

# Unit 15: Managing Business Activities for Achieving Results

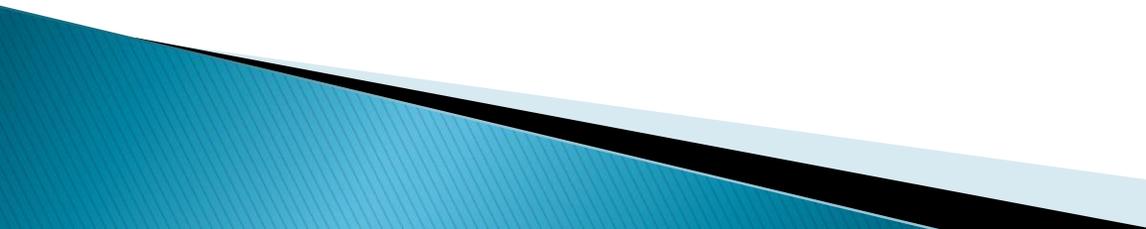
Lesson 12  
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# Learning Outcome 4

- ▶ Be able to manage health and safety in the workplace:
  - AC 4.1 Carry out risk assessments as required by legislation, regulation and organisational requirements ensuring appropriate action is taken
  - AC 4.2 Demonstrate that health and safety regulations and legislation applicable in specific work situations are correctly and effectively applied
  - AC 4.3 Carry out a systematic review of organisational health and safety policies and procedures in order to ensure they are effective and compliant
  - AC 4.4 Carry out practical application of health and safety policies and procedures in the workplace.

# In This Session

- ▶ LO 4 Be able to manage health and safety in the workplace:
    - AC 4.3 Carry out a systematic review of organisational health and safety policies and procedures in order to ensure they are effective and compliant
    - AC 4.4 Carry out practical application of health and safety policies and procedures in the workplace.
  - ▶ Assessment Criteria
  - ▶ Review Questions
  - ▶ References
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# Assessment Criteria 4.3



Carry out a systematic review of organisational health and safety policies and procedures in order to ensure they are effective and compliant

# Systematic Review

- ▶ According to Khan (2003) a review earns the adjective systematic if it is based on a clearly formulated question, identifies relevant studies, appraises their quality and summarizes the evidence by use of explicit methodology. It is the explicit and systematic approach that distinguishes systematic reviews from traditional reviews and commentaries.
- ▶ Wikipedia.org (2016) further notes that systematic review is a type of literature review that collects and critically analyzes multiple research studies or papers. A review of existing studies is often quicker and cheaper than embarking on a new study. Researchers use methods that are selected before one or more research questions are formulated, and then they aim to find and analyze studies that relate to and answer those questions. Systematic reviews of randomized controlled trials are key in the practice of evidence-based medicine

# Steps in conducting Systematic Review

Khan et. al (2013) identify five steps in conducting a systematic review:

- ▶ Step 1: Framing questions for a review

The problems to be addressed by the review should be specified in the form of clear, unambiguous and structured questions before beginning the review work. Once the review questions have been set, modifications to the protocol should be allowed only if alternative ways of defining the populations, interventions, outcomes or study designs become apparent

- ▶ Step 2: Identifying relevant work

The search for studies should be extensive. Multiple resources (both computerized and printed) should be searched without language restrictions. The study selection criteria should flow directly from the review questions and be specified a priori. Reasons for inclusion and exclusion should be recorded

# Steps in conducting Systematic Review

- ▶ Step 3: Assessing the quality of studies

Study quality assessment is relevant to every step of a review. Question formulation (Step 1) and study selection criteria (Step 2) should describe the minimum acceptable level of design. Selected studies should be subjected to a more refined quality assessment by use of general critical appraisal guides and design-based quality checklists (Step 3). These detailed quality assessments will be used for exploring heterogeneity and informing decisions regarding suitability of meta-analysis (Step 4). In addition they help in assessing the strength of inferences and making recommendations for future research (Step 5)

- ▶ Step 4: Summarizing the evidence

Data synthesis consists of tabulation of study characteristics, quality and effects as well as use of statistical methods for exploring differences between studies and combining their effects (meta-analysis). Exploration of heterogeneity and its sources should be planned in advance (Step 3). If an overall meta-analysis cannot be done, subgroup meta-analysis may be feasible

# Steps in conducting Systematic Review

- ▶ Step 5: Interpreting the findings

The issues highlighted in each of the four steps above should be met. The risk of publication bias and related biases should be explored. Exploration for heterogeneity should help determine whether the overall summary can be trusted, and, if not, the effects observed in high-quality studies should be used for generating inferences. Any recommendations should be graded by reference to the strengths and weaknesses of the evidence

# Documents for Review

- ▶ In conducting your systematic review, it is important that you source all policy and procedural health and safety documents. Also check incident reports and risk assessment documentation.
- ▶ The document must be compared with the legislation and regulations in place. Check to see:
  - Are the provisions in compliance with the laws and regulations
  - How many if any accidents, health and safety breaches has taken place over a particular period?
  - What were the reasons for those – is it related to a lack of provision?

