

मानक सन्दर्भ नोट - 2020 STANDARD REFERENCE NOTE -2020

कारखाना सलाह सेवा और श्रम संस्थान महानिदेशालय Directorate General Factory Advice Service & Labour Institutes

श्रम एवं रोज़गार मंत्रालय, भारत सरकार Ministry of Labour & Employment, Government of India

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PREFACE

The Directorate General, Factory Advice Service and Labour Institutes (DGFASLI), the technical arm of the Ministry of Labour and Employment, deals with matters related to Occupational Safety and Health in factories and dock works of major ports. The organisation assists the Central Government in formulating policies in the administration of the Factories Act, 1948, enforcing the Dock Workers (Safety, Health and Welfare) Act, 1986 and liaising with State Governments, Port authorities and Industries for effective implementation of these statutes.

The 'Standard Reference Note - 2020' provides comprehensive information on the objectives, functions, important activities, organisation structure, human resource and budget of the organisation. It contains details of studies/surveys, audits, support services, training programmes, promotional and other activities carried out by DGFASLI, which are aimed at preventing accidents and occupational diseases in factories and dock works of major ports.

To fulfil the need of qualified Safety professionals in the industry, DGFASLI regularly conducts various training programmes on Occupational Safety and Health which, among others, include One-year Diploma course for Safety Officers and Three-months Associate Fellow of Industrial Health for qualified medical practitioners. DGFASLI also conducts a number of other specialized training programmes and certificate programmes, seminars, workshops, online programmes, public training programmes, in-plant training programmes, appreciation programmes, talks, etc. of various duration, which are discussed in detail in this Standard Reference Note.

To recognize safety systems and practices followed and implemented in factories and dock works of major ports, DGFASLI on behalf of the Ministry of Labour and Employment, Government of India, organises the Safety Awards presentation function for Vishwakarma Rashtriya Puraskar & National Safety Awards at New Delhi.

In addition to presenting the latest information on industrial injuries collected and analysed by Labour Bureau, this 'Standard Reference Note - 2020' further contains the state-wise information relating to Occupational Safety and Health in factories based on the information collected by DGFASLI from the Chief Inspectors of Factories/Director of Industrial Safety and Health of States/UTs governments. It also contains information on Safety and Health matters such as industrial injuries, safety inspection, investigation, etc. in respect of major ports. This compilation of data and its analysis reflects the trends, evidences and areas of concern on Occupational Safety and Health and acts as a reliable tool in devising programmes for preventing accidents and improving working environment in factories and dock works of major ports.

Mumbai 12th August, 2021 (Dr. R. K. Elangovan) Director General

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1 General Information

1.1 DGFASLI- A Brief Introduction

The Directorate General Factory Advice Service & Labour Institutes (DGFASLI), formerly known as the office of Chief Adviser of Factories, was set up in 1945 in Delhi with the objective of advising the Central and State Governments on the administration of the Factories Act, 1948 and liaising with factories inspection services in the States and Union Territories. The office was subsequently shifted to Mumbai in 1966.

DGFASLI achieved significant importance as an attached office of the Ministry of Labour & Employment, Government of India serving as a technical arm to assist the Ministry in the formulation of national policies on Occupational Safety and Health in Factories and Docks.

The Dock Workers (Safety, Health and Welfare) Act, 1986 and the Regulations, 1990 framed thereunder provide for safety, health and welfare of dock workers. These are enforced by DGFASLI through the Inspectorates of Dock Safety set up in all the major ports in India.

1.2 Functions of DGFASLI

- Rendering advice and carrying out support activities for the administration of the Factories Act, 1948.
- Administration of the Dock Workers (Safety, Health & Welfare) Act, 1986 and the Regulations, 1990 framed thereunder and enforcing these in the major ports of the country.
- Providing service to the Central and the State Governments, industries, ports, organisations etc. on matters related to Occupational Safety and Health (OSH).
- Coordinating technical and legal activities to facilitate uniform standards of enforcement of safety and health in manufacturing and port sectors.
- Educating and training employers and employees on matters relating to safety and health.
- Conducting promotional activities by operating schemes for (i) recognition of good suggestions under Vishwakarma Rashtriya Puraskar (ii) safety performance under National Safety Awards; and (iii) workers' outstanding contribution towards their organization, under Prime Minister's Shram Awards.
- Co-operating with International agencies like UN, ILO, WHO, G-20 etc. and advising Central Government with regards to international standards concerning safety and health.
- Building competence of enforcement agencies.
- Encouraging and providing best practices in the field of OSH.
- Collecting and disseminating information and material related to Occupational Safety and Health.

1.3 Organization Structure of DGFASLI

DGFASLI organization comprises of the Headquarters, Central Labour Institute, 4 Regional Labour Institutes and 11 Inspectorates of Dock Safety.

- Headquarters situated in Mumbai
- Central Labour Institute situated in Mumbai
- Regional Labour Institutes at Chennai, Faridabad, Kanpur and Kolkata. A new RLI at Shillong is being set up. A new Regional Labour Institute at Jammu is proposed.
- Inspectorates of Dock Safety at Mumbai, Kolkata, Chennai, Kandla, Mormugao, Tuticorin, New Mangalore, Cochin, Visakhapatnam, Paradip and Jawaharlal Nehru Port. The Inspectorate of Dock Safety at Ennore is being setup.

In 1959, the Central Labour Institute, Mumbai was established under UNDP Project as a socioeconomic laboratory and as a national institute dealing with the scientific study of human aspects of industrial development. Subsequently, Regional Labour Institutes (RLIs) were established at Kolkata, Kanpur, Chennai and Faridabad to serve as Regional Centers. The detailed organization structure is given in **Appendix I** and the contact addresses of DGFASLI and its subordinate offices are given in **Appendix II**.

The Central Labour Institute and Regional Labour Institutes are fully equipped with necessary laboratory facilities for conducting studies and surveys in the field of safety and health. The Institutes also have conference facilities fully equipped with modern audio-visual aids. Industrial Safety, Health and Welfare Centers are also established at these Labour Institutes.

1.4 Developments and activities – DGFASLI

The Occupational Safety, Health and Working Conditions (OSH) Code, 2020

The Occupational Safety, Health and Working Conditions (OSH) Code, 2020 seeks to regulate the health and safety conditions of workers in establishments with 10 or more workers, and in all mines and docks. The code focusses on consolidating and amending the laws regulating the occupational safety, health and working conditions of the persons employed in an establishment and for all other incidental or related matters.

The Occupational Safety, Health and Working Conditions Code, 2020 has been drafted after amalgamation, simplification and rationalization of the relevant provisions of the 13 Central Labour Acts viz; the Factories Act, 1948, the Mines Act, 1952, the Plantation Labour Act, 1951, the Dock Workers (Safety, Health and Welfare) Act, 1986, the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996, the Contract Labour (Regulation and Abolition) Act,1970, the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, the Working Journalists and other Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955 the Motor Transport Workers Act, 1961, the Sales Promotion Employees (Conditions of Service) Act, 1976, the Beedi & Cigar Workers (Conditions of Employment) Act, 1966 and the Cine-workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981.

The salient features of the Code are as follows:

i. For electronic registration of establishments, uniform threshold of 10 employees has been fixed. One registration for an establishment has been envisaged in place of 6 registrations in the Acts. This will create a centralized database and promote ease of doing business.

ii. An enabling provision has been made that the Central Government can extend applicability of this Code to any establishment, even if it has less than 10 employees, carrying out hazardous or life threatening occupations.

iii. The Code rationalizes the compliance mechanism with one license, one registration and one return for the establishments.

iv. The OSH Code expands the earlier definition of migrant worker given in the Inter-state Migrant Worker Act, 1979. The present OSH Code includes those workers who would be directly employed by the employer, besides by the contractor. Further, it has also been made possible that a migrant, who comes on his own, in the destination state, can declare himself a migrant worker by registering on an electronic portal on the basis of self-declaration seeded with Aadhaar. The registration on portal has been made simple and there is no requirement of any other document except Aadhaar.

v. One of the primary reasons for non-availability of data for migrant worker was that the definition of inter-state migrant worker was restrictive. The Ministry of Labour & Employment in this regard has also taken steps to develop a national database to enroll unorganized workers including migrants, which will inter-alia help migrant workers get jobs, map their skills and provide other social security benefits. It will also help in better policy formulation for unorganized sector workers, in general.

vi. The migrant workers will also be able to enjoy the benefits of portability in respect of ration and avail benefits from building & other construction cess fund.

vii. Employer to provide free of cost annual health check-up for employees above the specified age working in certain type of establishments.

viii. Issue of appointment letter has been made mandatory for all employees, covered under the Code which will promote formalization of employment.

ix. The Code envisages employment of women in all establishments covering all types of works. Women are now entitled to work in the night, subject to their consent, with provisions of safety, holidays, working hours or any other condition as prescribed by appropriate Government. It promotes gender equality in a big way.

x. The ambit of definition of 'working journalists' and 'cine worker' have been modified to include workers employed in electronic media and all forms of audio- visual production.

xi. The courts have been enjoined upon that a part of the penalty amount for contravention of provisions relating to duties of employer leading to death or serious bodily injury to any person may be given to the victim or the legal heirs of the victim.

xii. An all India license to contractor for five years has been provided in the Code as against work order based licensing at present.

xiii. Enabling provision for constituting a bi-partite Safety Committee in any class of establishment by appropriate Government to promote safe and healthy working conditions in an establishment. Earlier, it was limited to establishments engaged in hazardous occupations.

xiv. The multiple committees under five labour Acts have been substituted by one National Occupational Safety and Health Advisory Board which is of tripartite nature and has representation from trade unions, employer associations, and State governments.

