Occupational risk exposure profile (OREP)

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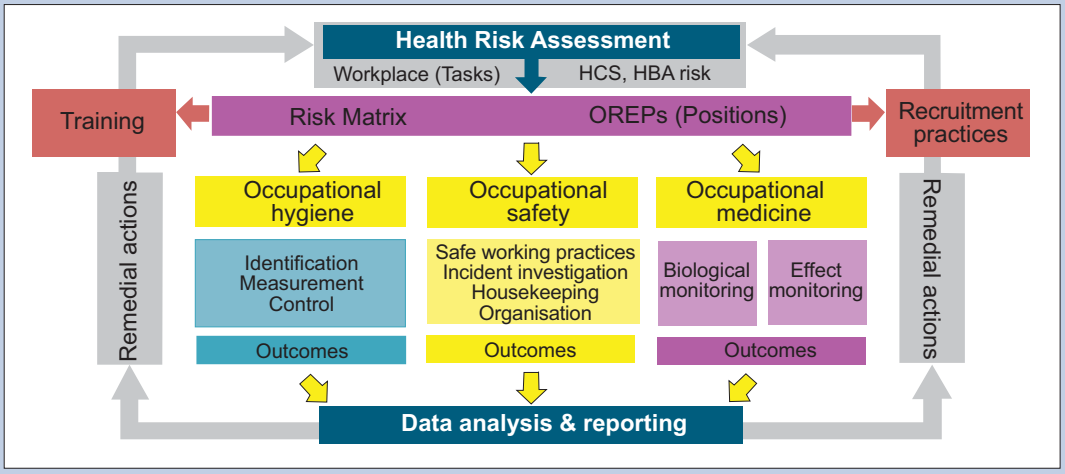

Figure 1. The ten steps for occupational health programme implementation

Introduction

Occupational toxicology is the study of physical and chemical agents and the impact or injury they cause to living cells. An occupational risk exposure profile (OREP) is a guideline which when followed should prevent or detect early signs of exposure. The main object of the OREP programme is to holistically determine the impact hazardous situations have on the workforce and the environment.

Assessing certain thresholds within the ten step occupational health programme (Figure 1) will define and identify the probability that injury or illness will occur under specified conditions of exposure.

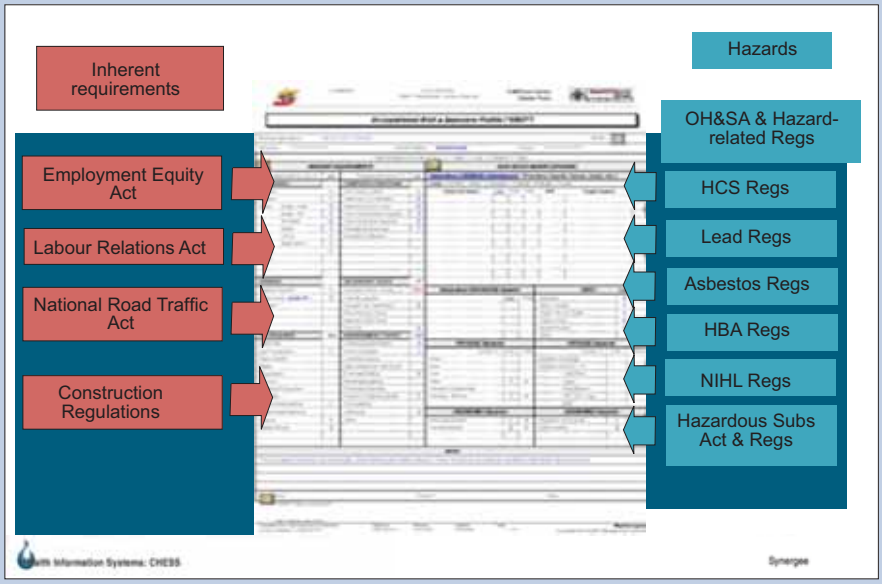

Figure 2. Demonstrates the legal requirements as defined in the different acts and regulations

Why do Risk Assessments?

- The law.
- To manage risk! (good business sense).
- Drives everything else! (medical surveillance).

What is an OREP?

- OREP stands for "Occupational Risk Exposure Profile"
- It comprises a modern evolution of the old "man-job / person-job spec" concept.
- It integrates the requirements of effective employee deployment, plus legal compliance.

What is the value of the "OREP"?

- Enabling the establishment of appropriate minimum inherent standards of fitness.
- Providing a communication tool that can be used for training and recruitment.
- Managing incapacity and performance by providing an objective benchmark of the minimum requirements of the jobs.
- Planning medical testing/surveillance by providing the occupational health staff with the information they need.

What is an OREP?

