DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,
CHHATRAPATI SAMBHAJINAGAR.

CIRCULAR NO.SU/Sci & Tech./Diploma/53/2024.

It is hereby inform to all concerned that, on the recommendation of The Dean of Faculty of Science & Technology; the Academic Council at its meeting held on 05.06.2024 has accepted the ***"One Year Diploma in Industrial Health (DIH)"*** University Campus Under the faculty of Science & Technology.

This is effective from the Academic Year 2024-25 onwards as per appended herewith.

All concerned are requested to note the contents of the circular and bring notice to the students, teachers and staff for their information and necessary action.

University campus,
Chhatrapati Sambhajinagar-431 004.
Ref. No.SU/Dip./syllabus./2024-25/9950-57
Date: 27.11.2024

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Deputy Registrar,
Academic Section.
(Syllabus)

Copy forwarded with compliments to :-

1] **The Director, Entrepreneurship and Skill Development Centre, Dr.Babasaheb Ambedkar Marathwada University.**

2] **The Director,** University Network & Information Centre, UNIC, with **a request to upload the curriculum along with this Circular on University Website.**

Copy to :-

1] **The Director, Board of Examinations & Evaluation,** Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

2] The Section Officer, [B.Voc Unit] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

3] The Programmer, [Computer Unit-1] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

4] The Programmer, [Computer Unit-2] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

5] The In-charge, [E-Suvidha Kendra], Rajarshi Shahu Maharaj Pariksha Bhavan, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

6] The Public Relation Officer, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

7] The Record Keeper, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

Dr. Babasaheb Ambedkar Marathwada University

Chhatrapati Sambhajinagar- 431001

(Maharashtra, India)

Entrepreneurship and Skill Development Centre

One Year

'Diploma in Industrial Health'

(Distance Mode)

Course Structure

(Based on NEP-2020)

Based on General Guidelines from :
World Health Organization, Geneva
International Labour Organization, Geneva
The Indian Legislations on OSH, Govt. of India

Effective from 2024-25

PREFACE

Factory Medical Officers (FMOs) are essential in maintaining the health and safety of workers in industrial establishments. They oversee a wide range of responsibilities, including occupational health and safety, emergency medical response, preventive health measures, management of occupational diseases, health surveillance, legal compliance, worker education and training, psychological support, and liaison with management.

FMOs conduct regular health check-ups, monitor workplace conditions, and ensure compliance with occupational health and safety regulations. They provide immediate medical attention in case of accidents or medical emergencies, reducing the severity of injuries and improving recovery outcomes. They implement preventive health measures, such as vaccinations, health education, ergonomic assessments, and promoting healthy lifestyles, reducing the risk of diseases and injuries among factory workers.

FMOs also ensure legal compliance, maintaining proper medical records and conducting health risk assessments. They educate workers about potential health risks and provide psychological support to address mental health issues. They act as a bridge between workers and management, providing insights and recommendations on improving workplace health and safety policies. To summarize, Factory Medical Officers play a crucial role in ensuring a healthier, safer, and more productive work environment for both employees and employers.

Importance of Factory Medical Officers can be highlighted through several key aspects:

1. Occupational Health and Safety

FMOs are responsible for monitoring and maintaining the health and safety of factory workers. They conduct regular health check-ups, monitor workplace conditions, and ensure compliance with occupational health and safety regulations. This helps in preventing work-related illnesses and injuries, thereby promoting a healthier and safer work environment.

2. Emergency Medical Response

In case of workplace accidents or medical emergencies, FMOs provide immediate medical attention. Their presence ensures that injured or ill workers receive prompt and effective care, which can significantly reduce the severity of injuries and improve recovery outcomes. Quick response during emergencies can be life-saving and reduces downtime caused by accidents.

3. Preventive Health Measures

FMOs implement preventive health measures to reduce the risk of diseases and injuries among

factory workers. This includes vaccinations, health education, ergonomic assessments, and the promotion of healthy lifestyles. By focusing on prevention, FMOs help in minimizing absenteeism and enhancing overall workforce productivity.

4. Management of Occupational Diseases

Factory workers may be exposed to various occupational hazards, including chemical, physical, and biological agents. FMOs are trained to identify, diagnose, and manage occupational diseases. They work closely with management to modify work processes and environments to mitigate these risks, ensuring long-term health and safety of employees.

5. Health Surveillance

Regular health surveillance by FMOs helps in early detection of health issues that may arise due to occupational exposure. This includes monitoring workers for signs of stress, fatigue, and other health problems. Early intervention can prevent minor health issues from becoming major problems, ensuring a healthier workforce.