National Occupational Safety and Health (OSH) Profile

The National Occupational Safety and Health Profile is a document which summarizes the existing OSH situation of a country and is used as diagnostic document to assess gaps in the national OSH system and identify priority areas for national action in OSH. The National OSH Profile is a valuable source of information for policy makers, government officials, workers, employers and OSH practitioners to follow and monitor OSH developments, and is used as a basis for formulating the National OSH Programme. The procedures and requirements to develop National OSH Profile and Programme are described under ILO Promotional Framework for OSH Convention (No. 187, 2006) and its recommendation (No. 197, 2006). Development and application of national OSH Profile and Programme will facilitate the process of understanding the present situation, identify gaps in OSH management system, ways to measure progress and effectively implement its national OSH system by further planning to ensure safety and health for all workers.

Objectives of the national OSH Profile in building the promotional frame work for OSH:

- Provide policy-makers, government officials, workers, employers, OSH practitioners and the public with the up-to-date and reliable information on OSH development in India;
- Identify gaps in OSH practices and recommend possible national action plan to strengthen national OSH systems. The recommendations will form the basis to develop national strategic action plan in OSH (National OSH Programme);
- Help to prepare for the ratification of ILO Promotional Framework for OSH Convention (No. 187, 2006) and Safety & Health Convention (No.155, 1981).

Establishment of Regional Labour Institute at Shillong for the North-East region

A Plan Scheme "Establishment of Regional Labour Institute at Shillong for the North-East region" with the objective to cater to the needs of the North-Eastern Region in the areas of Occupational, Safety & Health was initiated in the year 2014 for addressing the safety and health issues in the factories of the North-Eastern part of the country as a part of the initiative of the Government of India of bringing this region into the mainstream of the country. The construction of

Regional Labour Institute at Shillong is in progress. After completion, needs of the North-Eastern Region in the areas of Occupational, Safety & Health will be addressed to a large extent.

Other Major Activities

- Building Construction of RLI Shillong is under progress.
- A new Regional Labour Institute at Jammu has been proposed and it is under consideration of the Ministry.
- Construction of Integrated Knowledge Centre at CLI, Mumbai: CPWD is in the process of getting approvals from the local authorities for construction.

Dr. R. K. Elangovan takes over as Director General, DGFASLI

Dr. R. K. Elangovan took over as Director General, Directorate General Factory Advice Service and Labour Institutes (DGFASLI), Ministry of Labour and Employment, Government of India, Mumbai on 18th March, 2020.



Dr. R K Elangovan being congratulated on taking over as Director General, DGFASLI (L to R: Dr. R N Meena, Director, Dr. S K Haldar, the then Deputy Director General, Dr. R K Elangovan, Director General, Sh. B L Bairwa, Deputy Director General)

Dr. Elangovan received his Ph.D. in Industrial Safety (Education) from Alagappa University, Karaikudi, Tamil Nadu, M.Tech in Machine Design from Indian Institute of Technology, Madras, India, PGDBA from Annamalai University, M.Sc in Environmental Science from Bharathiar University and B.E. in Mechanical Engineering from College of Engineering, Guindy, Anna University, Tamil Nadu. He is a member of many Doctoral Committees of the academic research programs for the award of Doctor of Philosophy in the field of Occupational Safety and Health (OSH).

He is an expert faculty in the field of Occupational Safety and Health (OSH) for various renowned institutions and Universities and has been the Chairman/member secretary of various technical committees on OSH formed by the Central and State Governments.

He has organized and conducted many seminars, workshops and training programmes on OSH. He has conducted many regional and national studies and surveys in the field of OSH, Noise & Illumination Studies, Safety Audits in Factories and construction sites, On-Site & Off-Site Emergency Plans, Hazard Identification and Risk Assessment (HIRA), Quantitative Risk Analysis, Hazard Identification (HAZID) and Hazard and Operability (HAZOP) studies. He is actively involved in OSH activities for more than twenty-five years. He has published and presented many thematic and research papers at National and International Conferences in the field of Occupational Safety and Health.

Online training programmes

Dr. R. K. Elangovan, Director General, DGFASLI participated in and conducted various online webinars and programmes during the year 2020. In the webinar organised on 22nd May, 2020 by the Federation of Indian Chambers of Commerce & Industry (FICCI) on 'Industrial Safety : Coping with the New Normal', Dr. Elangovan talked about robust onsite & off-site emergency planning in the factory. He also talked about the importance of availability of emergency team leaders, team members, equipment & facilities in the factory as per the approved emergency plan.

In an Online Training Programme organized on October 12-14, 2020 by the National Institute of Disaster Management (NIDM) and the Federation of Indian Chambers of Commerce & Industry (FICCI) on 'Industrial - Chemical Safety: Law, Policy and Planning Framework', Dr. Elangovan, Director General, DGFASLI highlighted that Zero disturbance for communities & Zero Tolerance for Industries towards industrial incidents will ensure safe and secure environment around industries. He also discussed how hazardous processes in industries can cause material impairment to health and also result in pollution of general environment.



Dr. R. K. Elangovan, Director General, DGFASLI delivering lecture during the online training programme on 'Industrial - Chemical Safety: Law, Policy and Planning Framework'



Dr. R. K. Elangovan, the then Deputy Director General, current Director General DGFASLI along with participants of programme at Carriage Workshop, Matunga, Mumbai held on 07.03.2020



Dr. R. K. Elangovan, Director General, DGFASLI during the retirement farewell of Smt. Sumathi N of RLI, Chennai in the month of November, 2020



Dr. R. K. Elangovan, Director General, DGFASLI delivering lecture at the conference organised by FICCI

Shri Apurva Chandra, IAS joins as Secretary, Ministry of Labour & Employment

Shri Apurva Chandra who belongs to the 1988 batch of the Indian Administrative Service (IAS), Maharashtra Cadre assumed charge as new Secretary, Ministry of Labour & Employment on 1st October, 2020. Prior to this he was serving as Special Director General, Defence Acquisition, Ministry of Defence, a position where he played a key role in contributing towards AtmaNirbhar Bharat in terms of greater defence acquisition from domestic industry and at the same time keeping Defence Forces equipped with all its challenging requirements.



A Civil Engineer, Shri Chandra obtained his Bachelor's Degree in Civil Engineering and Master's in Structural Engineering from IIT Delhi. He has long experience of dealing with issues relating to industries while working in Government of Maharashtra and Government of India.

Shri Chandra has spent more than seven years in the Ministry of Petroleum & Natural Gas in the Government of India. He has been involved in framing policies with regard to fuel supplies to industries, supply logistics, transportation, storage & distribution of fuel products etc. He was directly associated with Natural Gas transportation infrastructure, setting up of city gas distribution companies, LNG import terminals and allocation of gas to industries. Shri Chandra has served on the Board of Directors of Maharatna PSU, GAIL (India) and petronet LNG. Shri Chandra also served as Joint Secretary, Union Ministry of HRD, Department of School Education & literacy from August 2011 to February 2013.

Shri Chandra has worked for over four years between 2013 and 2017 as Principal Secretary (Industries) in the Government of Maharashtra. Maharashtra led the country in attracting FDI and other investments over the period. Shri Chandra was instrumental for a slew of new policies like Electronic Policy, Retail Policy, Single Window Policy to attract new investments. The first smart industrial township under the Delhi-Mumbai Industrial corridor (DMIC) has operationalized at Aurangabad in Maharashtra under the leadership of Shri Chandra. More than 70 clusters for MSMEs have been operationalised to make available modern technology through common facility centres.

Shri Apurva Chandra joined as Director General (Acquisition) in Ministry of Defence w.e.f. 01.12.2017 with the mandate of strengthening the Indian Armed Force by expediting the acquisition process. He chaired the Committee to draft the new Defence Acquisition Procedure. Shri Chandra has been elected as the Chairperson of the Governing Body of the International Labour Organisation (ILO) for the period October 2020- June 2021.



Sh. Apurva Chandra, Secretary, M/o Labour and Employment, Chairperson of the Governing Body of International Labour Organisation (ILO), presiding over the 340th session of the Governing Body of ILO held on 02-14 November, 2020, virtually from New Delhi.



Human Resource

The human-resource in the organization comprises of Engineers, Medical Doctors, Industrial Hygienists, Statisticians, etc. The manpower strength of the organization is as given in Table 1.1 & Table 1.2.

Unite	Techn	ical	Administrative		Total	
Units	Sanctioned	In Position	Sanctioned	In Position	Sanctioned	In Position
Headquarters	10	5	54	26	64	31
CLI, Mumbai	40	28	73	51	113	79
4 RLIs	58	31	83	38	141	69
11 IDSs	25	16	31	10	56	26
Total	133	80	241	125	374	205

 Table 1.1 Manpower strength of DGFASLI organization as on 31.12.2020

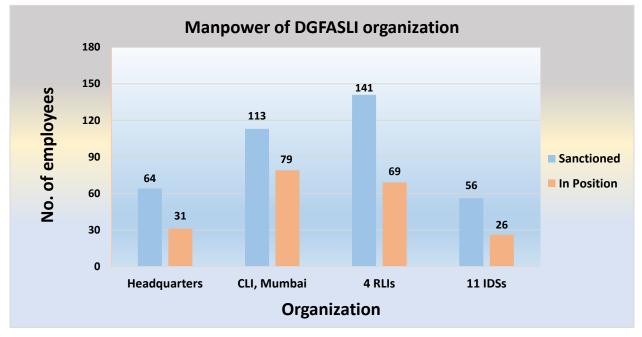


Chart 1: Manpower strength of DGFASLI organization

Group	Sanctioned	In Position
Group 'A'	86	55
Group 'B'	57	30
Group 'C' + MTS	231	120
Total	374	205

Table 1.2:	Group-wise Mar	power strength of DGI	FASLI organization as	on 31.12.2020

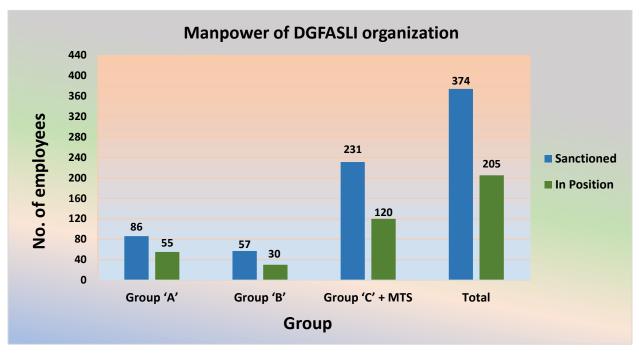


Chart 2: Group wise Manpower strength of DGFASLI organisation

2 About DGFASLI

The DGFASLI organization comprises of the Headquarters, Central Labour Institute (CLI), Regional Labour Institutes (RLI) and Inspectorates of Dock Safety (IDS).

