

**Points of “Guidelines for
Risk Assessment
(Labor and welfare minister’s
Notification ,No. 0310001,
March 10, 2006)”**

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**Japan Association of Working Environment
Measurement (JAWE)**



1 Purpose

Greater diversification and complexity in production processes

Increased use of new machinery, equipment and chemical substances

A wide variety of causes of industrial accidents, not as uniform as those that can be covered by articles of laws and regulations

In view of this situation, the revised Industrial Safety and Health Law requires employers not only to comply with the standards that are specified in laws and regulations as minimum requirements, but also to voluntarily conduct assessment of risks that individual workplaces entail.

These Guidelines specify the basic concept and actions **to facilitate the appropriate and effective implementation of individual risk assessment.**

As these are of general nature, **more detailed guidelines focusing on specific types of risks/ hazards** such as those for Chemical Substances or for Machinery Safety, should be separately developed.

Risk assessment in these guidelines constitutes the corresponding process in the **OSHMS guidelines.** (Ministry of Labor Notification No. 53, 1999).



2 Scope

These Guidelines shall be applicable to **all hazards inherent in work** associated with structures, facilities, raw materials, etc., work practices or other work-related factors.



3 Implementation

- (1) The identification of hazards involved in job by workers
- (2) An estimation of risks, that is, the severity and the extent of possibility of occurrence of injuries or diseases that might be caused by the hazards identified in item (1)
- (3) Setting priorities to reduce the risks estimated under item (2), and examining risk reduction measures
- (4) Implementing risk reduction measures in accordance with priorities set under item (3)



4 Organizational Structure

- a) **The responsible person for the supervision /management of the Risk Assessment**
the person who supervises and manages an overall business undertaking

- b) **The person in charge of implementation of risk assessment and control measures**
a safety supervisor, a health supervisor, etc.,

- c) **Participation of workers should be secured**
through opportunities such as a safety and health committee stipulated by law

- d) **To identify hazards, estimate risks and examine risk reduction measures.** employer shall strive to assign a person such as a foreman who is well acquainted with specific work details

- e) **Risk assessment and control measures relative to machinery and equipment** employer shall strive to have person(s) who have technical knowledge regarding the relevant machinery or equipment participate in such activities.

- f) **Persons designated for risk assessment and control measures above** employer shall provide necessary education and training

5 Implementation Timing

When to implement risk assessment and control measures when work specified in “a” through “e” below is planned or conducted.

- a. When a structure is installed, relocated, modified or dismantled
- b. When a facility is newly introduced or a change is made to
a facility
- c. When a raw material is newly adopted or changed
- d. When a working method or working procedures are newly adopted or changed

When risks perceived in a workplace change or are likely to change, such as in the following cases:

- a. If an industrial accident occurred and problems were found
in the contents of risk assessment and control measures conducted in the past
- b. when the quality of machinery, equipment, etc., has been degraded due to aging,
- c. when workers do not have adequate knowledge and/or

6 Determination of Objects of Risk Assessment

If the occurrence of injuries or diseases is reasonably possible due to hazards associated with **that specific work**,

the work should be the object of risk assessment

Those works, however, that are expected to cause only minor injuries or diseases such as walking on a flat walkway can be excluded.

The following shall be taken into consideration,

- 1) The actual situation of work sites,
- 2) Not only routine work but also **non-routine, temporary work** such as maintenance/repair of machinery



7 Collection of Information

Information needed are on;

Work standards, operation procedures, etc.

Hazards relative to machinery, equipment, materials, etc., that are used, such as specifications and material safety data sheets (MSDS)

Supplementary information of work environment such as the layout of machinery and equipment, etc.

The results of working environment measurements, etc.

Actual work situation, such as whether it is performed under sub-contract , sub-sub-contract, or workers from different companies work together in one place and danger exists arising from several kinds of operations performed in a single location

Actual cases of occurrences of accidents and statistics on accidents so far for the same/similar type of work.

Other materials and information relevant to implementing risk assessment and control measures



In gathering information, the employer shall take note of the following ;

- a) In introducing new machinery, equipment, etc., require the **manufacturer** of such machinery, equipment, etc., the results of risk assessment and control measures taken,
- b) In using or remodeling machinery, equipment, etc., that is not owned by the employer, obtain the results of risk assessment and control measures taken by **the person or company that owns management title over such facilities.**
- c) When multiple sub-contractors conduct work in one location, each employer shall obtain the results of risk assessment and control measures conducted by the **principal employer** to prevent an industrial accident due to the machinery and equipment used and performance of different types of work at one location.



8 Identification of Hazards

Based on work standards, etc., the employer shall examine work in detail by appropriate work units , and identify hazards inherent in each work unit



9 Estimation of Risks

Estimate risks and **determine priorities** to reduce risks, using a method such as those described below, taking into consideration the severity and the extent of possibility of the occurrence of injuries or diseases that may be caused by hazards.

However, with respect to diseases caused by chemical substances, etc., the employer can estimate risks in consideration of the level of toxicity of and the extent of exposure to chemical substances, etc.



- (1) A method of using a Table in which relatively estimated "severity" of injuries or diseases and relatively estimated extent of "possibility" of the occurrence of injuries or diseases are plotted on vertical and horizontal axes,
- (2) A method in which the extent of possibility and the severity are numerically expressed based on prescribed criteria, and such numerals are added or multiplied to estimate the degree of risk
- (3) A method in which risks are estimated by branching on step by step basis the severity and the extent of possibility



In estimating risks as specified above, the employer shall take note of the following matters.

- a) Accurately identifying those persons who may suffer estimated injuries or diseases and the details of such injuries or diseases**
- b) Estimating the severity of the most serious injuries or diseases by assuming the worst possible case, rather than using the severity of injuries or diseases that actually occurred in the past**
- c) Use principally the number of days absent, etc., as the common criteria to measure the severity of injuries or diseases regardless of their type,**



The employer shall estimate risks as specified in item (1) according to the characteristics of machinery, equipment, work, etc., for each type of injury or disease listed below.

- (a) Nature of possible accidents or diseases such as “being caught in machinery”, “falling”, explosion/ fire, poisoning, disorders caused by vibration, etc.,**
- (b) Reliability of functions/measures to prevent industrial accidents such as the installation of safety devices and “off limits” measures as well as the ability to maintain such functions or measures.**
- (c) Possibility of undoing or ignoring safety functions**
- (d) Possibility of foreseeable intentional or accidental incorrect use or dangerous behavior, such as deviation from work procedures or errors in handling**



10 Study and Implementation of Risk Reduction Measures

The employer shall ensure that the measures required by laws and regulations are fully implemented. In addition, the employer shall study and implement measures for reducing risks in the order of priority given below.

- 1) Measures from the design and planning stage, such as elimination of dangerous work or adoption of safer work**
- 2) Engineering measures to prevent or reduce risks such as the installation of interlocks and local exhaust ventilation systems**
- 3) Administrative measures such as the preparation of instruction manuals, education & training**
- 4) Use of personal protective equipment**



In studying measures as specified above, the risk reduction measures to which a higher priority is given must be implemented in as many cases as possible, except for cases in which the burden incurred to reduce such a risk is substantially greater than the expected effect of preventing accidents and leads to a significant imbalance between the cost and effect, and where the implementation of such measures is considered highly irrational.

If a long time is required to implement appropriate measures for risks that might lead to fatalities, residual disability or severe diseases, provisional measures shall immediately be taken.



1 1 Recording

The employer shall maintain a written record of the following activities.

- A) Examined work
- B) Identified risks
- C) Estimated risks
- D) Priorities established for risk reduction measures
- E) Implemented risk reduction measures

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