



Code of Practice on Workplace Safety and Health (WSH) Risk Management



2015 latest revision

Section 4: General Requirements

4.2 Employer **(New Added Definition)**

As defined in the WSH Act, an Employer is a person who, in the course of the person's trade, business, profession or undertaking, employs any person to do any work under a contract of service. The self employed person or Principal shall also fulfil the duties and functions of an Employer specified in this CP

Section 4.5: General Requirements

4.3.4 (new clause)

The Manager should work together with a Human Resource Manager to specify WSH training necessary for job positions and functions

Section 4.4: Human Resource Manager

(New Responsibility)

Covers clause 4.4.1 to 4.4.9

Section 5.1: Formation of Risk Management or Risk Assessment Team

5.1.2.1 (2015 Revised clause)

The RM Team Leader should be competent for the task. Basic competency can be attained through completing a **RM course conducted by Workforce Development Authority (WDA) Approved Training Organisation (ATO)** or equivalent

6.1.1.5 (2011 old clause)

The employer shall ensure that RM leader is competent for task. Having attended a **RM course conducted by a MOM Approved Training Provider** or equivalent is sufficient demonstration of the fact.

Section 5.1.4 : Risk Assessment Team

5.1.4.5 (2015 New clause)

If the inclusion is not feasible as detailed in 5.1.4.4, designers, suppliers and other contributors may be invited to share their comments and suggestions with the RA Team

5.1.4.8 (2015 New clause)

The RA Team Leader should be experienced with the type of work within his or her scope, and have direct access to the RM Team Leader, or in the absence of one, to the Employer.

Section 5.3: Gather Relevant Information

(2015 new inclusion)

To include Past Training records of employees in the relevant information that should be gathered

Section 6.1: General Requirements

7.1.4 (Removed clause from 2011)

The RM Team is to determine which hazards are to be reviewed monthly

7.1.5 (Removed clause from 2011)

All RA entries must be reviewed and if necessary, revised once every 3 years

Section 6.2: Principles - New Clause

6.2.1 RA is the cornerstone of the RM process. It is an integral part of all organisational work processes, from strategic planning to project and change management. The key steps in the RM process are outlined in Figure 2.

6.2.2 RA is customised and tailored to each organisation and its specific work environment.

6.2.3 RM contributes to the achievement of organisational objectives and improvement of performance in business, operational efficiency, regulatory, safety and health compliance and environmental protection