- Headquarters situated in Mumbai
- Central Labour Institute situated in Mumbai
- Regional Labour Institutes at Chennai, Faridabad, Kanpur and Kolkata. A new Regional Labour Institute at Shillong is being set up. A new Regional Labour Institute at Jammu is proposed.
- Inspectorates of Dock Safety at Mumbai, Kolkata, Chennai, Kandla, Mormugao, Tuticorin, New Mangalore, Cochin, Visakhapatnam, Paradip and Jawaharlal Nehru Port. The Inspectorate of Dock Safety at Ennore is being setup.

The Headquarters

The Directorate General Factory Advice Service & Labour Institutes (DGFASLI) headquarters assists the Ministry of Labour & Employment, Government of India, in framing of policies and planning of programmes pertaining to Occupational Safety and Health (OSH) and implements them through its Labour Institutes and Dock Safety Inspectorates. It also implements technical projects and liaises with national and international organisations working in the area of Occupational Safety and Health.

In addition to the overall administrative control of the entire Directorate consisting of its subordinate offices viz. CLI, RLIs and IDSs, the Headquarters carries out its technical activities through the following divisions:

- 1. Factory Advice Service Division
- 2. Dock Safety Division
- 3. Awards Division

1. Factory Advice Service Division

The Factory Advice Service (FAS) division coordinates the administration of the Factories Act, 1948 in the States and advises the Central and State Governments on related matters including interpretation, formulating and recommending amendments of the provisions of the Factories Act, 1948 and framing of Model Rules.

A conference of the Chief Inspectors of Factories of the States is convened annually for the purpose of obtaining their views and suggestions regarding the changes that need to be made in the Act and Rules to meet the challenges brought about by new technology and changing socio-economic scenario.

The Division also organizes training for Inspector of Factories, advises on policy documents on safety and health from the International Labour Organisation and other international agencies.

The **Statistical Cell**, under the FAS division, collects and compiles Occupational Safety and Health(OSH) statistics and other information, from Chief Inspector of Factories and Director of Industrial Safety and Health of State/UT governments, related to the administration of the Factories Act, 1948 and rules framed thereunder. This information base/database is used in planning and implementation of national policies concerning OSH as well as preparing replies to the various parliament questions and queries related to RTI. Apart from this, the Statistical Cell publishes and provides materials for various publications pertaining to the Occupational Safety and Health.

2. Dock Safety Division

The DGFASLI through the Inspectorates of Dock Safety set up in all the major ports in India enforces the Dock Workers (Safety, Health and Welfare) Act, 1986 and the Regulations, 1990 and strives to ensure Safety, Health and Welfare of dock workers. The Division also enforces the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 framed under the Environment (Protection) Act, 1986.

The Division is responsible for carrying out the following activities:

- Providing Advisory services to the Port Authorities, Dock Labour Boards, Stevedores and other employers of dock workers and Port users.
- Publication of Annual Reports on the administration of the Dock Workers (Safety, Health and Welfare) Act and the Regulations framed thereunder.
- Carrying out Inspection of ships, docks, loose gear, lifting appliances, transport equipment etc., investigation of accidents and initiation of prosecutions.
- Carrying out safety studies and surveys through a multi-disciplinary approach and organizing and conducting training courses on occupational safety and health for the Dock workers.

3. Awards Division

The Awards Division located at Regional Labour Institute Campus Faridabad, operates two national level award schemes namely National Safety Awards (NSA) & Vishwakarma Rashtriya Puraskar (VRP). Government of India, Ministry of Labour & Employment, instituted these two schemes in the year 1965.

The '**National Safety Awards**' scheme is instituted to give recognition to outstanding performance on the part of industrial establishments and ports to stimulate and maintain the interest of both the management and the workers in accident prevention and safety promotion.

The '**Vishwakarma Rashtriya Puraskar**' scheme is instituted to recognize workers employed in factories, docks and construction sites at the national level for their outstanding suggestions that result in increased efficiency, productivity, quality, safety and working conditions including import substitution at the plant level.

The Awards Division provides technical and scientific support in scrutinizing applications for '**Prime Minister's Shram Awards**' being operated by the Ministry of Labour & Employment. The

objective of the Prime Minister's Shram Awards Scheme is to recognize the workmen both from public and private sector organizations at the national level for their outstanding contributions, distinguished record of performance and devotion to duty of a high order.

The Central Labour Institute (CLI), Mumbai

The Central Labour Institute (CLI), Mumbai was conceived by the Government of India during the first five-year plan as a centre for research, training and consultancy on the various aspects of industrial work related to the human factor.

The institute commenced its activities in a rented building in 1961. On the 7th October, 1954 the foundation stone of the CLI building was laid by the first Prime Minister of India, Late Pandit Jawaharlal Nehru. It was shifted to its present premises in 1966 when the building was inaugurated on the 9th February, 1966 by Late Dr. Sarvapalli Radhakrishnan, the then President of India.

The CLI aims to improve work methods and working conditions so as to enhance the safety, health, working environment and productivity of the industrial workers leading to improved quality of work life. In this endeavour, CLI interacts with the state factories Inspectorates, employers' associations, trade unions and professional bodies and organizations and institutes concerned with OSH at work place.

The divisions of the CLI are:

- 1. Industrial Safety Division
- 2. Industrial Hygiene Division
- 3. Industrial Medicine Division
- 4. Staff Training and Productivity Division
- 5. Major Accident Hazards Control Advisory Division
- 6. Work Environment Engineering Division

1. Industrial Safety Division

The Industrial Safety division aims at achieving improvement in working conditions and safety standards of factories and docks through training, consultancy, field studies, surveys and other promotional activities. It has contributed to the following achievements:

- Evolution of a safety movement in the country
- Creation of national awareness on safety
- Development of infra-structure on safety at national level through competence building
- Better administration of the Factories Act through training of Inspectors of Factories and technical support.

National studies and surveys are conducted for ascertaining the status of working conditions and standards of safety in particular industries and operations.

Unit level studies are carried out with the objective of assessing the safety related problems and formulating recommendations for improvements. These studies also help the management to take necessary measures towards setting up safety systems, instituting safety programmes and achieving the goal of better safety in their organisations.

Consultancy studies are undertaken at the request of the management or government agencies like the Factory Inspectorates for studying specific problems and rendering advice for corrective measures.

The findings of national surveys and unit level consultancy studies become the source of technical inputs while drafting Rules & Regulations and designing various occupational safety and health intervention modules for target groups. Safety audits are conducted on request from Factories and Ports.

In keeping with its pioneering role in the field of industrial safety, the division has been conducting training for the benefit of industries, Factory Inspectors, Labour Administrators and Trade Unions. In view of the need of inspection of specific industries and major hazards control, specialized courses are also conducted to impart necessary technical knowledge and skill to the Inspectors appointed under the provisions of the Factories Act, 1948. In order to provide industries and docks sector with qualified safety officers, the division conducts one-year Advanced Diploma in Industrial Safety (ADIS) affiliated to Maharashtra State Board of Technical Examination. Specialized training courses are conducted for identified target groups such as Senior managers, Safety officers, Supervisors, Trade Union officials, and Safety Committee members from the industry. Some of these courses are:

- Testing and examination of lifting machinery, lifting tackles and pressure vessels
- Safety audit
- Safety in chemical industry
- Safety management techniques
- Accident Prevention

2. Industrial Hygiene Division

The Industrial Hygiene division is concerned with the improvement of industrial work environment and comprises Industrial Hygiene Laboratory, Respiratory Equipment Testing Laboratory and Non-Respiratory Equipment Testing Laboratory.

The division undertakes various studies/surveys, national projects and training courses to protect the health of industrial workers through identification, evaluation and control of occupational health hazards and advises the management on ways to meet the requirements prescribed in the Second Schedule (under Section 41F) of the Factories Act, 1948.

The Respiratory Equipment Testing Laboratory tests the performance and efficiency of indigenous respiratory personal protective equipment such as dust respirators and canisters/cartridge gas respirators etc. and advises manufacturers on improvements required to meet prescribed standards.

The Non-Respiratory Equipment Testing Laboratory carries out the testing of indigenous non-respiratory personal protective equipment such as safety shoes, safety helmets, safety goggles,

eye protectors, etc. This personal protective equipment is tested as per the specifications set by the Bureau of Indian Standards (BIS). Based on the test reports, technical advice and guidance on quality improvement are suggested to the entrepreneurs and manufacturers. User industries are also advised on proper selection, use, care and maintenance of various personal protective equipment.

The division also organizes training courses in the areas of industrial hygiene for the specific group of industries given in the First Schedule, Section 2(cb) of the Factories Act, 1948. These training courses are meant to help safety officers, chemists, supervisors and middle level managers in the identification, assessment and control of occupational hazards in their factories.

3. Industrial Medicine Division

The Industrial Medicine division aims to prevent and contain health hazards at the workplace brought in by industrialization. The hazards may arise from chemicals or from physical factors such as noise, heat, dust, vibration and radiation.

Occupational Health studies and surveys on industries manufacturing asbestos products, dyestuff, cement, chemical, engineering and ports handling such products are carried out to assess the incidence of occupational diseases by the division. Suitable recommendations such as medical surveillance, use of personal protective equipment, facilities for personal hygiene and first-aid are made to prevent and control health hazards.

The division also carries out training programmes for factory medical officers and workers on occupational health hazards and first-aid. The division conducts a three-month certificate course "Associate Fellow of Industrial Health (AFIH)" for factory medical officers every year since 1993 as per statutory requirement of Factories Act, 1948. The laboratory attached to the division has facilities for medical investigation, including ILO radiography, visual acuity tests, Audiometric evaluation, and Pulmonary Function Tests

Environmental physiology - It helps to identify and assess the impact of factors like heat, humidity, thermal radiation and movement of air in the working environment so that limits of heat stress for day-to-day industrial work can be stipulated and suitable remedial measures prescribed.

