# Public Works Ergonomic Program





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#### Sample Public Works Ergonomic Program

The management of <u>(City / Town / District)</u> and its Public Works Department is committed to implementing an effective ergonomics program. This will be accomplished for the department's employees by the Director placing a priority on eliminating ergonomic hazards at the facility and on the job site by conducting in house and pre job specific hazard analyses to determine how to perform all tasks in a manner using engineering and administrative controls to prevent injuries.

The Director of \_\_\_\_\_\_ Public Works Department understands that accident prevention is an operating responsibility. The Public Works department has the philosophy that accident prevention and ergonomics require the same executive direction and control given to every day operations and other phases of the department.

All supervisors and employees are to know what is expected of them. The Director will provide the resources so the responsibilities of all parties can be met. Each supervisor and employee responsible for ergonomic changes will be held accountable for carrying out his or her responsibilities. This written program shall be communicated to all current employees and to new-hires within 30 days of starting employment in the department. It is the \_\_\_\_\_\_ Public Works Department's goal to always reduce employee exposure to injuries.

#### **Employee Involvement**

Public Works Department encourages employee involvement in the ergonomics program and in the decisions that affect employee safety and health. This will be accomplished by using the following steps:

- Employees are encouraged to bring their concerns and suggestions to management's attention. This can be done by filling out a safety request sheet (Appendix A) or by contacting the Director, Safety Coordinator or Supervisor so that the issue can be discussed at the quarterly safety committee meeting.
- 2. Early signs of Musculoskeletal Disorder or Cumulative Trauma Disorder or near misses involving sprains and strains are to be reported as soon as possible to give the Public Works Department the opportunity to have employees evaluated and treated if needed.
- 3. \_\_\_\_\_\_ Public Works Department will have an ergonomics team consisting of its Safety Committee members. They shall receive training by Maine Municipal Association or by the employer's Preferred Medical Provider / Concentra Care to recognize problem jobs, identify risk factors, and develop solutions to reduce those factors. Elements of this training include the identification of workplace risk factors; job analysis methods, implementation and evaluation of



control measures taken to reduce exposure. Corrective action will be discussed at Safety Committee meetings.

#### **Program Elements**

- 1. The Public Works Director along with Human Resources will review the OSHA 300 Log and quarterly loss runs for evidence of Musculoskeletal Disorder, Cumulative Trauma Disorder sprains and strains to identify and analyze if there are any apparent trends.
- 2. After a problem area is discovered, an ergonomic checklist (Appendix B) that includes posture, force, repetition and vibration will be used by the Safety Committee members or our preferred medical provider to determine the hazards by breaking the job down into components and comparing them to the baseline survey conducted by our preferred medical provider.
- 3. In addition, the problem area is to be evaluated for the following risk factors: Length of repetitious work, posture regarding limb positions, types of tools used to preform work. Lifting and static loads, muscle forces and work pace.
- 4. The Public Works Director will analyze the ergonomic hazards as seasons change and job requirements change or, if there is a change in operations or equipment. This may be accomplished by interviewing the effected employees to see if new risk factors have arisen due to changes in job requirement, operations or equipment.
- 5. There is an Open Door policy. Employees are encouraged to bring their concerns to the Public Works Director, supervisor or safety committee member.

#### **Hazard Prevention and Control**

1. The Public Works Department, where feasible, will implement engineering controls such as lifting devices to reduce exposure to back injuries. These controls may include, but are not limited to; jib cranes overhead cranes, engine cranes, hydraulic pickup mounted cranes, hydraulic tail gates, forklifts, topside creepers and magnetic manhole lifting devices, to reduce exposure to back and shoulder injuries associated with lifting. Work stations such as benches shall be adjustable to accommodate employees. When employees stand for long periods, anti-fatigue matting shall be made available. If vehicles cannot be lifted to a comfortable standing work height or working on vehicles at floor level is preferred, stools and creepers will be made available to work at a comfortable height to reduce exposure to kneeling. Tools shall be purchased with considerations made to reduce exposure to vibration and that they are not cumbersome to use. When possible pneumatic tools and electric tools shall be made available to reduce exposure to soft tissue injuries associated with Cumulative Trauma disorder.



- 2. Proper work techniques for safe work practices shall be addressed to ensure that engineering controls that have been implemented do not create more hazards than they eliminated.
- 3. Personal protective equipment shall be purchased with ergonomic stressors in mind. A variety of sizes and types are available so that employees are not subject to extreme postures and excessive forces.
- 4. Administrative controls as outlined in the Job Safety Analysis have been established to address duration, frequency and severity of exposures to ergonomic stressors. This has been accomplished by allowing employees to take necessary stretch breaks throughout the work shift depending on the task at hand. (If applicable A lifting limit has been established that is comparable to the limit used during the post offer pre-placement physical exam. Employees are not to lift any object that exceeds the limit. Use a mechanical device or get help). When storing inventory, all heavy items shall be stored at waist height as outlined in the Job Safety Analysis.

