

Introduction to the JISHA's surveys on the Risk-Assessment/OSHMS disseminated situation and measures to be taken for their promotion

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1. Background of the Surveys

The Industrial Safety and Health Act (ISH Act) of Japan was revised (note) to be effective in April 2006 to stipulate, without penalty, that employers should make efforts to implement Risk Assessment (RA) at their workplaces.

While RA and OSHMS were considered to be very effective in preventing work-related accidents, it was also pointed out that they might bring about issues such as shortage in competent manpower, or operational and technical problems when they are more widely disseminated in the future.

This is the background that the JISHA implemented two surveys on RA and OSHMS recently, which will be the basis of my presentation in the Seminar at the APOSHO annual meeting in Mauritius.

(note)

Along with the compulsory implementation of RA based on the article 28-2 of the ISH Act, following favorable conditions started to be applied to workplaces that would start OSHMS:

① conditions based on the laws concerned:

- The employers of these workplaces will be exempted from the report to a local labour inspection office about the machines at their workplace.
- Special discount on workmen's compensation premiums; this is applicable only to small or medium-sided workplaces.

② conditions to be applied to specific employers

- Special discount on premiums of private accident insurances purchased by workplaces that have been certified OSHMS according to the JISHA Standard.

2. Method and Purpose of the Surveys

Survey (1) entitled *Study on Risk-Assessment and OSHMS disseminated situation and measures to be taken for their promotion*, prepared by a committee established inside the JISHA, **and targeting:**

The result of the questionnaire responded by 271 workplaces and the interviews with 19 workplaces, both of which had been selected from workplaces that had participated in JISHA's seminars, to be summarized as a study on RA/OSHMS dissemination, the effects of their introduction, and measures to be taken for their promotion advisable to OSH organizations

Survey (2) entitled *Survey result of the OSHMS implementation*, **targeting:**

The current situation of implementing OSHMS responded by 361 workplaces, which were members of an OSHMS-Promoting Council, whose secretariat was functioned by JISHA

3. Results of the Surveys

3.1.1 Awareness of the revised ISH Act and related regulations enforcing RA and OSHMS

The very first thing that employers should do is to grasp the contents of the revisions when a law is revised. Chart 1 shows the situation of awareness among employers of the revised ISH Act clarified through three different questions, where the data basis is a group of employers who are interested in introducing RA/OSHMS in comparison with another group of those who are not.

Question 1: awareness of the revision of the Act

It is found out that the Act's revision is widely known among employers whether they are interested in introducing RA/OSHMS or not; 98.5% of those who are interested know the revision, and 91.0% of those who are not.

Question 2: awareness of compulsory efforts to implement RA

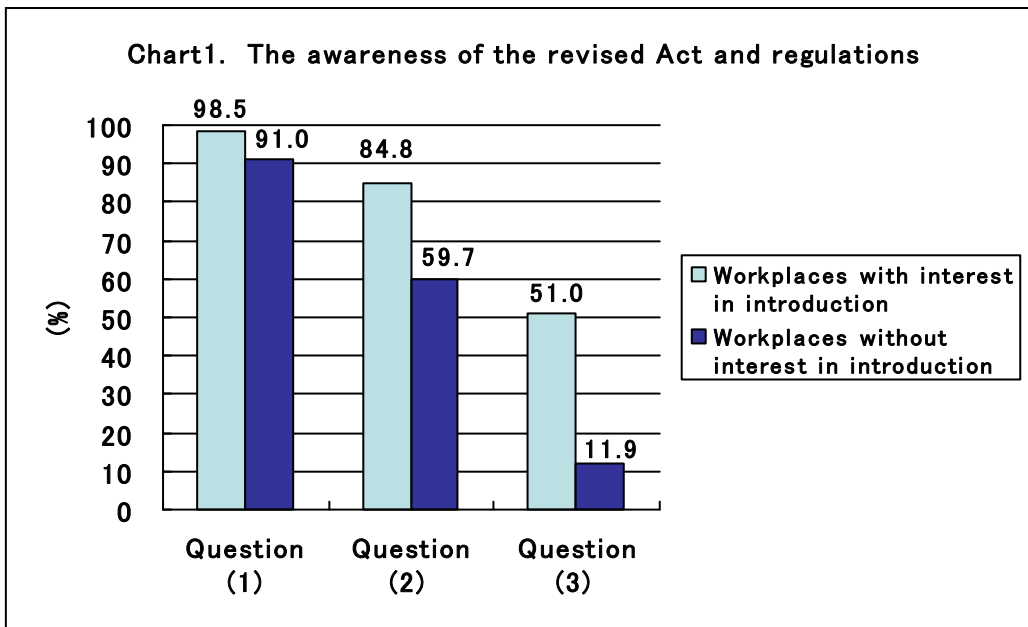
While 84.8% of employers who are interested in RA/OSHMS know the new stipulation that employers should make efforts to implement RA, only 59.7% of those who are not interested in the introduction know the fact, 25.1 percentage lower than the former group.