Respiratory physiology - It determines the effects of dust, fumes, toxic gases, etc. on the pulmonary functions and work capacity of the exposed individuals and suggest remedial measures.

In the area of ergonomics, the emphasis has been laid on the collection of anthropometric data from different regions of the country, which can be used in the design of work station, machinery, equipment, tools, etc. The division conducts specialized training courses such as industrial ergonomics, occupational stress and industrial heat, etc.

4. Staff Training and Productivity Division

A pilot project on supervisory training was organized in India by the International Labour Organisation in 1952. Encouraged by the results of the pilot project and realizing that such training is an essential requirement for the successful implementation of the plans for the industrialization of the country the Ministry of Labour, Government of India set up the Training Within Industry (TWI) Centre in Mumbai in 1955 with the assistance of the ILO. In keeping with the changing trend of manpower training and development activities, the centre was later renamed as the Staff Training Division.

The division conducts the following activities:

- conducts comprehensive supervisory trainer development projects
- helps industry to setup training and development cells with persons trained by the division
- assists industry in institutionalizing their manpower training and development efforts by helping them formulate their training and development plans

Productivity: Over a period of time the activities have expanded to cover the training of management and trade union representatives to help organisation, create a climate conducive for the development of collaborative leadership and bring about improvement in working conditions and productivity. Towards this end, new courses for managers, supervisors, trade union representatives and bipartite forums covering socio- psychological and team building aspects have been developed and conducted.

The division has embarked upon the training of supervisory trainers in chemical industries and trainers of dock workers to help organisations discharge their training responsibility on safety and health aspects under the amended Factories Act and the Dock Workers (Safety, Health and Welfare) Regulations, respectively. These trainers, in turn, undertake the training of supervisors/workers on safety and health aspects in their organisations.

The productivity division aims at improving productivity vis-a-vis working conditions and promoting co-operation between labour and management in industrial units. The above objectives are sought to be achieved through training courses and consultancy projects. In consultancy projects, a management and labour project team is formed and the experts of the division act as technical consultants and catalyst to the team.

Some of the courses conducted by the division are:

- Productivity techniques for effective employee participation
- Work study and wage incentives
- Wage & Salary Administration
- Office management

Man-power planning, job evaluation, productivity improvement, organisation and methods and wage incentives are some of the consultancy areas.

5. Major Accident Hazards Control Advisory Division

Major Accident Hazards Control Advisory Division is the outcome of the ILO project "Establishment and Initial Operation of Major Accident Hazards Control System" The project was executed by DGFASLI in collaboration with Factory Inspectorates of the various States and Union Territories. Although the project was completed in December, 1990, divisions continue to provide important services for the control of major accident hazards in the country. The activities of divisions were gradually enlarged to include other aspects of chemical safety.

The important achievements of the division are:

- 1. Setting up of a 3-tier technical organisation on Major Accident Hazards Control (MAHC) at the national, regional and state levels.
- 2. Preparation of Model Rules for Control of Industrial Major Accident Hazards.
- 3. Training of Inspectors of Factories in the inspection of major accident hazards installations.
- 4. Development and publication of training manuals and checklists.
- 5. Preparation of guidelines for inspection of chemical plants, on-site emergency plans and safety reports.

Major Accident Hazards Control Advisory division offers the following services:

- Conducting institutional & in-plant training programmes and workshops in specialized areas viz. Major Accident Hazards Control, On-Site Emergency Preparedness, Off-Site Emergency Preparedness, Hazard & Operability (HAZOP) Study and Management of Hazardous Chemicals for Major Accident Hazards Installations.
- 2. Conducting studies and surveys on specialized areas of Risk Assessment, HAZOP and Emergency Preparedness in Major Accident Hazards Installations

6. Work Environment Engineering Division

The Work Environment Engineering Division (WEED) of Central Labour Institute, Mumbai is a combination of engineering and industrial hygiene branches dealing with identification, assessment and control of physical hazards in industries. Although the emphasis is given on the engineering control of the working environment, it is important not to forget the recognition of potential health hazards done by the industrial hygienist. The WEED identifies the cause and effect relationship of physical hazards to exercise the engineering control to eliminate the work environmental hazards for protecting workers from occupational diseases. The WEED also deals with logical and systematic approach toward recognizing and defining the potential exposures that exist within the occupational work environment which cannot be underestimated. The WEED helps the industries for solving a problem of physical hazards and concludes with adequate data to support that conclusion. The WEED presents an outline of procedural method that can be used to recognize and evaluate physical hazard exposures that may be present within the work environment to provide a logical method of controlling the exposure.

The Division is well-equipped with Environmental Engineering Parameters and sophisticated monitoring equipment for industrial research, study and consultancy services including In-plant and In-house training programmes in the following areas:

- Evaluation and control of Industrial Noise
- Evaluation and control of Industrial Vibration
- Evaluation and control of illumination levels in the work places
- Evaluation and control of industrial ventilation system and thermal comfort

Facilities

The Central Labour Institute has models and exhibits regarding safety, health and welfare in the form of properly guarded machines, personal protective equipment, safe methods of material handling, light and colour schemes and other arrangements, for propagating the message of safety and other health of workplaces. This centre is open to organised groups from industry and educational institutions.

The Industrial Safety, Health and Welfare Exhibition Centre have exhibits to demonstrate methods, arrangements and appliances for promoting safety and health of workers. CLI has an auditorium with a seating capacity for 300 persons. It has 3 air-conditioned conference rooms, fully equipped with audio visual aids. Two conference rooms have a seating capacity of approximately 30 persons each and one conference room for 15 persons. A fully furnished class room having a capacity of 60 students is also available.

The institute also has a well-furnished hostel with facility for catering to both the international and national level participants.

Regional Labour Institutes

- The four Regional Labour Institutes are:
 - 1. Regional Labour Institute, Chennai
 - 2. Regional Labour Institute, Faridabad
 - 3. Regional Labour Institute, Kanpur
 - 4. Regional Labour Institute, Kolkata
- All Regional Labour Institutes have each of the following divisions:
 - 1. Industrial Hygiene Division
 - 2. Industrial Medicine Division
 - 3. Industrial Safety Division
- A new Regional Labour Institute at Shillong is being set up to cater to the needs of the North-East states.
- A new Regional Labour Institute at Jammu has been proposed and it is under consideration of the Ministry.

1. Regional Labour Institute, Chennai

The Regional Labour Institute, Chennai was formally inaugurated in the year 1965 by the then Hon'ble Chief Minister of Tamil Nadu Shri M. Bhaktavatsalam in the presence of the then Hon'ble Union Labour Minister Shri D. Sanjivayya. It serves the southern states and union territories of the country namely Tamil Nadu, Karnataka, Andhra Pradesh, Telangana, Kerala, Puducherry,

Lakshadweep and Andaman & Nicobar Islands. Regional Labour Institute, Chennai has been declared as a Centre for Excellence in Safety in Construction and Automobile Industries.

2. Regional Labour Institute, Faridabad

The Regional Labour Institute, Faridabad, was inaugurated on 10th February' 2009 by the then Hon'ble Union Minister of State for Labour & Employment (Independent Charge) Shri Oscar Fernandes to serve the northern states and union territories of the country namely Jammu & Kashmir, Ladakh, Haryana, Punjab, Himachal Pradesh, Chandigarh and Delhi. Regional Labour Institute, Faridabad has been declared as a Centre of Excellence in Safety in MSME and Chemical Process Industries.

3. Regional Labour Institute, Kanpur

The Regional Labour Institute, Kanpur was inaugurated on 6th July' 1966 by the then Hon'ble Chief Minister of Uttar Pradesh Shrimati Sucheta Kripalani. The institute serves the northern states of Rajasthan, Uttar Pradesh, Uttarakhand, Madhya Pradesh, and Chhattisgarh. Regional Labour Institute, Kanpur has been declared as a Centre for Excellence in Sugar and Power Generating Industries.

4. Regional Labour Institute, Kolkata

The Regional Labour Institute, Kolkata was inaugurated by the then Hon'ble Union Labour Minister Shri D. Sanjivayya at a function presided over by Shri P.C. Sen, the then Hon'ble Chief Minister of West Bengal. The institute serves the eastern and north-eastern states of the country namely West Bengal, Bihar, Jharkhand, Orissa, Assam, Tripura, Sikkim, Meghalaya, Nagaland, Mizoram, Manipur and Arunachal Pradesh. Regional Labour Institute, Kolkata has been declared as a Centre for Excellence in Safety in Ferrous & Non-Ferrous Metals and Paper Industries.

Inspectorates of Dock Safety

The Dock Workers (Safety, Health and Welfare) Act, 1986 was enacted on 14th April' 1987 and the Dock Workers (Safety, Health and Welfare) Rules, 1989 and Regulations, 1990 were framed under this Act. The Act and Regulations cover the safety, health & welfare aspects of dock worker engaged in loading, unloading & transportation of cargo, including the work incidental to dock work. In addition, the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 framed under the Environment (Protection) Act, 1986 are also enforced by DGFASLI in the major ports of India through the Inspectorates of Dock Safety.

Administration of the Act and the Regulations in major ports is carried out by the Ministry of Labour & Employment, through DGFASLI, Mumbai. The Director General is the Chief Inspector of Dock Safety. The Chief Inspector of Dock Safety is also an authority for enforcement of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 framed under the Environment (Protection) Act, 1986 in the major ports.

The above statutes are enforced by the Inspectors posted at Inspectorate of Dock Safety at all the major ports:

- 1. Inspectorates of Dock Safety, Mumbai
- 2. Inspectorates of Dock Safety, Kolkata
- 3. Inspectorates of Dock Safety, Chennai
- 4. Inspectorates of Dock Safety, Kandla
- 5. Inspectorates of Dock Safety, Jawaharlal Nehru Port
- 6. Inspectorates of Dock Safety, Mormugao
- 7. Inspectorates of Dock Safety, Tuticorin
- 8. Inspectorates of Dock Safety, New Mangalore
- 9. Inspectorates of Dock Safety, Cochin
- 10. Inspectorates of Dock Safety, Visakhapatnam
- 11. Inspectorates of Dock Safety, Paradip

*Inspectorate of Dock Safety at Ennore is being setup.