6. Legal Compliance

FMOs ensure that factories comply with national and international health and safety regulations. This includes maintaining proper medical records, conducting health risk assessments, and ensuring that the workplace meets all required health standards. Compliance with these regulations not only protects workers but also shields the company from legal liabilities and potential fines.

7. Worker Education and Training

FMOs educate workers about potential health risks associated with their jobs and train them on how to minimize these risks. This includes proper use of personal protective equipment (PPE), safe handling of hazardous materials, and best practices for maintaining health and hygiene. Educated workers are better equipped to protect themselves, reducing the incidence of workplace injuries and illnesses.

8. Psychological Support

The industrial environment can be stressful, and FMOs provide psychological support and counseling services to workers. Addressing mental health issues is crucial for maintaining overall well-being and productivity. FMOs help create a supportive environment where workers feel valued and cared for, enhancing job satisfaction and morale.

9. Liaison with Management

FMOs act as a bridge between workers and management, ensuring that health and safety concerns are effectively communicated and addressed. They provide management with insights and recommendations on improving workplace health and safety policies, contributing to a proactive approach to worker well-being.

10. Enhancing Productivity

Healthy workers are more productive, and FMOs contribute directly to enhancing productivity by ensuring that workers are in optimal health. By reducing the incidence of work-related illnesses and injuries, FMOs help maintain a steady and efficient workforce, which is critical for the smooth operation of industrial activities.

In summary, Factory Medical Officers are integral to maintaining the health and safety of workers in industrial settings. Their roles encompass a wide range of responsibilities, from emergency medical care and health surveillance to preventive measures, legal compliance, worker education, and psychological support. The presence of FMOs ensures a healthier, safer, and more productive work environment, benefiting both employees and employers.

Structure of One Year Diploma in Industrial Health (Distance Mode)

Structure of Semester – I

Subject Type	Subject Code	Subject Title	Teaching Scheme (Hrs / Week)		Credits Assigned		Total Credits	Maximum Marks	Passing Marks
			Theory	Project/ Tutorial	Theory	Project/ Tutorial			
Theory - 1	DIH-1	Industrial Management of Occupational Safety and Health	04	00	04	00	04	100	50
Theory - 2	DIH-2	Occupational and Environmental Health	04	00	04	00	04	100	50
Theory - 3	DIH-3	Industrial Safety and Hygiene	04	00	04	00	04	100	50
Theory - 4	DIH-4	Occupational Safety and Health : Statutes and Standards	04	00	04	00	04	100	50
Project and Tutorial	DIH-5	Project and Tutorial	00	12	00	06	06	100	50
			16	**12**	**16**	**06**	**22**		

Structure of Semester – II

Subject Type	Subject Code	Subject Title	Teaching Scheme (Hrs / Week)		Credits Assigned		Total Credits	Maximum Marks	Passing Marks
			Theory	Project/ Tutorial	Theory	Project/ Tutorial			
Industrial Visits, Practical and Demonstration-1	DIH-6	Industrial Visits, Practical and Demonstration	00	16	00	08	08	200	100
On-the-Job Training-1	DIH-7	On-the-Job Training	00	16	00	08	08	100	50
Dissertation and Seminar-1	DIH-8	Dissertation and Seminar	00	12	00	06	06	200	100
			00	**44**	**00**	**22**	**22**		

Eligibility:

- Candidate should possess MBBS/BDS/BAMS/BHMS Degree recognized by Respective Medical Council
- Two years clinical experience after completion of the compulsory internship period (or) one year industrial experience as factory medical officer
- Higher education such as MD/MS/MCH/DNB/Diploma in medicine etc. will be given additional weightage for selection

Selection Criteria for Admission:

- Point Rating System will be followed.
- One mark will be given to any additional diploma in medicine
- Two Marks will be given to any additional PG qualification such as MD/MS/MCH/DNB etc.
- Two marks will be given to each year of clinical experience after completion of compulsory internship
- Three Marks will be given to every year of completion of experience in industry/ mines/docks/construction/plantation etc. as a Medical Officer.
- In case tie among candidates with same score, age-wise seniority will be considered.
- Short – Listed candidates will be called for personal interview

Credit-to-contact hour Mapping:

(a) One Credit would mean equivalent of 15 contact hours for theory lecture.

(b) For lab course/ workshops/internship/field work/project, the credit weightage for equivalent hours shall be 50% that for lectures.