Question 3: awareness of exemption from reporting to the authority concerned

As regards the treatment that employers who implement RA/OSHMS will be exempted from reporting the machines of the workplace to a local

labour inspection office (see note in 1 above), 51.0% of employers who are interested in RA/OSHMS know the treatment, whereas only 11.9% of those who are not interested know that, 39.1 percentage lower than the former group.

As shown above, employers are well aware of the revision of the ISH Act in 2006, but as far as its detailed knowledge is concerned, those who are interested in introducing RA/OSHMS know the details better than those who are not.



3.1.2 Accident rate per 1,000 workers

Chart 2 shows accident rates per 1,000 workers (Accident Rate 1,000) for workplaces which have fully or partially introduced RA/OSHMS as compared with all the others including those who are just planning, considering the introduction or having no plan.

$$\text{Accident Rate 1000} = \frac{\text{The number of industrial injuries in a year}}{\text{The average number of workers in a year}} \times 1,000$$

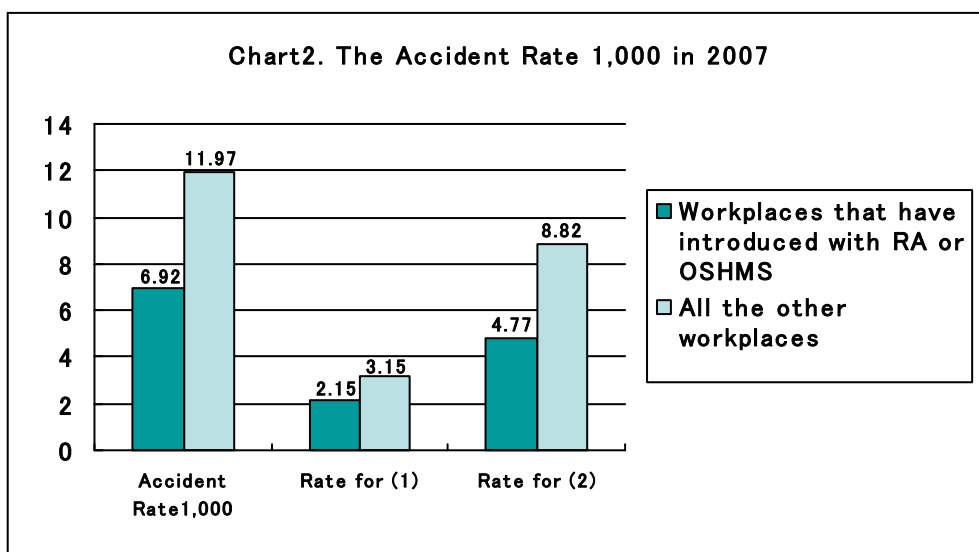
The number of industrial injuries in a year is the sum of (1) and (2):

(1) the number of accident causing absence from work in a year

(2) the number of accidents causing no lost days in a year

The accident rate 1,000 ((1)+(2) above) for workplaces that have introduced RA/OSHMS is 6.92 whereas that for all the others is 11.97. As their components, the rates on the basis of accidents causing absence from work ((1) only) are: 2.15 for workplaces that have introduced RA/OSHMS, and 3.15 for all the others. The rates on the basis of accidents causing no lost days ((2) only) are: 4.77 for those who have introduced the system(s), and 8.82 for all the others.

