

Ergonomics Fact Sheet

Six Steps to Building an Ergonomics Mind Set

Whether you work for a multi-national corporation or a small independently owned and operated business, you can benefit from adopting an ergonomics mind set. Not only will the workplace be **inherently safer**, but you may even **save time and money**. These savings result because of careful planning that allows for a **'right the first time'** approach.

An ergonomics mind set can be developed by considering the following six questions **whenever decisions are being made** to:

- purchase an item
- build a new workspace or facility
- modify an existing facility, workspace, job, tool or piece of equipment
- create a new work position

1. What are the task requirements?

What does the person have to do, step by step, to perform the job? By thinking this through carefully, you'll have insight to potential risks that may exist for the worker(s). You can then address the potential risks proactively, before anyone actually performs the job.

- L** Think about the **physical actions and body positions** that are/will be required to do **all** parts of the job. For example, how heavy will handled items be? How frequently will actions be repeated? Will the person have easy physical access to stored items or other parts of the workspace that must be regularly accessed? How long will the person stand or sit at one time?

2. Define important employee characteristics?

By answering this question, you will be able to ensure all workers can safely perform all aspects of the job/task in question, in an efficient manner.

Think about whether there are **special limitations** to keep in mind? What **sizes** and **capabilities** are represented by your workers? People (older/younger, male/female, experienced/novice, etc.) vary widely in terms of size, strength, visual abilities, etc.

Ergonomics Fact Sheet

3. What is the physical operating environment?

- L Will temperature, lighting, etc. impact on **how well the person will be able to carry out the work?**
- L What **personal protection** is required, if any, to ensure safety?
- L Think about the following types of conditions, not solely from a health and safety perspective, but from a work performance viewpoint too:
 - Exposures to **cold or heat** for the whole body, or for select body parts, such as the hands.
 - **Noise** levels. Will levels be low enough to protect hearing, ideally without the need for hearing protection? Will parts of the job require the person to hear signals, or verbal instructions? Can these be heard above ambient noise levels? Is mental concentration important to the job?
 - **Light** levels. Is there enough light for the type of task being performed? Is it the appropriate type of light for task requirements, e.g. for matching colours accurately? Are lights positioned to avoid glare for workers?
 - **Vibration**. Will workers use vibrating tools? Will they be exposed to whole-body vibration through their feet or through seating?
 - **Outside weather conditions**, if applicable.
 - **Floor conditions**, especially if standing or movement of objects is required. Can slipping and tripping hazards be prevented?

4. What training/skills does the person need or have?

By considering these issues up front, you will have better insight to the type(s) of **training and skill development** that may be required. You will also be in a better position to plan the required training and **schedule the necessary time** for new workers to complete it.

- L Will the employee(s) be experienced or at novice-level for this task?
- L Will s/he already have skills that can be transferred to this type of task?

Ergonomics Fact Sheet

5. What is the worst case scenario for the employee?

By working through questions 1-4, you have a good opportunity to identify potential safety and injury risk situations. By answering questions about the **type(s) and level(s) of risk**, you are in a better position to take action, proactively, to **eliminate or reduce those risks**.

- L Are there likely to be **injury and/or other safety hazards** associated with the job/task? Identify all potential hazards. Consider **workload requirements** too: excessive workload (amount and pace) requirements can compel employees to take short-cuts, thereby increasing their risk of an accident.

- L How likely is it that workers will be injured? How severely?

6. What is the consequence of human error?

- L What will happen to people, product, and place if the person makes a mistake, or does not perform up to standard?

In many cases, the consequence may be insignificant. However, by arming yourself with this knowledge ahead of time, you are again in a better position to make changes, proactively, to avoid an error that may be associated with serious consequences.

How can I learn more?

If you have a question contact the OHS Division's Ergonomist by E-mail at pettits@gov.ns.ca, or by telephone at 902-424-5032 (toll-free at 1-800-952-2687), or in writing to:

Sue Pettit
Ergonomist
OHS Division
NS Department of Environment and Labour
P.O. Box 697
Halifax, NS B3J 2T8