Departmental Committee:

The Departmental Committee (DC) of the Centre will monitor smooth functioning of the program.

Results Grievances / Redressal Committee:

Grievances / Redressal committee should be constituted in the department to resolve all grievances relating to the evaluation. The committee shall consist of Head of the department, the concerned teacher of a particular course and senior faculty member of Department of Committee. The decision of Grievances / redressal committee will have to be approved by Department committee.

Evaluation Methods:

Theory Examination:

- There will be Semester End Examination (SEE) of 70 Marks comprising 35 MCQ questions of 02 marks for each course. Duration of the exam will be of 150 minutes.
- There will be 30 Marks Oral Examination for each course as part of Continuous Internal Assessment (CIA)
- There will be 50 marks combined passing criteria (SEE + CIA) for each theory course
- The Theory Examination has to be written at the University Centre, Chh. Sambhajinagar

Evaluation of Project and Tutorials:

- There will be end semester examination of 100 Marks
- Viva: 40 Marks, Project Work and Tutorials: 30 Marks, Instrumentation: 30 marks.
- There will be 50 marks passing criteria for Project and Tutorials

Students must submit an original project work carried out in occupational health domain related to workers in registered factories, mines, dock works, construction works, and plantation works. Projects may include primary data/ secondary data. Completion and submission of detailed project report and two tutorials by each student will be mandatory. The project report should contain following contents in same order:

1. Title
2. Structured Abstract
3. Introduction
4. Review of Literature
5. Materials and Methods
6. Results and Analysis
7. Discussion
8. Conclusion
9. References

The Content of the Project Report should be about 15,000 words and tutorials should be about 5,000 words.

Evaluation of Industrial Visits, Practical and Demonstration:

Semester- End practical examination will be conducted based on modules trained under practical coursework. Following evaluation pattern will be followed:

There will be end semester examination of 200 Marks

Industrial Visit: 80 Marks; Instrumentation: 50 Marks, Viva: 50 Marks, Journal: 20 Marks

There will be 100 marks passing criteria for Practical and Demonstrations

Evaluation of On-the-job training:

Semester- End evaluation will be conducted based on routine performance of the candidate. Following evaluation pattern will be followed:

- There will be end semester examination of 100 Marks
- Viva: 50 Marks, Case Studies: 30 Marks, Journal/Log Book: 20 marks
- There will be 50 marks passing criteria for On-the-job training.

Evaluation of Dissertation and Seminar:

Semester- End evaluation will be conducted based on Preparation of dissertation, Seminar presentation and dissertation defense. Topic of dissertation should be chosen from problem identified during on-the-job training, after completion of Theory Sessions in Semester I. The contents of dissertation should be about 30,000 words.

The Dissertation should contain following contents in same order:

1. Title
2. Structured Abstract
3. Introduction
4. Problem Statement & Hypothesis
5. Review of Literature
6. Materials and Methods
7. Results, Analysis and Discussion
8. Conclusion and Future Scope
9. References

Following evaluation pattern will be followed:

- There will be end semester examination of 200 Marks
- Dissertation: 100 Marks, Seminar presentation and dissertation defence: 100 Marks
- There will be 100 marks passing criteria for Dissertation and Seminar.

Earning Credits:

At the end of every semester, a letter grade will be awarded in each course for which a student had registered. A student's performance will be measured by the number of credits that he/she earned by the weighted Grade Point Average (GPA). The SGPA (Semester Grade Point Average) will be awarded after completion of respective semester and the CGPA (Cumulative

Grade Point Average) will be awarded at the respective exit point.

Grading System:

The grading reflects a student-own proficiency in the course. A ten-point rating scale shall be used for the evaluation of the performance of the students to provide letter grade for each course and overall grade for the Bachelor Programme. Grade points are based on the total number of marks obtained by him / her in all heads of the examination of the course. The grade points and their equivalent range of marks are shown in Table-I

Table – I: Ten point grade and grade description

Marks Obtained (%)	Grade Point (GPA/CGPA)	Letter Grade	Description
90-100	9.00- 10	O	Outstanding
80-89	8.00-8.99	A^+	Excellent
70-79	7.00-7.99	A	Very Good
60-69	6.00-6.99	B^+	Good
55-59	5.50-5.99	B	Above Average
50-54	5.00-5.49	P	Pass
Below 50	Below 5.0	F	Fail
Absent	Absent	Ab	Absent

- Non-appearance in any examination / assessment shall be treated as thestudents have secured zero marks in that subject examination / assessment.
- Minimum P grade (5.00 grade points) shall be the limit to clear / pass the **course / subject. A student with F grade will be considered as —failed in the** concerned course and he / she has to clear the course by appearing in the next successive semester examinations. There will be no revaluation or recounting under this system.
- Every student shall be awarded grade points out of maximum 10 points in each subject (based on 10 point scale). Based on the grade points obtained in each subject, Semester
- Grade Point Average (SGPA) and then Cumulative Grade Point Average (CGPA) shall be computed. Results will be announced at the end of each semester and CGPA will be given at respective exit point.

