

Sustainability In-depth; Ergonomics Program and Performance

From more than 18 years experience, 3M has learned that incorporating good ergonomics into our business operations is effective in reducing the number and severity of Work-related Musculoskeletal Disorders (WMSDs). Our ergonomic efforts not only benefit our employees but also contribute to productivity and quality improvements.

Ergonomics Program

Our ergonomics program is defined in 3M's Global Safety & Health Plan and applies to all global operations. The program includes requirements for annual planning, application of standard risk assessment tools, development of skilled location resources and ergonomics training for all employees. For over 18 years, the objectives of 3M's Ergonomics Program have been to:

- Reduce the impact and costs of work-related injury and process inefficiency
- Improve employee health and job satisfaction
- Enhance human performance
- Increase efficiency of production

Work-related Musculoskeletal Disorders were first documented as the largest category of 3M Injury and Illness cases in 1990. At that time, MSD ergonomic-related cases represented 39% of all OSHA Recordables, and 63% of all lost time OSHA Recordables

3M's ergonomics program requires four key elements that every 3M location around the world is expected to have as part of their ergonomics program:

1. Documentation of ergonomic objectives
2. Methods to identify and control ergonomic risk
3. Health and safety staff to lead ergonomic initiatives
4. Training for all employees

Goals and Initiatives

In 2004, 3M initiated a 5-year Ergonomic Goal to reduce exposure to unacceptable ergonomic risk in targeted jobs by 75%. To achieve this goal, a number of supporting initiatives were needed:

Creation of a common Ergonomics Risk Reduction Process (ERRP), integrated into our Environmental, Health and Safety (EHS) Management System, and applied globally to prioritize ergonomic initiatives.

- Visibility / transparency of progress through the EHS Quarterly Scorecard – venue to display and drive results.
- Adoption of a standard Ergonomics Job Assessment (EJA[®]) Tool for operations use.
- Development of Ergonomic risk assessment training modules and EJA Workshop
- Establishment of 3M's Ergonomics Job Assessment Certification.

Collaboration with 3M's Engineering Department to create a standard approach integrating our Ergonomics Design Criteria (EDC) Tool into 3M Engineering standards and project management process for application in new equipment design.

- Integration of ergonomics into each location's annual EHS planning process.
- Inclusion in the EHS Management System Auditing process.
- Promotion of successful ergonomics improvement projects via our annual Applied Ergonomics Innovation Award process.

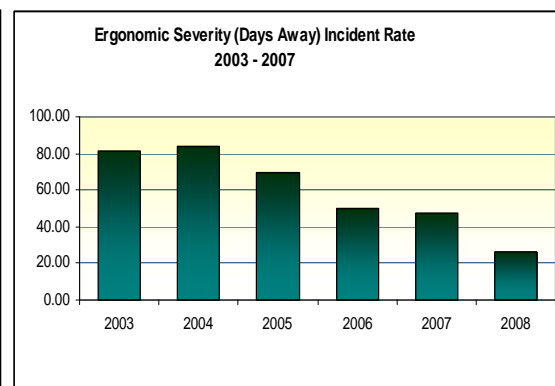
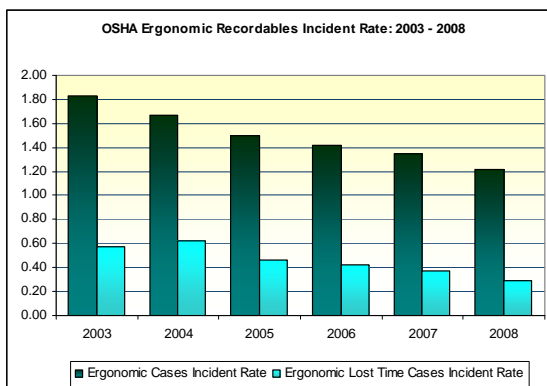
Performance

When qualified individuals use appropriate risk analysis tools, 3M has experienced a significant reduction in the occurrence and severity of WMSDs in our manufacturing operations globally. In many instances, this has also positively impacted operational efficiencies. The 5-year Ergonomic Goal concluded in 2008. Here are some of the results:

- 1,898 jobs from 120 locations in 30 countries were analyzed for unacceptable ergonomic risk.
- To date, 73% of identified unacceptable risk exposure was eliminated from the 1,898 targeted jobs. Locations continue to identify, assess and reduce high risk exposures as part of their annual ergonomics plan.

Region	Percent of High Risk Reduced in Target Jobs
UNITED STATES	78%
LATIN AMERICA	56%
EUROPE	60%
CANADA	88%
APAC	68%
TOTAL	73%

- Since 2003, 3M U.S. operations have realized a steady reduction in frequency and severity of WMSDs.



- Ergonomics considerations have been integrated into each location's Environmental, Health and Safety annual and long-range planning process.
- 53 individuals achieved 3M's Ergonomics Certification status, 130 more continue in the program and a total of over 300 individuals have participated in the initial two-day Ergonomic workshop.
- To meet the needs of our diverse workforce, over 30 ergonomic training modules on a variety of ergonomic topics are available to all 3M employees through our Global Learning Network. Some modules focus on ergonomics general awareness information for all employees; other modules provide technical ergonomic information for specific jobs such as engineers, health and safety professionals and plant engineering,
- Over 500 successful ergonomics improvement projects documented.
- Approximately 23% of the ergonomic risk reduction improvements were achieved for costs of \$1,000 or less and 63% for \$5,000 or less.
- Ergonomics risk reduction projects also resulted in productivity, quality or efficiency improvements as documented in our annual Applied Ergonomics Innovation Awards.

Continuous Improvement

We are building on past success to continuously improve the effectiveness of 3M's ergonomic program at every location. Our objective is helping locations identify, prioritize and resolve ergonomic issues. In order to achieve this objective, 3M's Ergonomics Program will continue to emphasize the following strategies.

- Measuring and reporting ergonomic performance. Each location's ergonomics performance on specific program, risk management, resource, and training aspects critical to identifying and controlling ergonomic risk will be measured and reported quarterly on the 2009 EHS Scorecard. Ergonomics is one element of 3M's formal GSHP Auditing Process.
- Developing business and location expertise in ergonomics. Four EJA workshops, two U.S. and two international are planned for 2009. The internal EJA Certification process will continue developing technical skilled ergonomic resources within our operations.
- Applying ergonomics criteria to the design of new equipment and processes. 3M's Front End Engineering Package (FEED) is used for defining engineering projects. Engineering, in partnership with Ergonomics, supports and promotes the application of the EDC Tool.
- Integrating new acquisitions. Specific timelines and objectives for applying 3M's Ergonomics Risk Reduction Process is one aspect of 3M New Acquisition EHS Process.
- Networking and sharing of success. Individuals from around the world present successful and cost effective solutions they have implemented during bimonthly e-meetings. 3M's annual Ergonomics Award recognizes innovative and successful solutions to ergonomics issues. Projects are summarized and shared on the company-wide EHS Solutions Website. In the spirit of sharing what we have learned, 3M's ergonomics program has been and will continue to be presented at numerous professional conferences and proceedings.

Building ergonomics capability and accountability by establishing a successful ergonomics program at each 3M location remains the number one priority.