

Risk Analysis at Work

Risk Analysis

All employers are required to carry out risk assessment. This is defined as the methodology that predicts likelihood of industrial explosions, workplace injuries, natural catastrophes, injury/ death due to voluntary sport activities, diseases caused by chemical exposure, death due to natural causes and death by lifestyle choices. It must be reviewed and revised regularly, and the findings recorded in a written statement. There are no specific requirements on substance and procedures of risk assessment. This assessment must be consisted with identification of present hazards and an estimate of the extent of the risks involved, taking into account whatever precautions already have been taken.

Process

1. hazard identification;
2. risk evaluation;
3. risk elimination;
4. risk minimization;
5. risk control;
6. personal protection.

Results

- measurements of concentrations and intensities of working condition factors for which a hygiene limit is given;
- identification of kind and type of biological agent which is hazardous for human health;
- number of workers in individual categories;
- way of ensuing protection of workers health.

Health Risk Assessment

System of categorization of work operations based on monitoring different harmful factors in the workplace.

Main Parameters

1. dust (concentration of specific kind of dust in working atmosphere per 8 hours);
2. chemical substances, carcinogens, mutagens (concentration in working atmosphere per 8 hour shift, exceeding of MAC, skin penetration possibility, values of parameters of biological exposure);
3. noise (level per 8 hour shift, average group increase of hearing loss according to special law);
4. vibrations (level of vibration acceleration according to special law);
5. atmospheric pressure (i.e. when working in increasing atmospheric pressure);
6. biological agents;
7. physical load (full shift energy output, minute energy output, average heart rate per shift, average muscular strength and number of movements per shift, weighted mass hand transferred according to sex);
8. working position (i.e. work activity in unacceptable position arrangement of workplace);
9. thermal exposure (microclimate conditions acceptable per shift, necessity of regime measures);
10. cold exposure (work involving permanently being outdoors in winter months, work in air conditioned areas, exposure to extreme changes in temperature);
11. physical burden (monotony, forced work pace, permanent computer work, shift rotation, repeated physical movement);
12. visual burden (enlargement of detail on screen).

Links

Related articles

Sources

References

Bibliography

- BENCKO, Vladimír, et al. *Hygiene and Epidemiology : Selected Chapters*. 2nd edition. Prague. 2008. ISBN 80-