The main function of the Inspectorates is to ensure the compliance with the provisions under the statutes. The statutory responsibilities of Inspector include inspection of ships, tankers, loosegears, container-handling equipment, docks, container-yard and terminal, hazardous installations and isolated storages, tanks; carrying out the investigation of accidents (fatal and serious) and dangerous occurrences; prosecution of employers, attending to complaints, providing advisory services and conducting safety promotional activities like training programmes, workshops, celebration of safety week etc. The Inspectorate also prosecutes the agency responsible for violation of any provision of the Act and Regulations framed there under.

3 Budget

The allocation of funds for various constituents of the organization for the years 2020-21 is given below:

Head of Account- 2230.01.102.13.01 Revenue: Directorate General of Factory Advice Service (DGFASLI) (in ₹'000)

Sl.	Minor head	BE (2020-21)	Total Expenditure
1	Salaries	196500.00	195739.51
2	Wages	100.00	81.20
4	Medical treatment	2000.00	1833.88
5	Domestic travel expenses	5500.00	5496.38
6	Foreign travel expenses	1100.00	1080.73
7	Office expenses	34000.00	33434.81
8	Rents, Rates and Taxes	4500.00	4410.19
9	Other administrative expenses	300.00	297.00
10	Advertising and publicity	100.00	0.00
11	Minor works	21900.00	10479.46
12	Professional services	2000.00	424.00
13	Other charges	100.00	0.00
	Total	268100.00	253277.16

Head of Account- 2230.01.102.13.96 Swachchhta Action Plan (in ₹000)

Sl.	Minor head	BE (2020-21)	Total Expenditure
1	Office expenses	800.00	369.29
2	Minor works	200.00	29.00
	Total	1000.00	398.29

Head of Account- 4250.00.201.19.04 Capital: DGFASLI and Inspectorates of Dock Safety (in ₹000)

Sl.	Minor head	BE (2020-21)	Total Expenditure
1	Machinery and equipment	600.00	435.49
2	Major works	59400.00	6794.70
	Total	60000.00	7230.19

4

Safety & Health Improvement in Factories and Dock Works of Major Ports

4.1 Co-ordination in the Administration of the Factories Act, 1948

The Factories Act, 1948 is the principal and comprehensive legislation of the Parliament, which provides for the requirements concerning safety, health and welfare amenities needed by workers employed in factories. The provisions of the Act are applicable to the factories as defined under Section 2m (i), 2m (ii) or notified under Section 85 of the Act by the State Governments.

The Ministry of Labour & Employment is accountable to the Parliament for proper enforcement of the Act. Uniformity in the application of the provisions of the Act in the State/Union Territories is achieved by circulating the Model Rules prepared by DGFASLI, which are incorporated by states in their State Factories Rules with necessary modifications to suit local needs. In the task of framing of the Model Rules, the DGFASLI, on behalf of the Ministry of Labour & Employment, enlists the cooperation and involvement of the State Governments by convening annually a Conference of Chief Inspectors of Factories. Matters relating to the administration of the Act as well as proposed amendments are discussed in this conference. Besides, this conference also serves as a forum for discussion on the progress made in the application of techniques and methods for prevention of accidents and ill-health in factories.

4.2 During the year 2020, comments/clarifications/replies/materials were prepared on the following matters:

Sl.	Comments/ Clarifications / Replies/ Materials	Nos.
1.	Matters regarding the Factories Act, 1948	49
2.	Matters regarding ILO Conventions/ILO meetings	7
3.	Matters relating to Parliament Questions and Parliamentary Standing Committee on Labour Meetings	42
4.	Matters regarding Court Cases	30
5.	Other Important Matters	235

Table 4.1: comments/clarifications/replies/materials prepared

4.3 Implementation of the Right to Information Act, 2005

- The enactment of Right to Information Act, 2005, is a gateway for the citizens to seek information under the control of Public Authority and promote transparency and accountability.
- DGFASLI being one of the Public Authorities, the Central Public Information Officer (CPIO) of the organization received a total no. of 130 applications during the period January to December, 2020. Of these 130 applications, 84 applications were received as transferred under Section 6(3) of the RTI Act and 46 applications were received directly. Besides, 6 applications were brought forward from the year 2019.
- A total of 136 applications were considered during the year. Information was provided within the stipulated time frame to 118 applications and 1 application was transferred to other public authorities under section 6(3) of the RTI Act. Among the total applications received, 12 applications were carried forward to next year and 5 applications were rejected.
- An amount of ₹ 124/- was received during the period as application fees and cost of providing information in material form.
- The Appellate Authority of DGFASLI received a total number of 18 appeals during the period and 1 appeal was carried forward from the year 2019. A total of 19 appeals were considered during the period and 18 were disposed off within stipulated time frame and 1 was carried forward to next year.

4.4 Administration of the Dock Workers (Safety, Health and Welfare) Act, 1986 and Regulations, 1990 framed thereunder and enforcing the MSIHC Rules, 1989 framed under the Environment (Protection) Act, 1986

The Dock Workers (Safety, Health and Welfare) Act, 1986 and the Regulations 1990 framed there under cover safety, health and welfare aspects of all the workers engaged in dock work, whether in loading or unloading of cargo on board the ship, alongside it or in transit sheds, warehouses or yard etc., within the port premises including those engaged in chipping and painting of ships. These statutes are in line with the ILO Convention No. 152 on Occupational Safety and Health (Dock Work).

Administration of the Act and the Regulations in major ports is carried out by the Ministry of Labour & Employment, through DGFASLI, Mumbai. The Director General is the Chief Inspector of Dock Safety appointed under the Act. The Chief Inspector of Dock Safety is also an authority for enforcement of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 framed under the Environment (Protection) Act, 1986 in the major ports. The above statutes are enforced by the Inspectors posted at Inspectorate of Dock Safety at all the major ports viz. Mumbai, Kolkata, Chennai, Kandla, Mormugao, New Mangalore, Cochin, Tuticorin, Visakhapatnam, Paradip and Jawaharlal Nehru Port except Ennore where the Inspectorate is being set up. Presently, the enforcement in this Port is carried out by the Inspectors posted in the Inspectorate Dock Safety, Chennai.

The main function of the Inspectorates is to ensure the compliance with the provisions under the statutes. The statutory responsibilities of Inspector include inspection of ships, tankers, loosegears, container-handling equipment, docks, container-yard and terminal, hazardous installations and isolated storages, tanks; carrying out the investigation of accidents (fatal and serious) and dangerous occurrences; prosecution of employers, attending to complaints, providing advisory services and conducting safety promotional activities like training programmes, workshops, celebration of safety week etc. The Inspectorate also prosecutes the agency responsible for violation of any provision of the Act and Regulations framed there under.

4.5 Safety Week Celebrations and Dock Safety Committee Meetings

During the year 2020, Safety Week Celebrations were held at the Ports of Mumbai, Kolkata, Paradip, Visakhapatnam, Kochi, New Mangalore, J. N. Port, and Tuticorin. A total of 9 Safety Weeks Celebrations were held during the period. Various safety promotional activities like safety poster competitions, safety quiz contest, first-aid and firefighting demonstrations and appreciation programmes were organized during the occasions for the benefit of dock workers and their families

During the year 2020, a total of 21 Dock Safety Committee Meetings were held at all the 11 major Ports - Mumbai, Kolkata, Chennai, Kandla, Mormugao, Tuticorin, New Mangalore, Cochin, Visakhapatnam, Paradip and Jawaharlal Nehru Port. Port-wise details of Safety Week Celebrations and Dock Safety Committee Meetings are given in Table. 9.8.

4.6 Safety and Health in Construction Sector (The BOCW Act, 1996)

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act was enacted in 1996. The Central Government is the appropriate authority for notifying the rules and regulations under the Act as well as the enforcement of the provisions under the said Rules, in respect of establishments in relation to which Central Government is the appropriate authority under the Industrial Disputes Act, 1947. In respect of other establishments, the State Government is the appropriate authority for notifying the Rules and enforcing the provisions. In respect of other establishments, the State Government is the appropriate authority for notifying the Rules and enforcing the provisions. DGFASLI at the behest of the Ministry of Labour & Employment had done the entire work of drafting the BOCW Act 1996 as well as framing of the Central Rules of 1998 made there under. The Director General, DGFASLI is a member on the Central Advisory Committee constituted under Rule 10 of the Central Rules of 1998. DGFASLI was entrusted with the task of processing applications in respect of approval of Competent Persons under Rule 2(j) of the Central Rules, 1998.

4.7 Studies and Surveys

National and state level Studies and Surveys are conducted by DGFASLI in its efforts towards helping the Government to ascertain the status of working conditions, safety and health in factories and docks, and to formulate the appropriate standards for inclusion in statutes.

Unit Level Consultancy Studies, Surveys and Audits are undertaken at the request of the management and reports are submitted for implementation of the recommendations for further improvement in factories concerned. The details of Unit level consultancy studies and audits undertaken during the year 2020 are given in Table 4.2.

