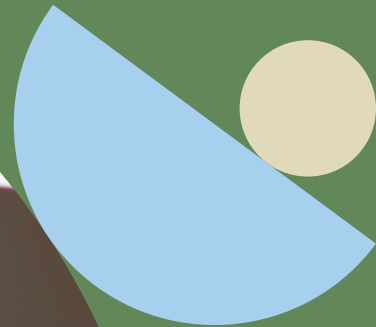


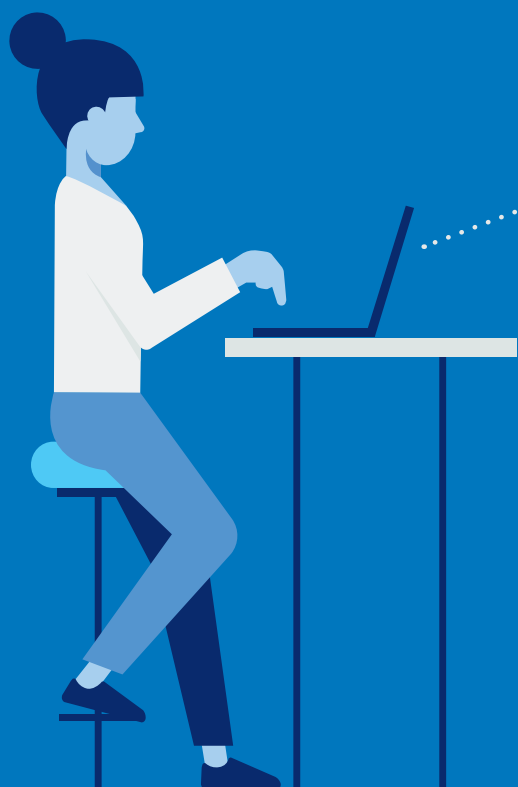
Office and Industrial Ergonomics

Strategies for a safer, more productive workplace



Ergonomics is crucial to workplace health and safety, reducing injury and improving overall employee wellbeing. Designing work environments to support people in their work environment can minimize injury risks, enhance productivity, and create safe and efficient operations. Ergonomics can help foster employee health and morale, improving job satisfaction, retention rates, and stronger corporate reputation. It also helps businesses ensure regulatory compliance and manage risks effectively, helping to avoid costly fines and litigation.

The value of ergonomics is significant; it can reduce musculoskeletal disorders (MSDs) and support a high return on investment (ROI). For effective workplace practices, ergonomic strategies should focus on proactive prevention and comprehensive workplace design, integrating with broader wellness programs. Investing in ergonomics is a strategic decision that can enhance safety, productivity and profitability. By embracing ergonomics, companies can achieve safer, more efficient production and build long-term operational success, employee wellbeing and a competitive edge.



Benefits of Ergonomic Improvements



Reduced injuries

Ergonomic interventions help reduce the risk of MSDs, improving worker health and lowering injury-related costs.



Increased productivity

Ergonomic solutions can streamline workflows and enhance efficiency by designing tasks and workplaces to fit employee capabilities.



Improved employee morale

Comfortable workspaces help improve focus, reduce fatigue and increase job satisfaction, which can result in higher retention rates.



Regulatory compliance

Ergonomic assessments help businesses meet health and safety standards, mitigating legal risks and avoiding costly fines.

Employee health & wellbeing

The lifeforce of most organizations is its people. Healthier employees are more productive and engaged in their work, signaling reduced turnover intention¹. By creating comfortable and supportive work environments, businesses can meet growing individual needs and improve worker wellbeing. Ergonomics is a core component of establishing an employee-centered workplace.

The leading cause of workplace-related disability claims is musculoskeletal disorders, many of which are related to persistent repetitive motion and poor ergonomic workplace design². In fact, approximately \$1 out of every \$3 spent by companies on workers' compensation claims is connected to MSDs³.

Conversely, research has found that the “physical and psychosocial aspects of work-related ill health harm individual and system performance⁴” which can disperse into other areas of the organization with negative impact. In the long term, organizations that invest in ergonomics see positive impacts on their corporate reputation. Workers who feel safe and valued are more likely to stay with a company, contributing to a positive workplace culture. Additionally, companies that

prioritize ergonomics often position themselves as employers of choice, attracting top talent who seek workplaces committed to their wellbeing.

The most recent full year-data from the National Safety Council and Bureau of Labor Statistics found that preventable occupational injuries impacted nearly 160,000 individuals and cost businesses \$167 billion; additionally, more than 75 million days of work were lost because of these on-the-job injuries⁵. Ergonomic improvements directly correspond to limiting worker injury and absenteeism.