A summary of:

- the key inherent requirements of a job; and
- the key hazards (risks) to which the job (employees) are exposed.

Key legal imperatives (see Figure 2) include:

- Inherent requirements – Employment Equity Act,

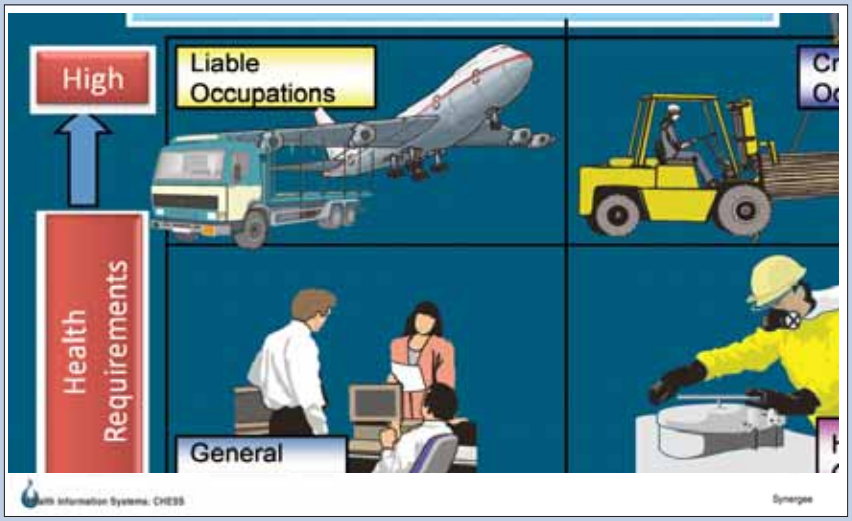

Figure 3. Physical risk and liabilities within a certain work profile and environment

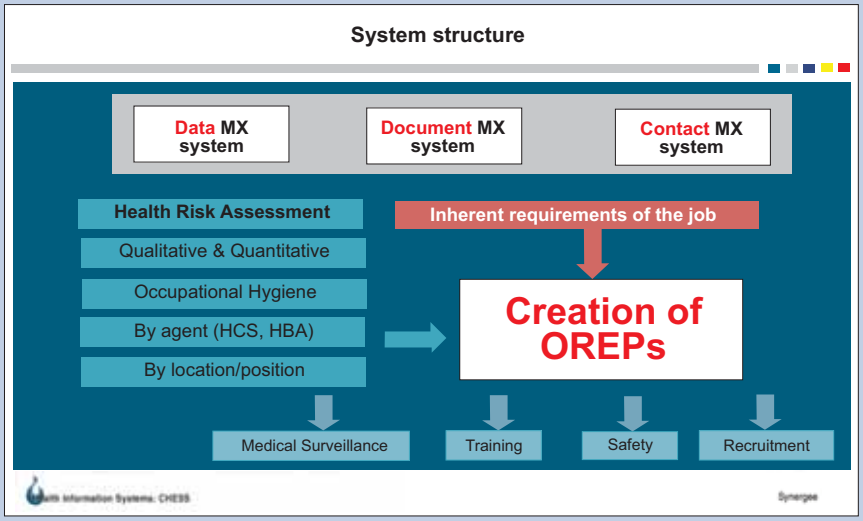

Figure 4. The creation of OREPs required for a certain work profile

Labour Relations Act and Codes of Practice, as well as many statutes specific to occupations (aviation, drivers, divers, construction workers, etc.); and

- Hazards/risks – Occupational Health & Safety Act and Regulations, including Hazardous Chemical Substance Regulations.

Liability versus hazard risk

The occupational health and safety officers have a responsibility towards the workforce, enviroment and management. Their observations and recommendations are generally based on the process within a certain work environment or occupation. Figure 3 illustrates that in many occupations an increase in physical risks and liabilities is directly the result of increased hazards within the workplace. The inherent requirement of the workprofile will define the OREPs within that environment, which in turn will define the degree of liability and hazard risk for that specific occupation. The creation of OREPs required for a certain work profile is illustrated in Figure 4.

Conclusion

An increase in the number and hazards, chemical compounds and exposures is and has been the norm for the 21st century. Indeed, many of these hazards are the products of industrial and human development previously never found in nature. This provides for an ever increasing complexity and modification of occupational risk exposure profiles to fit the type of hazard or situation present.

In reality, the use of occupational risk exposure profiles is a holistic approach which assists the occupational health practitioner in making informed decisions around hazards, liabilities and workers health status.

References

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2. Schillack VR, Coombs WM. Medical surveillance and biological monitoring: The dynamic of chemical and drug absorption, distribution and elimination and the impact it has on the monitoring of exposure to (hazardous) chemicals. Occupational Health Southern Africa. 2010; 16(1):32-35.