 Table 4.2-Unit-level Consultancy Studies, Surveys and Audits undertaken during 2020

Sl.	Title	Started in 2020	Completed in 2020
1.	Hazard and Operability (HAZOP) Study	-	1
2.	Heat and Ventilation Study	2	2
3.	Industrial Hygiene Survey	-	1
4.	Noise Study	1	1
5.	Occupational Safety and Health Audit	3	3
6.	Risk Assessment Study	-	1
7.	Safety Audit	4	14
8.	Testing of Breathing Air Compressor	1	-
9.	Ventilation Study	1	2
10.	Work Place Environment Monitoring Study	1	4
	Total	13	29

Details of some of the Studies, Surveys and Audits conducted during the year 2019 are given below:

OSH Survey in Silicosis prone industry

As per the order of the Hon'ble Supreme Court, DGFASLI has taken up a national level survey of the silica prone industry in India to identify the cases of silicosis, treatment of the workers suffering from the disease, hygienic condition of the industry and safety measures to be adopted for prevention of the occupational disease. Based on the findings of the survey, the following general recommendations were given to prevent the cases of silicosis in the industry: •

DGFASLI

- method and good work practices in the industry.
 Suitable dust respirator for respiratory protection along with other personal protective equipment should be provided to the workers and it may be ensured that workers wear them at the time of work. They should also be trained about the use, care and maintenance of equipment.
- The workers should be medically examined at periodic interval by Occupational Health Physician and the employer should make and maintain an accurate record for each employee periodic examinations as per the prescribed proforma.
- The employer should make and maintain an accurate record of all exposure measurements taken to assess employee exposure to respirable crystalline silica.
- The waste siliceous material is a hazardous waste and should be collected properly from the units and should be suitably disposed off away from the units on the safe location. The casual disposal can raise ambient concentration of dust in air and can adversely affect the health of the community.
- The employer should ensure that each worker is aware about health effects, engineering controls and work practices that reduce dust, the importance of maintenance and good housekeeping, as well as on the proper type and fitting of respirators.
- Specialized training programmes may be organized and conducted from time to time to educate and make the workers aware.

National Study on Occupational Safety, Health and Working Environment in Asbestos-Cement Product Industries

DGFASLI carried out a "National Study on Occupational Safety, Health and Working Environment in Asbestos Cement Product Industries" to assess the status of safety, health and hygiene and detect the cases of asbestosis and asbestos related disorder. The study was conducted covering 50 functional asbestos cement product industries in the States of Haryana, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh & UT of Chandigarh. This was subsequently followed up by an interventional study to further investigate the suspected cases of asbestos related disorders. Outcome of the study report with recommendations have been forwarded to concerned states for necessary action and compliance for the benefit of the workers.

4.8 Education and Training

DGFASLI organizes workshops, seminars, training programmes etc. for the benefit of industries, ports, enforcement officials, etc.

4.8.1 Seminars & Workshops

Seminars & Workshops are organized on the basis of findings and recommendations of various national studies; unit level studies and surveys; and issues and priorities of national concern. They are organized to enhance the skills of the participants in dealing with matters connected to

safety, health, productivity and environment etc. These seminars & workshops provide platform for discussing various issues related to safety and health; and recommend National level/State level/Unit level action plan in respective area of concern. The details of Seminars & Workshops conducted during the year 2020 are given in Table 4.3.

Sl.	Title	Coordinating body	No. of Partic- ipants	No. of Organiz- ations
1.	Development of PPE Program in industry	CLI, Mumbai	21	10
2.	Hazard & Operability Study	CLI, Mumbai	32	18
3.	Hazard Identification and Risk Assessment	CLI, Mumbai	9	4
4.	Industrial Hazards & Control Techniques of Work Environment (2 prog.)	CLI, Mumbai	11	6
5.	Monitoring of Work Place Environment in Industries	RLI, Faridabad	2	2
6.	Occupational Health and Safety	RLI, Kanpur	9	6
7.	Safety and Health for Safety Officers	RLI, Faridabad	20	17
8.	Safety Audit (2 prog.)	CLI, Mumbai	43	24
9.	Silicosis & ILO Radiography Pneumoconiosis	RLI, Kolkata	5	4
10.	Team Building for Safety, Health and Environment at Work Place	CLI, Mumbai	19	2
11.	Workshop for Small/Medium Scale Industries to Improve Productivity, Safety and Working Conditions	CLI, Mumbai	24	17
12.	Workshop on Bio waste management for Healthcare Professionals	RLI, Kanpur	13	9
	Total		208	119

Table 4.3- Seminars & Workshops of	conducted during 2020
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4.8.2 Long Duration Training Programmes

Long Duration Training programmes include Professional Programmes and Specialized Training programmes. The details of Long Duration Training Programmes conducted during the year 2020 are as given in Table 4.4

a) **Professional Programmes:** To fulfill the need of qualified Safety Officers, and Factory Medical Officers in the industry, DGFASLI organization conducts one-year "Advanced Diploma in Industrial Safety" (ADIS) Course and three-months "Associate Fellow of Industrial Health" (AFIH) Certificate Course. Besides other programmes, DGFASLI also conducts Five-Weeks Certificate Course for Supervisors to be employed in Hazardous Process Industries, Three-Weeks Basic course for the

freshly recruited Inspectors of Factories and a Two-Weeks Refresher course for the experienced Senior Inspector of Factories and other Specialized courses in the emerging field of Occupational Safety and Health.

b) **Specialized Training Programmes** are conducted for identified target groups such as Inspectors of Factories, Senior Managers, Safety Officers, Factory Medical Officers, Supervisors, Trade Union Officials and Safety Committee members from Industry. Basic Course for newly recruited inspectors of factories is conducted to impart technical knowledge and skills in the field of safety and health. In view of the need for inspection of specific industries and Major Accident Hazards units, specialized courses are also conducted for Senior Inspectors. Some of the programmes are exclusively conducted for the union-leaders where joint participation of management personnel and union representatives from industries are the special features of some programmes.

	Table 4.4. Long Duration Training Frogrammes conducted during 2020					
	Programme/ Area	Institute	No. of Participants	No. of Organizations		
A)	Professional Programmes					
a)	Advanced Diploma in Industrial Safety	RLI, Chennai	47	44		
b)	Advanced Diploma in Industrial Safety	RLI, Faridabad	61	36		
c)	Advanced Diploma in Industrial Safety	RLI, Kanpur	50	48		
d)	Advanced Diploma in Industrial Safety	RLI, Kolkata	54	53		
e)	Advanced Diploma in Industrial Safety	CLI, Mumbai	29	29		
	Total		241	210		
B)	Specialized Training Programmes					
I. P	rogramme for Medical Officers					
a)	Refresher training programme on Occupational Health for Medical Officers	CLI, Mumbai	5	5		
II. I	II. Programme for Management Personnel/Executive/Supervisors and Medical Officers					
a)	Occupational Health Management in Factories and Docks	RLI, Chennai	11	10		

 Table 4.4:
 Long Duration Training Programmes conducted during 2020

4.8.3 Need Based In-Plant Training Programmes

On the request of management, DGFASLI, CLI and RLIs conduct in-plant need based training programmes for the benefit of cross-section of personnel from respective units. These programmes are designed after proper identification of needs of the defined target groups through preliminary discussions with the management. The details of need based in-plant Training Programmes conducted during the year 2020 are as given in Table 4.5.

Programme/ Area	Institute	No. of participants	No. of organizations
a) Occupational Safety and Health Management System at Integral Coach Factory, Chennai (2 prog.)	RLI, Chennai	53	2

Table 4.5: Need based in-plant Training Programmes conducted during 2020

4.8.4 Short Duration Training Programmes

DGFASLI organizes short duration training programmes of 1 or 2 days duration for the benefit of supervisors, workers, and workers' representatives from factories. Such programmes are organized in the field of Safety, Health, Hygiene, Psychology, etc. The details of short duration training programmes conducted during the year 2020 are given in Table 4.6.

Table 4.6: Short Duration Training P	on Training Programmes conducted during 2020		
		No. of	No

	Programme/ Area	Institute	No. of participants	No. of organizations	
I.					
1)	Anticipation, Recognition, Evaluation and Control of Health Hazards	RLI, Chennai	17	8	
2)	Awareness on Safety, Health & Environment in Industries	RLI, Kanpur	29	1	
3)	Electrical Safety in Factories and Docks	RLI, Chennai	33	15	
4)	Fire Safety in Factories and Docks	RLI, Chennai	29	12	
5)	Industrial Safety Awareness	CLI, Mumbai	24	1	
6)	Safe Use of Lifting Appliances & Accessories	CLI, Mumbai	26	12	
7)	Safety Audit	RLI, Kanpur	23	10	
II.	Programme for Educational Institutes				
1)	Awareness on Safety, Health & Environment in Industries for the PIDS students of Dr. Ambedkar Memorial Institute of Industrial Safety, Rourkela, Odisha	RLI, Kolkata	47	1	
2)	Awareness on Safety, Health & Environment in Industries for the PIDS students of Shivnanda Institute of Industrial Safety, Odisha (2 prog.)	RLI, Kolkata	42	2	

HALF-DAY DURATION ONLINE TRAINING PROGRAMMES					
III.	III. Programme for Management Executives				
1)	Effective Participation for improving Safety, Health & Productivity	CLI, Mumbai	13	4	
2)	Introduction to Occupational Health & Basic First Aid (2 prog.)	RLI, Kanpur	99	64	
3)	Managing Occupational Heat Stress Amidst Covid-19	CLI, Mumbai	13	13	
4)	Occupational Health Practices for Medical Officers	RLI, Kanpur	37	36	
5)	Personal Protective Equipment	CLI, Mumbai	10	6	
6)	Safety Audit and its Methodology in Industries	RLI, Kanpur	41	39	
IV.	Programme for Workers				
1)	Safety with Hand and Portable Power Tools	RLI, Faridabad	8	8	
V.	Programme for Medical Personnel				
1)	Refresher Course on Occupational Health for Medical Officers	CLI, Mumbai	21	21	
VI.	Programme for Management/Executive	e & Supervisors			
1)	Accident Reporting & Investigation	CLI, Mumbai	31	26	
2)	Effective Functioning of Safety Committee Members in Industries & Major Ports	RLI, Chennai	8	8	
3)	Effective Promotion of Safety, Health & Welfare in Industries	RLI, Kanpur	50	16	
4)	Evaluation and Control of Industrial Illumination	CLI, Mumbai	8	8	
5)	Evaluation and Control of Industrial Ventilation	CLI, Mumbai	14	11	
6)	External Safety Audit (2 prog.)	CLI, Mumbai	97	71	
7)	Fundamentals of Occupational Health & Occupational Lung Disease	RLI, Kanpur	50	22	
8)	Hazard Identification and Risk Assessment	RLI, Faridabad	41	19	
9)	Industrial Disasters	RLI, Kolkata	29	19	
10) Internal Safety Audit	RLI, Kolkata	31	31	
11]) Investigation and Prevention of Accidents in Factories and Docks	RLI, Chennai	16	7	
12) Major Accident Hazards Control	CLI, Mumbai	50	15	
32					

