



Dental offices have a variety of safety issues for dentists and dental hygienists that may not be apparent to everyone. Dentists and dental hygienists have exposure to repetitive motion disorders, musculoskeletal issues, hazardous chemicals and blood-borne pathogens. For this article, we are focusing on the ergonomics of dental offices.

An article on [erogweb.com](http://erogweb.com) discovered research from the University of Iowa showing that dental hygienists may have some of the highest occupational incidences of Carpal Tunnel Syndrome (CTS). Repetitive motion disorders including carpal tunnel, tendonitis to the elbow and neck issues stem from pinch grip of their tools, deviation and flexion of the wrist and awkward position of the neck.

According to the National Center for Biotechnology Information, studies have demonstrated that the awkward postures from dental work cause increased disk pressures and spinal hypomobility that may lead to degenerative changes within the lumbar spine and low back pain or injury.

Hazard recognition at each workstation should be conducted to identify any issues and employers should emphasize ergonomic interventions such as workstation redesign as a means to reduce the exposure to risk factors. Workstation redesign might include purchasing ergonomic dental cleaning tools that fit the hand which reduces a severe pinch grip, more comfortable dental chairs and proper ergonomic training of the staff.

Successful Ergonomic Programs provide management support while involving workers directly in worksite assessments, solution development and implementation. It is important that workers and employers are able to identify and provide important information about hazards and their workplaces.

An OSHA article on Ergonomics states that training is an important element in the ergonomic process. It ensures that workers are aware of ergonomics and its benefits, become informed about ergonomics related concerns in the workplace, and understand the importance of reporting early symptoms of repetitive motion issues or musculoskeletal disorders (MSD).

## Musculoskeletal Disorders

### Identify Problems

- Identify and assess ergonomic problems in the workplace before they result in MSD.

### Encourage Early Reporting

- Early reporting can accelerate the job assessment and improvement process, helping to prevent or reduce the progression of symptoms, the development of serious injuries, and subsequent lost-time claims.

### Implement Solutions

- There are many possible solutions that can be implemented to reduce, control or eliminate workplace MSD.

### Evaluate Progress

- Once solutions have been implemented, it is important to evaluate the corrective action procedures to verify the effectiveness of the ergonomic process.