#### **Medical Management**

- (Preferred Medical Provider / Concentra Care) has evaluated all jobs at the facility to determine the hazards that exist from a Musculoskeletal Disorders (MSD) standpoint. (Preferred Medical Provider) uses the job evaluations when conducting a post offer pre-placement physical exam with our new employees. These evaluations have helped \_\_\_\_\_\_Public Works Department develop our Job Safety Analysis program as well as establishing our Light Duty Return to Work program.
- 2. (Preferred Medical Provider / Concentra Care) is the health care provider we have chosen to provide medical treatment for our employees with injuries or illnesses relating to ergonomic factors. They have visited our facility and are familiar with our specific workplace job procedures and the job risk factors.
- 3. We encourage all employees to immediately report any symptoms of discomfort that may be associated with their job duties. In most cases, employees are to report to their immediate supervisor. Those supervisors are responsible to recommend light duty work or medical evaluation for injured employees.
- 4. The Ergonomics Team has developed a list of light and restricted duty jobs which have low musculoskeletal risks. This list is a valuable resource for assigning duties to recovering employees until they can resume their normal job functions. This list has been given to our preferred medical provider so that they know how the Public Works Department can accommodate employees. These jobs include, but are not limited to;



- Updating Safety Policies and Procedures
- Fire Extinguisher inspection
- SCBA inspections- if properly trained
- Updating Hazardous Chemical Inventories
- Updating SDS sheets
- Inspecting secondary containers for proper labels
- Taking inventory of first aid kits
- Ordering first aid kit supply's
- Conducting pre and post DVIR's (Daily Vehicle Inspection Reports) for commercial vehicles
- Taking parts inventory at PW garage
- Ordering parts
- Parts cleaning
- Driving to get parts
- Inspecting jacks and jack stands
- Inspecting eye wash stations
- Inspecting extension cords
- Inspecting power tool cords and condition
- Inspecting ladders
- Inspecting chains and binders
- Inspecting straps
- Janitorial work
- Cleaning computers
- Filing
- Working as a Flagger
- Work as gate attendant at Transfer Station
- Moving lawns using a riding lawn mower
- 5. After verification of an employee's job-related injury or illness, the Public Works Director and the Ergonomics Team are to review this plan and re-evaluate the work station to determine if additional practices, procedures, or redesign of the station could be implemented to prevent similar injuries.



#### **Training and Education**

Administrative controls consisting of job evaluations to determine the physical requirements and internal evaluations of each job have been conducted to create Job Safety Analysis for each position. Each new employee will receive training regarding this policy and the Job Safety Analysis for the position they have been hired. If the employee is hired to preform multiple jobs, they are to receive training on this policy and the appropriate Job Safety Analyses training. All training shall be documented.

#### **Program Review and Evaluation**

- 1. This program shall be reviewed annually or if there is a change in work practices, facility changes or equipment changes. The Public Works Director and Human Resource Director will analyze trends in injury and illness rates to determine hazards and to see if corrective action taken has lowered exposures.
- 2. All employees who have been effected by ergonomic changes shall be surveyed for input on the changes made to determine if the changes have had a positive impact on their ability to perform their work.
- The Public Works Director, the Ergonomics Team, Preferred Medical Provider or Maine Municipal Association's Loss Control Consultant may evaluate the results of the surveys. If additional changes are needed, corrective action shall be taken on employee's suggestions for improvements.
- 4. Records will be kept on job improvements tried or implemented. Records shall be found in the minutes of the Safety Committee meetings under Corrective Action. The minutes are to be posted so that all employees can see the ongoing safety efforts the department is taking in the ongoing effort to provide a safe workplace.



### Appendix A

# Safety Request Sheet

Employee	 	 
Date	 	
Job		
Job Title	 	 
Safety		
Safety Request	 	 



## Appendix B Sample Work Station Evaluation / Checklist

Employee
 Date
Job Title
Purpose of evaluation
% of work standing
% of work sitting
Rate and number of repetitions: Performance of the same motion or motion patterns every few seconds for more than two hours at a time.
Postures and limb positions: Fixed or awkward work postures such as overhead work Twisted or bent back, bent wrist
Stooping, or squatting, for more than a total of two hours Over reaching
Vibration: Use of vibrating or impact tools or equipment for more than a total of two hours.

Loads/lifted:

Lifting, lowering, or carrying of anything weighing more than 50 pounds (22.7 kg) more than once during the work shift.



Loads/static: holding a fixed or awkward position with arms or neck for more than ten seconds.

Muscle forces:

Continually pulling or pushing objects.

Workplace temperatures:

Hot

\_\_\_\_

Cold

Poor Lighting: Dark

Work pace:

Self-paced, piece rate or machine paced work for more than four hours at a time (legally required breaks cannot be included when totaling the four hour limit).