32

13) Management of Hazardous Chemicals	CLI, Mumbai	50	30
14) Management of Heat Stress in industries	RLI, Kanpur	33	11
15) Management of Work Environmental Hazards in Industries	RLI, Kanpur	35	22
16) Management of Workplace Hazards	CLI, Mumbai	50	22
17) Material Handling in Industries	RLI, Kanpur	18	16
18) Monitoring of Workplace Environment	RLI, Faridabad	4	4
19) Occupational Health for Non-Medical Executive and Safety officer	RLI, Kolkata	3	3
20) Occupational Safety & Health for Safety Committee Members (2 prog.)	RLI, Kanpur	46	30
21) Occupational Safety and Health for Safety Officers and Occupational Health Personnel	RLI, Kolkata	15	15
22) Occupational Safety and Health in Cement Industries	RLI, Kolkata	35	17
23) Online Evaluation and Control of Industrial Noise	CLI, Mumbai	25	20
24) Principles and Practice of Industrial Hygiene in Industry	RLI, Kolkata	7	3
25) Safe Use of Hand Tools and Portable Power Tools in Industries	RLI, Chennai	23	11
26) Safe Use of Lifting Machine & Lifting Tackles	CLI, Mumbai	39	27
27) Safety and Productivity	CLI, Mumbai	10	10
28) Safety Audit	RLI, Chennai	29	19
29) Safety committee members	RLI, Faridabad	37	8
30) Safety in Handling of Lifting Appliances & Loose Gears in Factories & Docks	RLI, Chennai	39	25
31) Safety in the use of Cranes, Lifting Appliances/Tackles in Industries	RLI, Kanpur	39	31
32) Safety in Work at Height	CLI, Mumbai	15	15
33) Safety Management	CLI, Mumbai	25	16
34) Safety Management System in Workplace Activities	RLI, Faridabad	32	32
35) Safety in Chemical Industries	RLI, Chennai	22	13
36) Selection and effective use of PPEs in industries	RLI, Kolkata	28	17

37)) Work Environment Monitoring in Industries	RLI, Chennai	8	8
VII.	Programme for Management/Executive	e, Supervisors and	d Medical Pers	onnel
1)	Accident Investigation and Reporting System in Industries & Major Ports	RLI, Chennai	38	30
2)	Dust Exposure and its Assessment at Industrial Work places	RLI, Chennai	11	6
3)	Occupational Health in industries & ports	RLI, Chennai	14	10
4)	Occupational Lung Diseases	RLI, Chennai	17	15
VIII.	Programme for Medical & Para-Medical	Personnel		
1)	Occupational Health Practice for Nurses & medical assistance working in Occupation Heath Centre	RLI, Kanpur	50	25
	Total	1734	1017	

4.8.5 Appreciation and Promotional Programmes

Each of the Labour Institutes at Mumbai, Chennai, Faridabad, Kanpur and Kolkata has an Industrial Safety Health and Welfare Centre, where half-day appreciation programmes are conducted. Appreciation Programmes are also conducted at various laboratories and divisions of the organization. The details of appreciation and promotional programmes conducted during the year 2020 are given in Table 4.7.

SI.	Description	Institute	No. of Progra- mmes	No. of Parti- cipants	No. of Organ- izations
1.	Appreciation programme for students of ADIS course of CLI Mumbai, RLI, Chennai, RLI, Faridabad, RLI, Kanpur and RLI Kolkata	CLI, Mumbai	12	446	204
2.	Appreciation programme for students of CPCL Polytechnic College, Chennai	RLI, Chennai	1	55	1
3.	Appreciation programme for students of Govt. Polytechnic for Women	RLI, Faridabad	1	50	1
4.	Appreciation programme for students of ITI, Kurla, Mumbai	CLI, Mumbai	1	25	1
5.	Appreciation programme for students of J.B.S.P. Institute of Industrial Safety	CLI, Mumbai	1	26	1

Table 4.7: Appreciation and Promotional Programmes conducted during 2020

	TOTAL	103	2825	326	
15.	Visit to Occupational Safety and Health Exhibition Centre (4 prog)	CLI, Mumbai	49	1196	51
14.	Visit of International Delegates from V.V. Giri National Labour Institute	RLI, Faridabad	1	30	30
13.	Safety centre visit for the participants of the "Workshop on Silicosis & ILO Radiography Pneumoconiosis"	RLI, Kolkata	1	5	4
12.	Introduction to Medical Laboratory instruments	RLI, Kanpur	2	9	6
11.	Half-day Appreciation programme	RLI, Chennai	1	57	1
10.	Half-day Appreciation programme (3 prog)	CLI, Mumbai	19	509	13
9.	Demonstration of the activity of the Work Environmental Engineering Division (3 prog)	CLI, Mumbai	10	310	10
8.	Appreciation programme for students of Ramakrishna Polytechnic College, Chennai (2 prog)	RLI, Chennai	2	66	1
7.	Appreciation programme for students of National Institute of Public Health Training and Research	CLI, Mumbai	1	19	1
6.	Appreciation programme for students of Mother Teresa PG Research Institute of Health Sciences, Puducherry	RLI, Chennai	1	22	1

4.9 Technical Advice

Technical advice and guidance are provided to industries and port users on various aspects relating to control of hazards, prevention of accidents and occupational diseases, work environment, productivity etc.

4.10 Testing of Personal Protective Equipment (PPE)

The respiratory and non-respiratory Personal Protective Equipment (PPE) testing laboratories at the Central Labour Institute, Mumbai undertake performance tests of canisters, masks, helmets, safety shoes, safety goggles, safety belts, welding glasses etc. The details of Personal Protective Equipment tested during the year 2020 are given in Table 4.8

SI.	Type of Equipment	No. of Equipment tested
1.	Safety Helmet	3
2.	Eye Protector	61
3.	Safety Hand Glove	9
4.	Safety Shoe	117
5.	Safety Belt	6
6.	Dust Mask	349
7.	Breathing Air Cylinder	76

Table 4.8: Personnel Protective Equipment tested in 2020

4.11 Talks

The officers of the organization deliver talks on special topics in programmes organized by external organisations to disseminate latest technical information with specific reference to national studies, unit level studies, surveys conducted, etc. Institute-wise details of talks delivered during the year 2020 are given in Table 4.9

Table 4.9: Institute-wise Talks delivered during 2020

Sl.	Institute	No. of Talks	Participants	Organizations
1.	DGFASLI (HQ)*	10	156	36
2.	Regional Labour Institute, Faridabad	3	99	27
	Total	13	255	63

* Comprising of Factory Advice Service & Dock Safety Division

4.12 DGFASLI website

The DGFASLI website <u>www.dgfasli.gov.in</u> is a source of information on various safety and health related matters. The website contains database on abstract of OSH studies, reports, information on advisory services rendered by DGFASLI in the area of testing of respiratory and nonrespiratory personal protective equipment etc. The training programme calendar for all the Labour Institutes, announcement on National Safety Awards & Vishwakarma Rashtriya Puraskar awards, AFIH course, Diploma Course in Industrial Safety along with the application forms are available on the website. The website enables users to access other useful websites related to safety and health and get the national directory of organization and profile of agencies engaged in the field of safety and health. The website also contains the text of the Factories Act, 1948 and the Model Rules framed there under and also the Dock Workers (Safety, Health and Welfare) Act, 1986 and Regulations, 1990 etc. Statistics of Factories, Docks, list of Chief Inspectors of Factories and list of Dock Safety Inspectorates are also available on the portal.

STANDARD REFERENCE NOTE-2020

The digitization of clearances issued by various Ministry/Department, as a part of Digital India Program, DGFASLI has digitization of clearances in the following areas:

- i. Approval of site notification of Major Accident Hazard (MAH) installations in the port premises under Rule 7 of MSIHC Rules, 1989 under the Environment (Protection) Act, 1986
- ii. Issue of competency certificate under Rule 2(d) of the Dock Workers (Safety, Health & Welfare) Regulation 1990.

5

Safety Awards

To appreciate the contribution made by the factories and docks towards producing quality goods and providing efficient services in safe and healthy conditions, the following awards are being given.

5.1 Prime Minister's Shram Awards (PMSA)

The Prime Minister's Shram Awards (PMSA) were instituted in 1985, for the workers (as defined in Industrial Disputes Act, 1947) in recognition of their outstanding contributions in organizations both in public and private sector and who have distinguished record of performance, devotion to duty of a high order, specific contribution in the field of productivity, proven innovative abilities, presence of mind and exceptional courage and also to the workmen who have made supreme sacrifice of laying down their lives in the conscientious discharge of their duties.

It has been decided from the year 2004 onwards that the private sectors shall also be included within the ambit of Prime Minister's Shram Awards and the workers in the private sector units employing 500 or more workers and engaged in manufacturing and productive processes will be eligible to apply for these awards. The number of awards has been increased from 17 to 33. The awards, in order of sequence are Shram Ratna, Shram Bhushan, Shram Vir/Veerangana and Shram Shri/Devi. The recognition consists of a Sanad and cash award of Rs. Two lakh (1 award), Rs. One lakh (4 awards), Rs. 60,000 (12 awards) and Rs. 40,000 (16 awards) respectively.

5.2 Vishwakarma Rashtriya Puraskar & National Safety Awards

The DGFASLI on behalf of the Ministry of Labour & Employment has been implementing the Vishwakarma Rashtriya Puraskar (VRP) (earlier known as Shram Vir National Awards) and the National Safety Awards scheme since 1965. These schemes were modified in 1971, 1978 and again in 2007. The schemes presently in operation are as follows:

• Vishwakarma Rashtriya Puraskar (VRP): VRP is awarded in recognition of outstanding suggestions given by a worker or group of workers and implemented by the management during the previous calendar ear resulting improvement in quality, productivity and working conditions such as safety, health and environmental conservation in the industrial undertakings where "Suggestion Schemes" are in operation.