## Assessment Criteria 4.4



Carry out practical application of health and safety policies and procedures in the workplace.

# Practical Application

- ▶ According to thefreedictionary.com (2012) practical application – the act of bringing something to bear; using it for a particular purpose; "he advocated the application of statistics to the problem"; "a novel application of electronics to medical diagnosis."
- ▶ According to Victorian Workcover Authority (2001: pg4 ) to manage health and safety effectively you need to:
  - set your health and safety objectives, and plan how you will achieve them;
  - decide who is responsible for getting things done;
  - give those responsible the skills and resources to do the job; and
  - regularly check that you are meeting your objectives.

# Managing Risk in the Workplace

- ▶ Victorian Workcover Authority identify six main ways:
  - Elimination – — eliminating toxic substances, hazardous plant or processes which are not necessary to a system of work. If the risk cannot be eliminated, it should be reduced.
  - Substitution — substituting a toxic substance, hazardous plant or process with one known to be less harmful to health. Substitution is not only a preferred control method, it may also be the least expensive. For example, substituting a less hazardous material to control a vapour hazard makes more sense than installing an expensive ventilation system.

# Managing Risk in the Workplace

- Isolation — enclosing or isolating a hazard such as a toxic substance, plant or process from employees, to eliminate or reduce the risk of injury or illness. Using a fume cupboard or sound enclosure booths are examples of moving a hazardous process away from the main work area (and other employees) to a site where emissions can be controlled.
- Engineering controls — changing processes, equipment or tools, for example:
  - machine guards and machine operation controls;
  - ventilation to remove chemical fumes and dusts, and using wetting down techniques to minimise dust levels;
  - changing layout of work levels to minimise bending and twisting during manual handling.

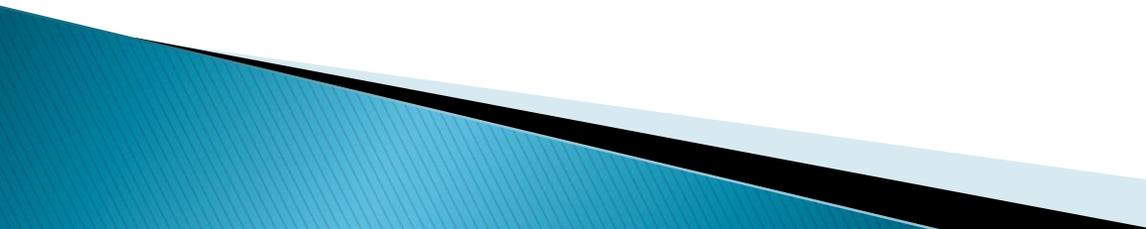
# Managing Risk in the Workplace

- Administrative controls — changing work procedures to reduce exposure to existing hazards. For example:
  - reducing exposure to hazards by job rotation;
  - limiting the number of employees exposed to the hazard by limiting access to hazardous areas.
- Personal protective clothing and equipment — devices and clothing which provide individual employees with some protection from hazards. An effective personal protective clothing and equipment system requires considerable effort by the employer to ensure that:
  - proper protective devices are selected;
  - employees are individually fitted;
  - proper instruction on the need for, and use of, personal protective clothing and equipment is provided;
  - standards are enforced; and
  - an effective system of cleaning and maintenance is devised.

# Some Practical Application of HS Policy/Procedures

- ▶ Victorian Workcover Authority (2001) identify the following that can be done:
  - Have copies of the legislation, regulations, codes of practice and Standards which apply to your workplace for staff to access?
  - Are there arrangements in place for consultation between management and employees or their nominated representatives?
  - Identify health and safety representatives and provide training for them
  - Establish a health and safety

# Some Practical Application of HS Policy/Procedures

- Establish programme for new and transferred employees to receive instruction in your health and safety policies and procedures
  - Develop procedures for emergencies and first aid and make all staff aware of the procedures
  - Put system in place to ensure that all injuries, ill-health and incidents recorded, investigated, reported (if required) and analysed for trends? Make this information made available to managers and employees?
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# Further readings

- ▶ [https://www.worksafe.vic.gov.au/\\_\\_data/assets/pdf\\_file/0015/21822/GS\\_Policies.pdf](https://www.worksafe.vic.gov.au/__data/assets/pdf_file/0015/21822/GS_Policies.pdf)
- ▶ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC539417/>

# REFERENCES

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- ▶ thefreedictionary.com (2012) Practical Application Definition retrieved from <http://www.thefreedictionary.com/practical+application>
- ▶ Victorian Workcover Authority (2001) Getting Started with Workplace Health and Safety: An Introduction to Workplace Health and Safety Policies, Procedures and Evaluation retrieved from [https://www.worksafe.vic.gov.au/\\_\\_data/assets/pdf\\_file/0015/21822/GS\\_Policies.pdf](https://www.worksafe.vic.gov.au/__data/assets/pdf_file/0015/21822/GS_Policies.pdf)
- ▶ Wikipedia.org (2016) Systematic Review retrieved from [https://en.wikipedia.org/wiki/Systematic\\_review](https://en.wikipedia.org/wiki/Systematic_review)