

Similar Exposure Groups (SEGs)

As an employer of coal mine workers, you will be familiar with the Coal Mine Workers' Health Scheme, which requires all coal mine workers to undergo a medical assessment on commencement and at regular intervals thereafter. The medical is carried out in accordance with an approved form, section 1 of which is completed by the employer prior to the assessment.

As of 1 January 2011, section 1 of the form will contain two new boxes to receive information on similar exposure groups, commonly referred to as SEGs. You are required to complete the box labelled "Generic SEG" using the list attached and the box labelled "Company SEG" if you have company specific SEGs.

In order to assist you to complete this section appropriately, the following information may be useful.

What is a similar exposure group?

A Similar Exposure Group (SEG) is a group of workers having the same general exposure profile for the agent(s) being studied because of the similarity and frequency of the tasks they perform, the materials and processes with which they work and the similarity of the way they perform those tasks. (Mulhausen et al, 1998)

What advantage is there in establishing SEGs?

The nature and extent of the risks to which every worker is exposed should be identified and the level of risk assessed. It should be possible to avoid having to assess every position by grouping workers into SEGs. If the members of a large work group do a similar job and are exposed to similar risks, data from a small sample of workers can be used to predict the exposure of the whole group, saving significant resources.

How do I establish SEGs to start the process?

The most acceptable method is by observation and sampling. Observation involves grouping work activity according to the task, job description, the process, and exposure to any agent in the work environment and control measures applied.

Identifying SEGs by observation alone is not sufficient because exposures can alter with differences in work techniques from one worker to another or from shift to shift.

Sampling data are required, either historic data or data collected for the purpose of defining a SEG, to support the observational data. These might include noise levels, respirable dusts levels and exposure to hazardous substances. Once sufficient data are collected, statistical analysis can be carried out to confirm that the group is representative of a SEG.

What will this information be used for?

The SEGs will be used to classify data collected in the scheme. For example the medical data collected for "Longwall production" workers can be collated and analysed to see if there are any health trends that can be identified in this group of workers. This information can then be fed back to employers so that controls can be focussed in this group of workers if necessary.

Where can I get further information?

For further information please contact the Health Surveillance Unit on 3234 0723 or 3237 1041.

References:

American Industrial Hygiene Association (2006) A Strategy for Managing Occupational Exposures (3rd Edn) Mulhausen J Chapter 4, Establishing Similar Exposure Groups