These data tell us that work-related accidents take place less frequently at workplaces that have introduced RA/OSHMS than at all the others, including workplaces which are just planning, considering the introduction or having no plan.



3.1.3 Effects of introducing RA or OSHMS in the workplace

(1) Effects of introducing RA

The main effects gained from introducing RA are raised as follows:

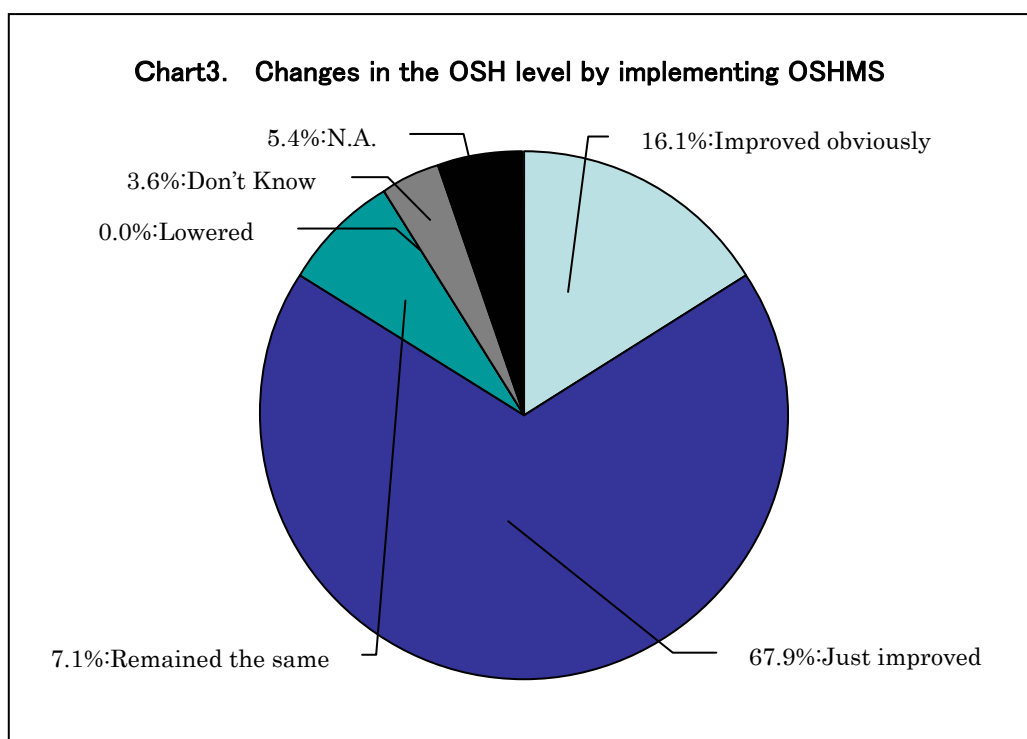
- Information on risks residing in the workplace has been shared by all the people involved (82.0%)
- Risks have been prioritized in rational order (54.7%)
- Measures for intrinsic safety have been taken (38.1%)

(2) Effects of introducing OSHMS

The main effects gained through introducing OSHMS are:

- OSH activities have been revitalized (76.0%)
- The OSH level has been improved (69.3%)
- Risks in the workplace have been reduced (68.0%)

According to the Chart 3 which shows the changes in OSH level after OSHMS has been established, 84.0% of the workplaces concerned responded that the level has been just improved or obviously improved.