In addition to injury prevention and improved psychosocial health, ergonomics includes considerations for safe and effective return-to-work programs for injured employees to limit repeated incidents.

| Rank | Industry | Frequency of MSDs | Severity of MSDs (Days away from work) |
|------|--|-------------------|--|
| 1 | Healthcare and Social Associate | High | Very High |
| 2 | Manufacturing | High | High |
| 3 | Construction | High | Moderate to High |
| 4 | Transportation and Warehousing | High | High |
| 5 | Retail Trade | Moderate | Moderate |
| 6 | Agriculture, Forestry, Fishing and Hunting | Moderate | Moderate to High |
| 7 | Wholesale Trade | Moderate | Moderate |
| 8 | Administrative and Support and Waste Management and Remediation Services | Moderate | Moderate |



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Regulatory compliance

Compliance with health and safety regulations is a critical consideration for businesses, especially in industries with high injury rates, such as construction, transportation and manufacturing. Ergonomics helps ensure that workplaces meet or exceed safety standards, minimizing the risk of regulatory fines and costly litigation arising from workplace injuries while protecting personnel.

| The 'General Duties Clause' of OSHA Act of 1970 ⁶ | | |
|--|---|--|
| Each employer | (1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees; | (2) shall comply with occupational safety and health standards promulgated under this Act. |
| Each employee | shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct. | |

Some regulations, such as California's Injury and Illness Prevention Program (IIPP), mandate that businesses take steps to reduce the risk of workplace injuries, including those caused by poor ergonomic design. Implementing ergonomic solutions not only helps companies comply with regulations like IIPP but also reduces long-term risk by proactively addressing safety issues before they lead to injury. Other standards, including ISO 10075-1:2017, established by the International Organization for Standardization, extend "to the design of working conditions with respect to mental workload... and the consequences of mental strain"⁷. It is important for organizations to understand the regulatory environment as it relates to workplace design and hazard reduction.

Increased ROI

Improving organizational and job-specific functionality with a focus on ergonomic solutions can directly impact the business's finances. If job-related injuries are reduced and fewer claims filed, worker compensation costs will decline. As operational efficiency increases on a per-employee basis, whether through automating repetitive tasks or making other specific ergonomic improvements, those gains can lead to increased output and growth opportunities.



Annual Cost of Job-Related Injuries⁵

\$50.7 billion in wage & productivity losses

\$37.6 billion in medical expenses

\$54.4 billion in administrative expenses

\$15.0 billion in employers' uninsured costs

\$9.3 billion in other expenses

Source: National Safety Council

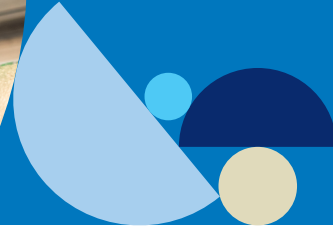


Companies prioritizing ergonomics can expect a return on investment (ROI) up to

\$2 and \$10

for every dollar spent on improving the ergonomic conditions of a workplace⁸.





The future of Ergonomics: expanding horizons for prevention

Ergonomics will remain a key factor in shaping the future of workplace safety and operational efficiency, but its focus is evolving beyond simple task adjustments toward a more comprehensive approach to injury prevention and workplace design. The emphasis is shifting to proactive strategies that anticipate risks before they lead to injury, including regular ergonomic assessments and early intervention programs that address hazards before they manifest.

In addition, ergonomic principles are likely to increasingly integrate with broader workplace wellness programs, creating a holistic design that considers not only physical health but also mental and emotional wellbeing. This approach fosters a more inclusive model of worker care. Workstations of the future will become more dynamic and adaptable, designed to adjust in real time to the needs of individual workers. These flexible designs promote movement and minimize the risks associated with prolonged static postures, ultimately enhancing both comfort and productivity.

Blending ergonomics with operational efficiency is a smart, strategic move for companies looking to stay ahead in today's competitive landscape. It enables businesses to meet modern market demands while creating a culture where safety and productivity thrive together.

Conclusion

Ergonomics is not just a safety measure – it is a strategic investment that delivers tangible benefits for businesses. By reducing the risk of MSDs, improving worker well-being, and enhancing productivity, ergonomics contributes to a healthier, more efficient, and profitable workplace. For organizations seeking to stay competitive in today's market, ergonomics offers a compelling value proposition with measurable ROI.

For more information on Zurich's extensive Risk Engineering and Ergonomics Services, visit us at us.zurichresilience.com.

Ergonomics in action: case studies



Warehouse slotting for safety and efficiency

A logistics company suffering from high turnover rates and frequent injury claims restructured its warehouse slotting system to minimize employee bending, lifting, and reaching. By adding height-adjustable packing stations and repositioning high-frequency items within easy reach, the company reduced MSD injuries by 20% and improved order fulfillment speed, leading to a notable boost in overall operational efficiency.




Lean Ergonomics in automotive manufacturing

An automotive parts manufacturer with high injury rates, particularly associated with MSDs and repetitive tasks, improved ergonomic conditions on its assembly line, focusing on reducing motion waste and physical strain. By re-designing workstations and automating repetitive tasks, the company reduced MSD claims by 45%. Additionally, absenteeism dropped by 15% and task efficiency improved by 25%, contributing to a reduction in overall workers' compensation costs and over \$500,000 in annual savings.

Source: Zurich Insurance Group



To learn how ZRS can help with your ergonomic needs, contact us:

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