Computation of SGPA (Semester Grade Point Average) and CGPA (Cumulative Grade Point Average)

Grade in each subject / course will be calculated based on the summation of marks obtained in all modules.

The computation of SGPA and CGPA will be as below

- Semester Grade Point Average (SGPA) is the weighted average points obtained by the students in a semester and will be computed as follows:

$$SGPA = \frac{\text{Sum (Course Credits) X Number of Grade Points in concerned Course Gained by the Student}}{\text{Sum (Course Credits)}}$$

- The SGPA will be mentioned on the grade card at the end of every semester.
- The Cumulative Grade Point Average (CGPA) will be used to describe the overall performance of a student in all semester of the course and will be computed as under.

$$CGPA = \frac{\text{Sum (Two Semester SGPA)}}{\text{Total Number of Semester}}$$

- The SGPA and CGPA shall be rounded off to the second place of decimal.

Grade Card

Results will be declared by the Centre and the grade card (containing the grades obtained by the student along with SGPA) will be issued by the university after completion of every semester. The grade card will be consisting of following details.

- Title of the courses along with subject code opted by the student. Credits associated with the course.
- Grades and grade points secured by the student.
- Total credits earned by the student in a particular semester. Total credits earned by the students till that semester.
- SGPA of the student.
- CGPA of the student (at respective exit point).

Cumulative Grade Card

The grade card showing details grades secured by the student in each subject in all semesters along with overall CGPA will be issued by the University at respective exit point.

Syllabus for semester- I	
Course Code	**Learning Objectives**
DIH - 1	To provide the students with fundamental concepts of Industrial Operations and Hazards associated with them in factories, ports, mines, building and other construction etc.
DIH - 2	To provide the students with – i. Basic knowledge of toxicology related to different organ systems of humans with reference to hazardous substances employed in industries ii. Fundamental concepts of occupational diseases monitoring and control.
DIH - 3	To provide students with concepts of industrial safety measures, accidents causation, and control measures
DIH - 4	To provide students with fundamentals of labour laws related to occupational safety and health in pertinence to National Standards
DIH - 5	To provide students with implementation capabilities of the concepts imparted through the above theory courses (DIH 1 to 4)
Course Code	**Learning Outcomes**
DIH - 1	After completion of the course, students should be able to analyze and evaluate industry situations in pertinence to occupational safety and health
DIH - 2	After completion of the course, students should be able to correlate and appraise the environmental issues in the hazardous operations systems in industries
DIH - 3	After completion of the course students should be able to – i. confidently correlate to the physical hazards at workplace situations and ii. identify, assess and monitor, the hazardous chemicals at workplace
DIH - 4	After completion of the course, students should be able to enjudge the industry situation with regard to labour laws in reference to National policies by Government of India
DIH - 5	After completion of the course, students should be able to execute their capabilities in form of a systematic documentation/ report

Course Code/ Type/ Credits	**Course Content**	**Contact Hrs.**
DIH-1 (Theory) 04 Credits	**Industrial Management of Occupational Safety and Health** Fundamental concepts of Industrial operations, Hazardous processes involved in factories, ports, mines, building andother construction industries. Role of Management, workers,trade unions, Govt. of Central and States. Present status of Occupational Safety & Health of workers at National and International Level.	**60 Hrs**