3.2 Current situation of RA/OSHMS and Issues for their dissemination

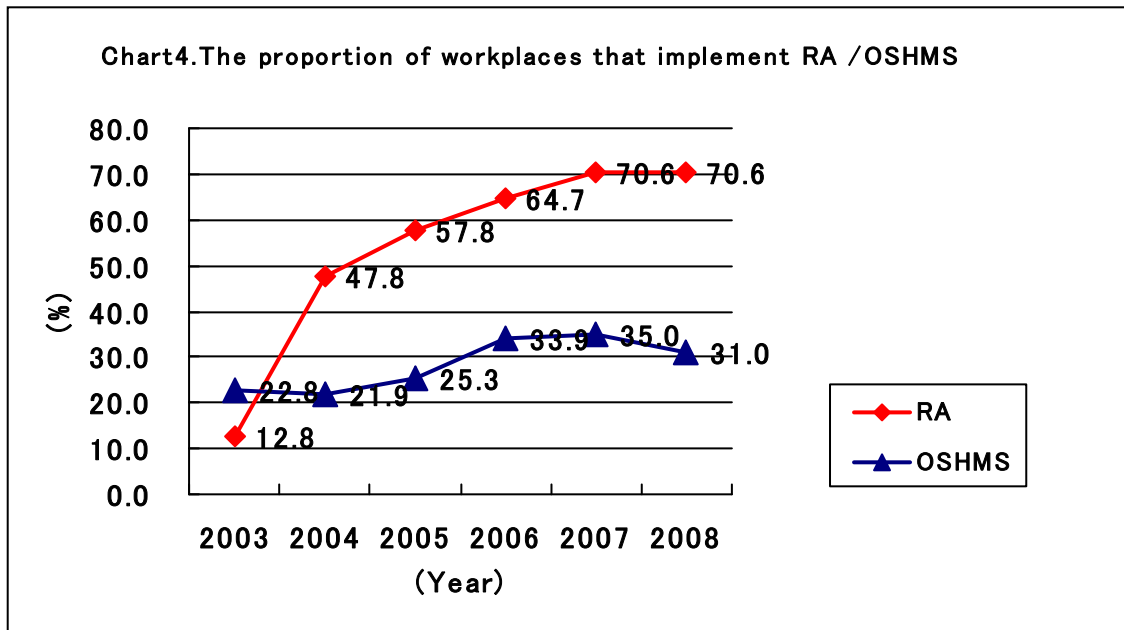
3.2.1 Current situation of RA/OSHMS

Chart 4, whose data derives from those collected annually, shows the proportion of workplaces that have introduced RA and OSHMS, respectively. (note)

The proportion for RA, after sharply rising in 2004, progressed steadily by 6-10 percentages annually in 2004-2007, but then it became flat in 2008.

The proportion for OSHMS was increasing gradually from 2003 till 2007 to reach the level of only 20-30 percent, and then declined a bit in 2008, reflecting the situation that the OSHMS guideline was issued from the

government in April, 1999, that the revised ISH Act came into effect in 2006, and that JISHA started the OSHMS Certification Service to support employers in 2003.



(note) This is a sample survey where respondents change year by year, which may attribute to some volatility in the data level. We may also say that the rate will have some upward bias in level as compared with nationwide average level because the samples are selected among enterprises that have participated in JISHA's training courses positively.

3.2.2 Issues for disseminating RA/OSHMS

3.2.2.1 Reasons for no plan to introduce RA/OSHMS

As the survey result, the number of workplaces with no plan to introduce RA was 84 out of the total 271 respondents; the proportion was 31.0%, and the number for OSHMS was 132, sharing 48.7 %. The reasons why having no plan to introduce RA or OSHMS, questioned to those workplaces, are shown below.

(1) Reasons for no plan to introduce RA

The Following are the main reasons for no plan for RA:

- Still not prepared very well in the workplace (40.5%)
- Lack of well-informed manpower (36.9%)
- Difficult to save enough time to implement (33.3%)

(2) Reason for no plan to introduce OSHMS

The Following are the main reasons for no plan for OSHMS:

- Still not prepared very well in the workplace (41.7%)
- Lack of well-informed manpower (38.6%)
- Difficult to save enough time to implement (34.1%)

As shown above, comparing the case of RA with that of OSHMS, exactly the same factors were named as the reasons for no plan of its introduction at almost the same level of magnitude. It is also found out that the biggest issue was how to make enough preparations for the implementation in the workplace.