Section 6.2: Principles - New Clause

6.2.4 RM addresses uncertainty and helps businesses make informed decisions and prioritise actions.

6.2.5 RA provides a systematic approach to RM and leads to consistent and reliable results

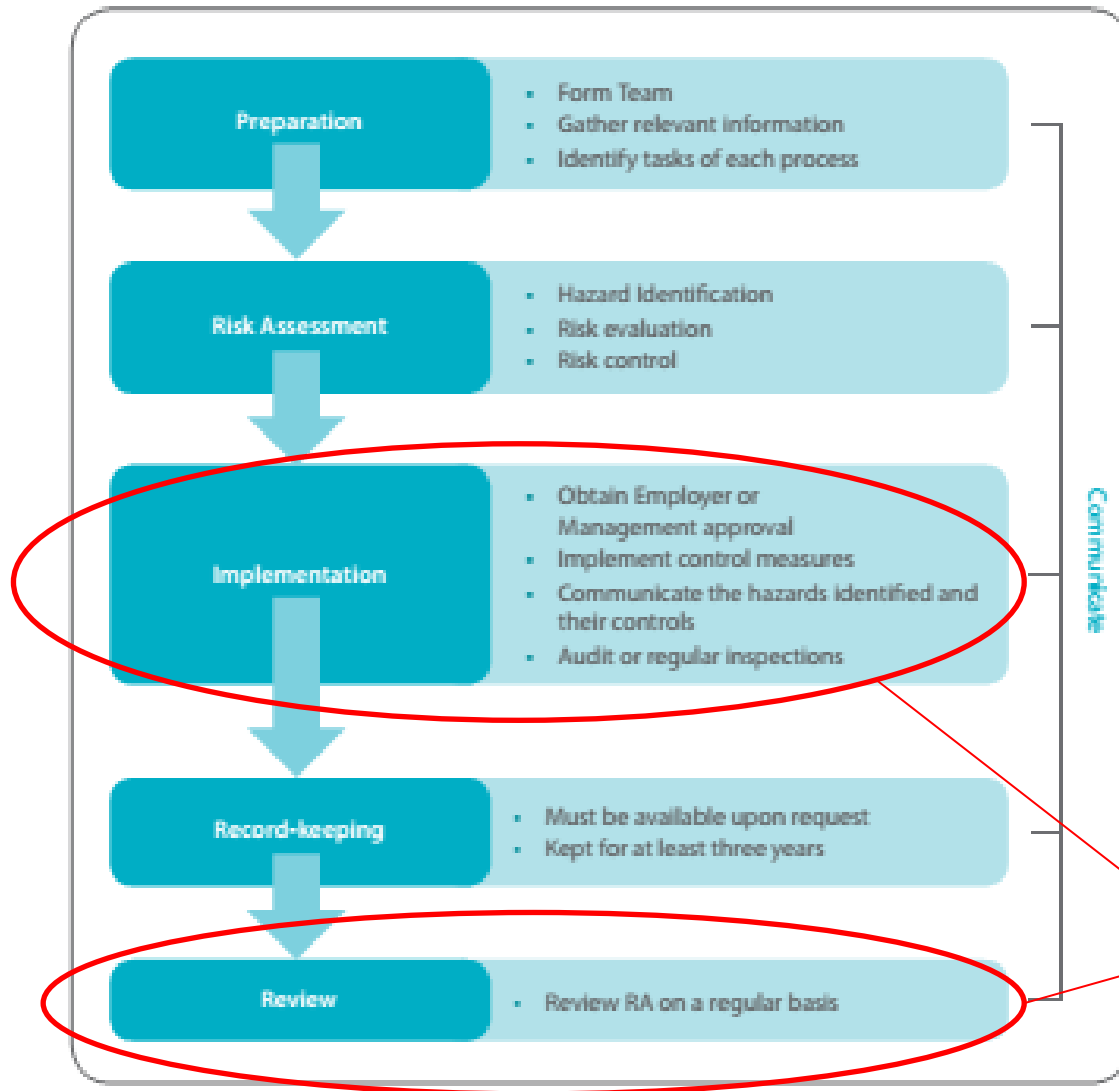
6.2.6 RA inputs are based on various information sources such as the RA team members' competency and experience, observations, employee feedback and expert opinions. The limitations of these information sources must be taken into account to ensure that the RA is based on the best available information

Section 6.2: Principles - New Clause

6.2.7 RA takes human and cultural factors into account. It recognises that the capabilities and health risk factors of employees should be managed when conducting a RA

6.2.8 RM should work alongside all other aspects of an organisation to facilitate continual improvement, and be responsive to change when new risks emerge or existing ones change

Risk Management Process - NEW



All stages should be communicated

Implementation & Review are now separate steps to be executed at different stages

Figure 2: Risk management process.

Section 6.3.2: Process

6.3.2.2 (2015 new clause)

Break down work activity into its sub-activities to facilitate the identification of all foreseeable hazards associated with the work. These sub-activities constitute the different steps that make up the work activity

6.3.2.4 (2015 new clause)

To include psychosocial (stress, fatigue) as part of the hazard category

Section 6.3.3: Human and cultural factors

(2015 new clause)

RA should consider organisational culture and personal risk factors that could compromise employees' work ability and safety (e.g., decreased mental alertness, fatigue, loss of concentration). Risk control measures can be implemented to take into account varying perceptions and behaviour

Section 6.3.3: Human and cultural factors

(2015 new clause)

6.3.3.1 Work organisation factors (include excessive workload, prolonged working hours, lack of adequate training, inadequate acclimatisation to hot work environment).

6.3.3.2 Individual health risk factors (include health risks uncovered from medical examinations, individual susceptibility to certain health risks, smoking as a risk factor for many diseases, health effects of alcohol misuse)

Section 6.3.4: Workplace or work-related factors

(2015 added clause)

6.4.4.1

Other factors to consider when identifying hazards:

- proximity of hazardous activities to one another;
- compatibility of work activities;
- non-routine work activities and situations; and
- environmental conditions

Section 6.4.1: Risk Matrices

6.4.1.3 (2015 new clause)

The risk matrix used in the RA should be displayed at least once, and preferably at every page of the RA form. This is particularly important when numeric ratings are used, as risk prioritisation number (RPN) may represent different levels of risk with different sizes of the risk matrix.

Section 6.4.3: Assessment of Severity

6.4.3.4 (2015 new clause)

Should RA Team members have difficulty developing a consensus to the severity level, the Team is to gather more information and/or consult an industry expert.

Section 6.5: Risk Evaluation for Health Hazards

(2015 new clause)

6.5.1 Exposure assessments should be conducted to estimate employees' exposure to health hazards where appropriate. Exposures can be estimated by qualitative assessment or quantified by direct measurement. All exposure measurements should be conducted by competent persons using recognised methods, acceptable standard procedures and standard calibrated equipment.