DIH-2 **(Theory)** **04 Credits**	**Occupational and Environmental Health** Principles and relevance of toxicology related to differentorgan systems of humans, epidemiology, determinant of diseases, analytical studies, case control and cohort studies,experimental studies, data analysis, research methodology of Occupational Diseases, Notifiable diseases of occupationaldisease as per Labour statutes such as Factories Act, DockSafety Act, Mine Safety Act, Building and OtherConstruction Safety Act, ESI Act, Workman compensationAct, Env. Protection Act, etc. occupational Lung Diseases, Usage of ILO radiographs, Occupational Asthma, extrinsic allergic alveiolities and other lung diseases, physical Hazards, Chemical hazards identification, measurement and control measures, procedure for Environmental Assessment of exposure, Biological monitoring of exposure. Detail study of Notifiable diseases as per legislations such occupational Diseases agents like chromium, manganes, arsenie,mercury,lead, fluorine, beryllium, phosphorus, pesticides & insecticides, Bronchopulmonary diseases, pneumoconiosiscaused due to mineral dusts, carbon disulphided, toxic hydrocarbons, carbantetrachlorides, polychlorinatedbiphenyls, vinyl chlorid, Benzene, Toluene, Xylene, aminoderivaties of benzene, Aniline, Nitrobenzene, industrial alcohol, glycol, ketones, chemical asphyxiants (Carbonmonoxide, hydrogen cynide, hydrogen sulfide, occupational Asthama, occupational cancer, cumulativetrauma Disorder, occupational Skin diseases, ionizing radiation, vibrations at work place etc., important chemicals at work place and their threshold limits and health effects. Industrial Medical emergencies and First Aid & Treatment. About objectives / Mission / Vision of AYUSH in India.	**60 Hrs**
DIH-3 **(Theory)** **04 Credits**	**Industrial Safety and Hygiene** Concepts of Industrial Safety, industrial accidents causation, control measures of heat, Noise, vibration, illumination, radiation and other physical hazards, Accident investigation, Hazard identification, Risk assessments & mitigation. Concepts of industrial Hygiene, safe working Limits, TLV/STEL/PEL/LC50, LD50, MSDS, Work place airborne contaminants measurement and monitoring and control. Types of Personal protective equipment (PPE) and usages.	**60 Hrs**

DIH-4 (Theory) 04 Credits	**OSH statutes and standards** National policy on OS&H. The factories Act & Rules, The Dock Safety Act, The Mine Safety Act, EPA Act, The Air (pollution & control) Act, The Water (Pollution & Control) Act, MISC Rules.	**60 Hrs**
DIH-5 (Project work & Tutorials) 06 Credits	**Project Work and Tutorials** The students are required to do project work and Tutorial on the topics related to Occupational Safety & Health of workers at work (Topic to be approved by Authorities).	**180 Hrs**

Syllabus for Semester – II	
Course Code	**Learning Objectives**
DIH - 6	To provide students with - i. Real time exposure on occupational safety and health by visiting industries of different domains ii. Operational knowledge of domain through practical and demonstrations
DIH - 7	To provide the students with hands on experience in the fields of occupational safety and health domain
DIH - 8	To provide students with a guided platform to enable formulation of new models in the realm of occupational safety and health

Course Code	**Learning Outcomes**
DIH - 6	After completion of the course, students should be able to connect with operational concepts of occupational safety and health parameters
DIH - 7	After completion of the course, students should be able to execute the skills of a medical practitioners as occupational health specialist
DIH - 8	After completion of this course, students should be able to formulate individual conceptual development in the field of occupational safety, health and allied documentation

Course Code/ Type/ Credits	**Course Content**	**Contact Hrs.**
DIH-6 (Visits, Practical and Demonstrations) 08 Credits	**Industry Visits, Practical and Demonstration** The students are required to have Four industry visits at their location or at Aurangabad location arranged by BAMU whichis optional and to produce proof of visits to Authority duration : one month	**240 Hrs**
DIH-7 (On-the Job Training) 08 Credits	**On-the-Job Training** The students are required to undergo on-the-Job / Rotation training clinics/ Occupational Health Centre at their location or at	**240 Hrs**

	Aurangabad location arranged by BAMU (which is optional) for a Period of one month and to produce a proof of undergoing the said training to the Authorities.	
DIH-8 (Dissertation & Seminar) 06 Credits	**Dissertation & Seminar** The students have to undertake a Dissertation work on the topic related to Occupational Safety and Health and Submit the same to the Authorities and also to make a presentation of the same through a seminar before the Expert Committee and other audience present during presentations.	**180 Hrs**

