined, the greater the risk of non-neutral head positions (head leaning too far forward to compensate). If this is observed, adjust the back rest of the chair forward to reduce the angle.

And remember, “The best posture is the next posture.” Encourage movement between the various seated postures, stand to work if possible, and walk often during the work day.

### Upcoming Economics Assessor Trainings

**Ergonomics Beyond the Office**  
April 14 | Salem

**Basic Ergo Assessor**  
May 27 | Salem

**Basic Ergo Assessor**  
July 22 | Salem

**Ergonomics Beyond the Office**  
October 13 | Salem

For locations and to register online, visit [saif.com](http://saif.com)

### Online Resources

[State of Oregon Loss Management Training](#)

[“Background to sitting at work: research-based requirements for the design of work seats”](#)

[Arizona State University ergonomics information](#)

[“The Upright Seated Posture: Conventional Wisdom vs. Current Thinking”](#)

[“Relieving Spinal Stress: Discovering the Optimal Seated Posture for the Stress-Free Spine”](#)

[SAIF Corporation Safety Topics](#)

### Ergo Assessor worksheet links

You can find the [PDF](#) version and the [Excel](#) version of the worksheet online.

## Recent Ergo Assessor Graduates

Congratulations to the following employees who completed their required assessments for Office Ergonomic Assessor certification.

Kim Morgan | OJD  
Kayla Trammell | DHS  
Christopher Cromwell | DOJ

Heather Pankretz | ODOT  
Julie Recla | DHS  
Jennifer Wright | DHS

Sherree Rodriguez | DOJ  
Kevin Reilly | SACU