

Reduction and Prevention of Musculoskeletal Disorders

Sector – Manufacturing

Background

A furniture manufacturing company requested training of their 15 managers in the management and prevention of musculoskeletal disorders (MSDs)/injuries.

The client had seen an increase in reported MSDs (23), absenteeism, and requests for occupational health appointments over the last 24 months. The client brief was to reduce MSDs absenteeism and requests for occupational health appointments while maintaining productivity.

150 employees were exposed to physically demanding jobs involving manual handling (heavy lifting, pulling, pushing) and fine precise repetitive work.

Ergonomics Training for the Prevention of Musculoskeletal Disorders

Morgan Maxwell visited the client site to get an understanding of the tasks required of the staff from a management and user (staff) perspective.

An ergonomics based questionnaire was completed by all employees to help identify processes within the business that needed ergonomics focus.

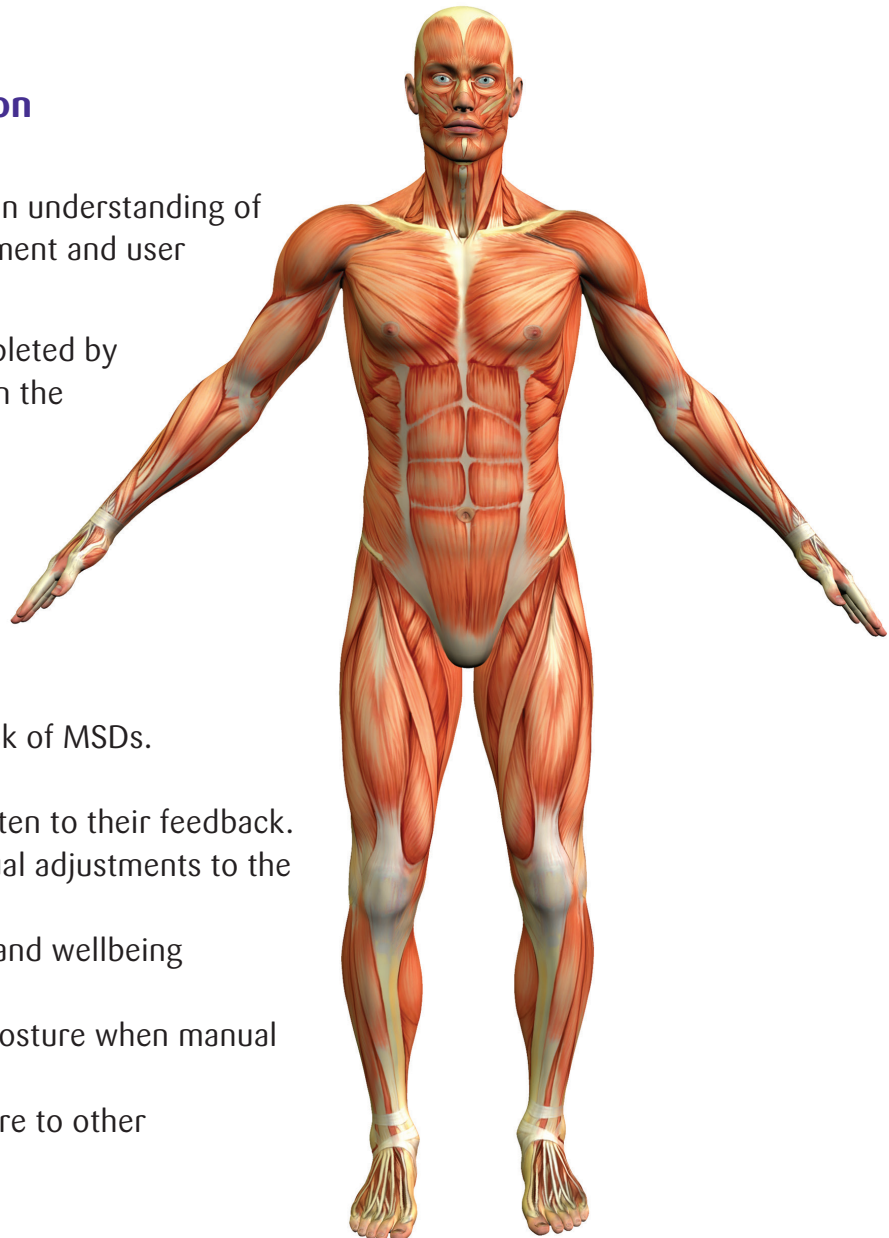
Scenario based walkthroughs were completed with team leaders from each product line to understand the tasks from their perspective.

From the data collected Morgan Maxwell identified the following risk factors:

- Limited job rotation which increased the risk of MSDs.
- High risk working postures.
- Staff reporting that management did not listen to their feedback.
- Limited ability for workers to make individual adjustments to the assembly lines and processes.
- Hi noise levels affecting the concentration and wellbeing of employees.
- Limited awareness and training regarding posture when manual handling or completing repetitive work.
- High staff turnover which increases exposure to other staff members.

Results

- ✓ Reduction in reported MSDs
- ✓ Reduction in absenteeism by 35%
- ✓ Reduction in occupational health appointments by 23%
- ✓ Return in Investment after 12 months was £12 for every £1 spent.



Morgan Maxwell were able to design a user centered bespoke training programme for the prevention of musculoskeletal disorders based on the data collected.

Recommendation for training

- Training ergonomics champions within the business to promote the human factor at all stages of the manufacturing process.
- Bespoke task specific ergonomics based manual handling training for all teams.
- Set up of reporting system for staff to convey ideas to improve processes and reduce exposure to MSDs risk.
- Ergonomics champions were trained in the use of ergonomic risk assessment tools such as Rapid Upper Limb Assessment (RULA), Rapid Entire Body Assessment (REBA), Assessment of Repetitive Tasks (ART) and the Manual Handling Assessment Chart (MAC)
- Acoustics awareness training and advice from external acoustician.

Results

Results after ergonomics interventions and training had been completed

- Six months after interventions MSDs had reduced to six from twenty-three.
- Twelve months after interventions, absenteeism reduced by 35% with a reduction of occupational health requests by 23%.
- Return on investment (ROI) after twelve months was £12 for every £1 spent based on reduction in absenteeism and reduced occupational health appointments.