3.2.3 Necessary arrangements to prepare for implementation

(note) The analysis of this section is based only on the responses by workplaces that have already introduced RA and/or OSHMS.

(1) Arrangements for RA implementation

The result of the survey questioning necessary arrangements to prepare to make in the workplace for implementing RA is shown in Chart 5. The main arrangements to make that were raised in the responses are:

- To gain understanding/cooperation of workers involved in the operation (85.7%)
- To gain understanding/cooperation of line managers (64.3%)
- To upgrade the skill of OSH staff (57.1%)

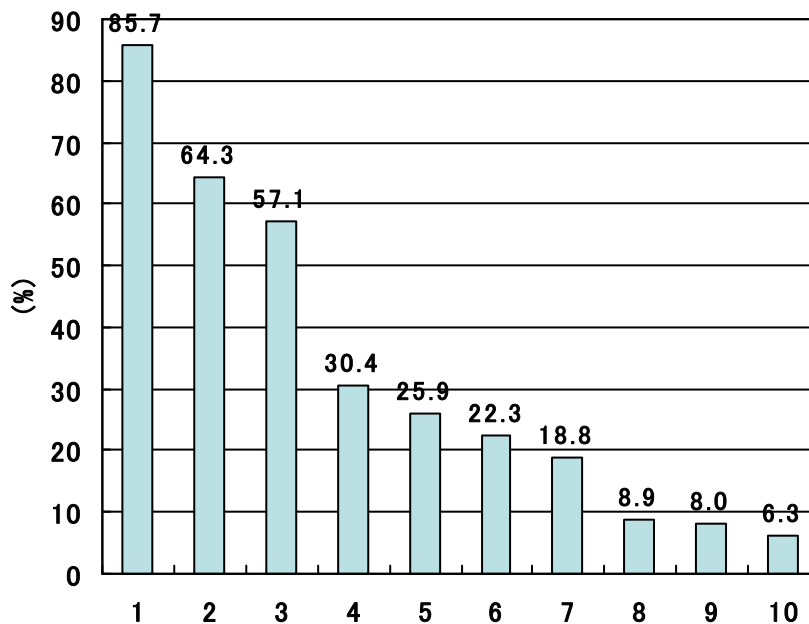
(2) Arrangements for OSHMS implementation

Likewise, the main arrangements for OSHMS raised in the responses are:

- To gain understanding/cooperation of workers involved in the operation (73.2%)
- To gain understanding/cooperation of line managers (57.1%)
- To upgrade the skill of OSH staff (48.2%)

As shown above, as preparations for implementation, the same factors were selected for both the cases of RA and OSHMS, and among them, the most important one was to gain understanding of workers in the workplace.

Chart5. Necessary arrangement to prepare for RA implementation (n=56)



- 1:To gain understanding/cooperation of workers involved in the operation
- 2:To gain understanding/cooperation of line managers
- 3:To upgrade the skill of OSH staff
- 4:To gain the RA information from other workplaces
- 5:Participation of engineers in RA
- 6:To increase the number of OSH staff
- 7:To gain understanding of top management
- 8:Assistance from outside the workplace
- 9:To gain cooperation from the headquarters
- 10:The others

3.2.4 Effective or necessary assistance from outside the workplace in implementing and operating RA/OSHMS

3.2.4.1 External assistance that was effective or necessary for RA

(1) At the stage of introducing RA

Assistance that employers got from outside the workplace and that was effective and/or necessary for implementing RA at the introducing stage was:

- Manuals that illustrate how to prepare for RA (49.6%)
- Training which is open to the public for manpower development

(35.3%)

- Lecturers-sending service for in-house training (30.2%)

(2) At the stage of starting to operate RA

External assistance that was effective and/or necessary at the stage of starting to operate RA was:

- Manuals that illustrate how to prepare for RA (38.8%)
- Information on other employers' good practice (36.0%)
- Consulting service for improving RA operation (34.5%)

3.2.4.2 External assistance that was effective or necessary for OSHMS

(1) At the stage of introducing OSHMS

External assistance that was effective and/or necessary at the stage of introducing OSHMS was:

- Training on OSHMS that is open to the public (52.0%)
- Manuals that illustrate how to forward OSHMS (38.7%)
- Consulting service for establishing OSHMS (30.7%)

(2) At the stage of starting to operate OSHMS

External assistance that was effective and/or necessary at the stage of starting to operate OSHMS was:

- Training on OSHMS that is open to the public (50.7%)
- Manuals that illustrate how to forward OSHMS (37.3%)
- Training on RA which is open to the public (32.0%)

3.3 Suggestions to OSH organizations for promoting RA/OSHMS

Based on the Survey (1), the committee concerned established inside the JISHA made a set of suggestions as below to work-related accidents prevention organizations or other OSH-related organizations from a viewpoint of further promoting RA and OSHMS.

(1) Approach to workplaces that have not yet introduced RA/OSHMS

The committee suggested to organizations concerned that they should inform the workplaces that have not yet introduced RA/OSHMS of following information to encourage them to introduce the system(s).

① Information to provide in relation to RA

- The fact that the introduction of RA normally has positive effects not only on the reduction of accidents but on such phenomena as; information on risks in the workplace will come to be shared by all;

the order of prioritized risks to take measures against will be rationally decided; measures against residual risk will become revitalized; measures towards intrinsic safety will come true, and communication in the workplace will improve.

- The fact that lots of employers say it was not so difficult as they thought before introduction.
- ② Information to provide in relation to OSHMS
 - The fact that the introduction of OSHMS normally contributes not only to the reduction of accidents but to realizing to implement activities concerned across the organization as a whole and to revitalizing OSH activities.
 - The fact that, as is the case with RA, lots of employers say it was not so difficult as they thought before introduction.
 - The fact that the whole process will end up with producing necessary documents so that regulatory compliance will become more practical.

(2) Approach to workplaces that are planning to introduce RA/OSHMS

The committee suggested that organizations concerned should advise such workplaces to refer to the following measures which have been proven easy to introduce based on employers' past experience.

① Measures for RA

- To target all employees at all levels for essential training
- To develop the system to be applied to the other workplaces by starting with making a trial at a specific workplace followed by revising operational methods or risk estimation standards
- To form a taskforce team across the organization to bring in common issues of each workplace
- To revise an operation-procedural manual to make it easier to specify hazards/harm, and then to utilize it for establishing and revising risk estimation standards
- To implement RA in relation to existent activities of KY, near-miss report, or QC(quality-control)

② Measures for OSHMS

- The fact that a top manager should strongly declare a principle and take a leadership in the activity
- To organize a OSHMS-Promotion Meeting across different sections regularly to monitor the advancement at each section, or to establish

the OSHMS-promotion secretariat comprising a representative of each section to supervise the activities and conduct education

- To regularly and repeatedly explain the significance, effects and a plan of introducing the system to people at all levels and all sections, and to ask for their understanding
- To save enough time for necessary education on a monthly or bi-monthly basis

(3) Approach to workplaces that have been operating RA/OSHMS

The committee suggested that organizations concerned should advise such workplaces to refer to the following measures which have been demonstrated, by employers' past experience, to be easy to disseminate across workplaces and to help get better performance.

① Measures for RA

- To prepare for occasions to communicate among workers, in the organization as a whole or at each workplace, for the information of good practices or measures that are more effective in improving the performance
- To implement RA with full participation of staff, and to have a well-experienced staff check the dispersion in risk estimation across different sections to resolve issues around risk estimation
- To specify hazards/harm, or to set numerical targets on risk reduction to monitor their progress monthly
- To implement RA to highly prioritized machinery for their risk reduction with experts of technical and maintenance sections involved

② Measures for OSHMS

- To implement internal audit involving experts from the headquarters or a mother company; to increase the number of internal auditors to mitigate their burden per person; to organize a workshop to convey points for the internal audit in advance
- To have each section report several times a year such regular activities as KY, near-miss report, 4S or in-house patrol to monitor their progress
- To add some items that are unique with each section, independently of requirements of the OSHMS; to rank or to commend sections/persons to encourage their continued improvement