Section 6.5: Risk Evaluation for Health Hazards

(2015 new clause)

6.5.2 Where there are large numbers of workers, groups of workers with similar exposure levels could be identified for more efficient exposure assessment.

6.5.3 Exposure estimates are then compared to established Permissible Exposure Level (PEL) or other health standards to establish the likelihood of the ill-health effects

Section 6.5: Risk Evaluation for Health Hazards

(2015 new clause)

6.5.4 Based on exposure assessment and risk evaluation, health exposure risks can be ranked to enable prioritisation of action plans to lower these risks

6.5.5 When assessing the risk of health hazards (e.g., noise, chemicals, biological agents and ergonomics), relevant risk factors should be taken into consideration (see Appendix F).

Section 6.5: Risk Evaluation for Health Hazards

(2015 new clause)

6.5.6 It is also important to consider other factors which may influence likelihood such as:

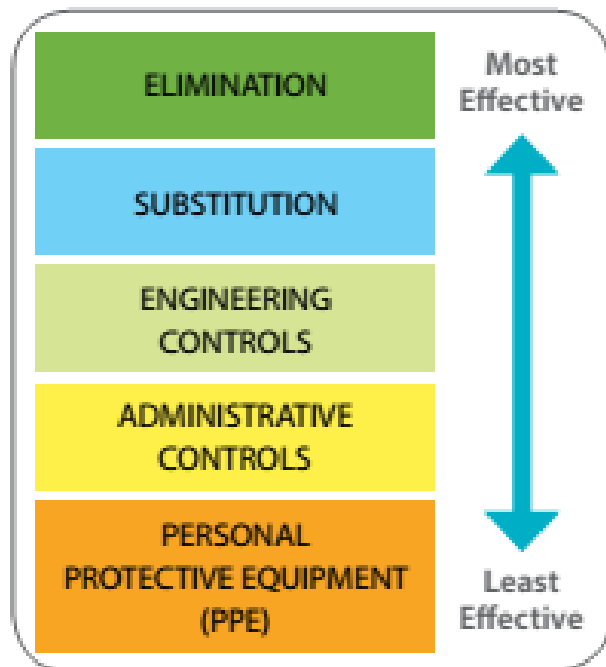
- potential cumulative exposures;
- potential synergistic effects between certain health hazards (e.g. exposure to excessive noise and trichloroethylene [TCE] will increase likelihood of hearing impairment); or
- any limitation in health standards if they do not consider all exposure routes. (e.g., potential dermal or ingestion risks are generally not taken into account when setting PELs).

Appendix F: Risk Factors of Health Hazards (NEW)

Health Hazard	Risk Factors
Noise	Exposure level (sound pressure level); Frequency of sound; Duration of exposure; and Frequency of exposure.
Chemicals	Intrinsic hazard of the chemical (e.g., carcinogenicity, mutagenicity, etc); Physical and chemical properties; Scale and frequency of use; Routes of exposure; Exposure concentration; Exposure duration; and Frequency of exposure.
Biological agents	Intrinsic hazard of microorganism (pathogenicity); Virulence; Host range; Viability of microorganism; Amount of microorganisms present at point of exposure; Mode of transmission; and Routes of infection.
Ergonomics-related factors	Weight of load or force; Repetition or frequency of motion; Posture (static, awkward, etc); Direct pressure on body parts or contact stress; Vibration; and Temperature of the environment.
Heat	Temperature; Humidity; Amount of direct sun exposure or radiant heat; Intensity of physical work; Physical exhaustion; Type of clothing; Un-acclimatised person or duration of acclimatisation; and Susceptible individuals (cardiovascular disease, impaired renal function, obesity, alcohol and drug abuse, dehydration).

Section 6.6.1 Hierarchy of Control

(2015 new clause and table)



Covers clause 6.6.1.1 to 6.6.1.4 regarding Hierarchy of control

Section 6.6.5 Implementation person and date

6.6.5.2 (2015 new clause)

If the person mentioned in 6.6.5.1 cannot be identified at the time the RA form was being completed, a designation of person may be indicated. The Manager is to propose this suitable person.

Section 8: Communication

8.1 (Revision of clause)

Communication and consultation with external and internal stakeholders, including all functions and levels within the organisation, should take place during all stages of the RM process.

8.2 (Revision of clause)

All persons at the workplace should be informed of the risks they face and the control measures available to manage those risks.

Section 8: Communication

8.3 (Revision of clause)

Communication can take various forms (such as meetings, staff dialogues, trainings, notice boards and various electronic means) for different groups within the organisation.

8.4 (Revision of clause)

Effective communication and consultation involve two-way dialogues between stakeholders