Recommended Books & References

1. International Labour Organisation Encyclopaedia of Occupational Safety and Health, Geneva.
2. National Institute of Occupational Safety and Health-Occupational respiratory diseases, US Dept. of Health and Human Service, Washington DC (Revised), USA
3. World Health Organisalon Harmful exposure to mineral dusts, World Health Forum, 15(2)
4. Gardner AW-Current approaches to Occupational Health 2, John Wright & Sons Ltd, Bristol, London, Boston.
5. International Labour Organisation-Guidelines for the use of ILO International classification of Radiographs of Pneumoconiasis, Geneva.
6. Hunter's Diseases of Occupations, Hodder and Stoughton, London/Toronto.
7. Occupational Health Harrington and Gill, Blackwell Scientific Publication, Oxford.
8. Epidemiology of Occupational Health-WHO, European Series No 20.
9. Monitoring for Health Hazards at Work-Gill and Ashton, Grant Mcintyre, London.
10. Recent Advances in Occupational Health - MacDonald, Churchill Livingstone, London.
11. Occupational Diseases: A Guide to Their Recognition - National Institute of Occupational Safety and Health, NIOSH, Cincinnati.
12. Occupational Health Practice-Schilling, Butterworths, London.
13. Current Approaches to Occupational Medicine Ward Gardner, J. Wright, Bristol
14. Occupational Medicine - Zenz, Yearbook Publication, Chicago.
15. Epidemiology in Medical Practice - Barker and Rose, Churchill Livingstone, Edinburgh.
16. Occupational Epidemiology-Monson, CRC Press, Boca Raton

17. Early Detection of Occupational Diseases-WHO, Geneva.
18. Epidemiology: Principle and Methods Mac Mohan and Pugh, Little Brown, Boston.
19. Park's Textbook of Preventive and Social Medicine-Banarsidas Bhanot Publishers.
20. Oxford Handbook of Occupational Health, DUP-UK
21. Harrison's Principles of Internal Medicine, Mc Graw Hill
22. Industrial Safety Handbook-Handley-Mc Graw Hill
23. Industrial Hygiene Simplified, Spellman, Bernan Press
24. Patty's industrial Hygiene, Wiley
25. The factories Act 1948 and Rules (Govt. of India)
26. The Mines Act 1952 (Govt. of India)
27. The Dock Workers (Safety Health & Welfare Act (Govt. of India)
28. The Air Pollution and Control Act (Govt. of India)
29. The Water Pollution and Control Act (Govt. of India)
30. The ESI Act (Govt. of India)
31. The Workmen Compensation Act (Govt. of India)
32. The MISHC Rules (Govt. of India)
33. The National Policy on OSH (Govt. of India)
34. The Building and Other Construction work Act (Govt. of India)
35. The Environmental Protection Act (Govt. of India)
36. The Insecticide Act (Govt. of India)
37. Parkes WR-Occupational lung disorders, Butterworths, London.

Magazines, Journals and Important Organizations Concerned with OSH. (on-line)

1. Safety and Health at Work, https://www.sciencedirect.com/journal/safety-and-health-at-work
2. Journal of Occupational Health, https://onlinelibrary.wiley.com/journal/13489585
3. Occupational and Environmental Medicine, https://oem.bmj.com/
4. Occupational Medicine, https://academic.oup.com/occmed
5. Indian Journal of Occupational and Environmental Medicine, https://www.ijoem.com/
6. International Journal of Occupational Medicine and Environmental Health, https://link.springer.com/journal/13382/volumes-and-issues
7. PubMed, https://pubmed.ncbi.nlm.nih.gov/
8. International Labour Organization, https://www.llo.org
9. International Training Centre-ILO, https://www.ltcilo.org/
10. World Health Organization, https://www.who.int/

11. Occupational Safety and Health Administration, USA, https://www.osha.gov/
12. European Agency for Safety and Health at Work, https://osha.europa.eu/en
13. Agency for Toxic Substances and Disease Registry (ATSDR), https://www.atsdr.cdc.gov/
14. Centre for Disease Control, USA, https://www.cdc.gov/
15. International Agency for Research on Cancer, https://www.larc.who.int/
16. Hand Book: Medical Management of Industrial Emergencies, First Aid & Treatment - TBIA.
17. Ministry of Labour and Employment, GOI: Reference manuals on os&h in India. hittes/asean
18. International Commission on Occupational Health, https://www.jcohweb.org/
19. National Health Mission, https://nhm.gov.in/
20. National Digital Library of India, https://ndl.litkgp.ac.in/
21. CSIR-Indian Institute of Toxicology Research, http://litrindia.org
22. Central Pollution Control Board, https://cpcb.nic.in/
23. All India institute of Hygiene and Public Health, MOHFW, GOL, http://boh.gov.in/
24. ICMR-National Institute of Occupational Health, https://www.nish.ers/
25. Online Learning Platform by Government of India, https://wgyam.gov.in/
26. Directorate General Factory Advice Service and Labour institutes, https/all

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