It is designed to give recognition at the national level to outstanding suggestions resulting in

- (I) Higher Productivity
- (II) Improvement in safety and working conditions

- (III) Savings in foreign exchange (import substitution as well as quality and safety of products)
- (IV) Improvement in overall efficiency of the establishments.

The prizes are grouped in three classes:

- (a) Applications ranked 1 to 5 (5 Awards) Class "A" Awards of Rs. 75, 000/- each.
- (b) Applications ranked 6 to 13 (8 Awards) Class "B" Awards of Rs. 50, 000/- each.
- (c) Applications ranked 14 to 28 (15 Awards) Class "C" Awards of Rs. 25, 000/- each.

These awards are applicable to the workers of Industrial establishments covered under the Factories Act, 1948, the employees covered under the Dock Workers (Safety, Health and Welfare) Act 1986, the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Installations under Atomic Energy Regulatory Board (AERB).

• National Safety Awards: National Safety Awards are given in recognition of outstanding safety performance on the part of the industrial establishments covered under the Factories Act, 1948, the employers covered under the Dock Workers (Safety, Health and Welfare) Act 1986, the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Installations under Atomic Energy Regulatory Board (AERB).

Shields and Citation Certificates are awarded to Winners and Runners Up.

Schemes I to X are meant for factories, construction sites and nuclear Installations and Schemes XI and XII are for Ports.

Owing to the Covid-19 pandemic, the awards ceremony was not conducted during the year 2020.

6

Human Resource Development

The officers of the Organization are deputed to the programmes organized by various agencies within the country and abroad, for their exposure to the latest technical developments that are taking place in the field of Industrial Safety and Health.

Integrated Government Online Training (iGOT) conference

The conference on Integrated Government Online Training (iGOT) was organised by Department of Personnel and Training (DoPT) on 04.02.2020 at Vigyan Bhawan, New Delhi for all Cadre Controlling Authorities (CCAs) and Central Training Institutions (CTIs) engaged in training of civil servants. This conference was attended by Director (Safety), RLI, Faridabad as a nominee to represent DGFASLI.

iGOT is an online training platform for induction training and re-training of the civil servants. The platform is conceived to be one stop for all capacity development needs of all of India's civil services, providing them with resources for continuous-anytime-anyplace learning. It is a solution built to be 'fit for purpose' to meet the exact learning needs of the civil services across all ministries, departments, states and organisations and will be the repository of all training/capacity building initiatives in the government, online, blended or face-to-face.

Celebration of Hindi Pakhwara

"Hindi Pakhwara" was celebrated in this Directorate and across Regional Labour Institutes at Chennai, Faridabad, Kanpur and Kolkata and Central Labour Institute, Mumbai in the month of September, 2020. During this period various competition like Nibandh Lekhan, Bhashan, Anuvaad, Nara Lekhan etc. were organized all through the pakhwara.



Dr. R K Elangovan, Director General, DGFASLI with Shri Apurva Chandra, IAS, Secretary, Ministry of Labour & Employment



Dr. R K Elangovan, Director General, DGFASLI with Shri Gopal Prasad, Economic Advisor, Ministry of Labour & Employment

7

Statistics on Occupational Safety and Health in Factories

The statistics of factories are collected and compiled by the Labour Bureau on the basis of the Annual Returns/Reports in respect of the Factories Act, 1948, furnished by various States and Union Territories. Under the Factories Act, 1948, injuries resulting from industrial accidents, by reasons of which the person injured is prevented from attending to work for a period of 48 hours or more immediately following the accident, are recorded. The important indices on injuries are Frequency Rate (FR) and Incidence Rate (IR). The Frequency Rate is defined as number of total injuries per 1,000 man-days worked. The Incidence Rate is the number of injuries per 1,000 workers employed in the factories.

The latest information relating to occupational injuries in factories are given in this chapter in tables 7.1 to 7.7, which are based on the statistics provided by Labour Bureau up to the year 2017.

Year	No. of Working Factories	Estimated Average daily Employment (in thousands)	Industrial Injuries		Injuries		Freque Rate o injurie per lal man-d worke	f es kh ays	Incidence of injurie thousand Workers Employe Factorie Submitti Return	es per d s ed in s
			Fatal	Total	Fatal	Total	Fatal	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
2011	240824	11578	1083	10441	0.07	0.72	0.09	0.90		
2012	161161	7335	682	5769	0.09	0.75	0.09	0.79		
2013	87493	3659	494	1951	0.08	0.37	0.14	0.53		
2014	135971	6367	515	3984	0.06	0.49	0.08	0.71		
2015	167726	8660	789	5500	0.05	0.33	0.09	0.64		
2016	167025	9335	777	3906	0.1	0.51	0.08	0.42		
2017	158046	7999	668	668 3149		0.33	0.08	0.39		

Table: 7.1-Statistics of Employment, Industrial Injuries, etc. in Factories for the year 2011-
2017

Source:(i) Data received from Labour Bureau through correspondence.

(ii) Data for the year 2018 and beyond is yet to be updated by the Labour Bureau.

Note: Limitations of the data received from Labour Bureau Chandigarh: The Number of injuries has been given on the basis of notices of accidents whereas the rates have been worked out on the basis of Annual Return.

Sl.	State / UT	2013	2014	2015	2016	2017
1.	Andaman & Nicobar	NA	55(-)	40(-)	58(-)	89(-)
2.	Andhra Pradesh	714 (152)	321(78)	207(72)	220(77)	184(55)
3.	Arunachal Pradesh	NA	NA	NA	NA	NA
4.	Assam	105 (4)	71(13)	48(8)	53(12)	64(10)
5.	Bihar	160 (4)	9(2)	210(10)	198(11)	97(17)
6.	Chandigarh	2(-)	-	-	1(1)	8(1)
7.	Chhattisgarh	156 (97)	188(113)	124(74)	120(67)	NA
8.	Daman & Diu and DNH	NA	56(20)	70(12)	54(15)	46(16)
9.	Delhi	NA	NA	NA	NA	NA
10.	Goa	55 (10)	87(5)	80(9)	58(3)	57(5)
11.	Gujarat	NA	NA	1722(206)	1412(243)	1257(250)
12.	Haryana	78 (41)	78(41)	90(42)	132(62)	132(62)
13.	Himachal Pradesh	NA	136(11)	5(-)	15(2)	9(5)
14.	Jammu & Kashmir	NA	NA	NA	NA	NA
15.	Jharkhand	130 (37)	127(31)	144(29)	91(21)	78(18)
16.	Karnataka	NA	NA	NA	NA	NA
17.	Kerala	NA	NA	NA	NA	NA
18.	Lakshadweep	NA	NA	NA	NA	NA
19.	Madhya Pradesh	NA	NA	NA	422(30)	NA
20.	Maharashtra	NA	2336 (65)	1660(145)	NA	NA
21.	Manipur	NA	NA	NA	NA	-
22.	Meghalaya	15 (-)	9(2)	2(1)	2(1)	3(2)
23.	Mizoram	NA	NA	NA	NA	NA
24.	Nagaland	NA	-	-	-	-
25.	Odisha	NA	NA	239(55)	222(47)	197(52)
26.	Puducherry	28 (3)	18(6)	21(5)	22(2)	38(3)
27.	Punjab	NA	NA	NA	NA	NA
28.	Rajasthan	761 (55)	762(55)	604(33)	125(15)	374(31)
29.	Sikkim	NA	NA	NA	NA	NA
30.	Tamil Nadu	NA	NA	NA	476(104)	290(72)
31.	Telangana	234 (89)	238 (71)	192(63)	164(52)	193(59)
32.	Tripura	7 (2)	8(2)	7(4)	6(2)	4(1)
33.	Uttar Pradesh	NA	NA	NA	NA	NA
34.	Uttarakhand	NA	NA	43(21)	55(10)	29(9)
35.	West Bengal	NA	NA	NA	NA	NA
	Total	2445(494)	4499(515)	5500(789)	3906(777)	3149(668)

Table 7.2- State-Wise Total Number of Industrial Injuries in Factories

Note: (i)NA = Not Available (ii) - = Nil

(iii) Figures in brackets pertain to "Fatalities" and are included in the total.

(iv) For limitations of the data please refer note under table 7.1

(v) Data for the year 2018 and beyond is yet to be updated by the Labour Bureau.

Sl.	State / UT	2013	2014	2015	2016	2017
1.	Andaman & Nicobar	NA	3.92(-)	3.40(-)	3.75(-)	5.87(-)
2.	Andhra Pradesh	0.76 (0.16)	0.26(0.06)	0.17(0.06)	0.16(0.06)	0.14(0.04)
3.	Arunachal Pradesh	NA	NA	NA	NA	NA
4.	Assam	0.98 (0.04)	0.55(0.1)	0.38(0.06)	0.4(0.09)	0.39(0.06)
5.	Bihar	3.39 (0.08)	0.56(0.12)	6.2(0.31)	4.95(0.27)	1.5(0.26)
6.	Chandigarh	0.09 (-)	-	-	0.07(0.07)	0.53(0.07)
7.	Chhattisgarh	0.49 (0.31)	0.57(0.35)	0.44(0.26)	0.79(0.44)	NA
8.	Daman & Diu and DNH	NA	0.22(0.08)	0.19(0.03)	0.14(0.04)	0.12(0.04)
9.	Delhi	NA	NA	NA	NA	NA
10.	Goa	0.27(0.05)	0.44(0.03)	0.38(0.04)	0.25(0.01)	0.23(0.02)
11.	Gujarat	NA	NA	1.1(0.13)	1.01(0.17)	0.34(0.07)
12.	Haryana	0.02(0.01)	0.14(0.07)	0.02(0.01)	0.18(0.08)	0.16(0.07)
13.	Himachal Pradesh	NA	0.26(0.02)	0.01(-)	0.05(0.01)	0.03(0.02)
14.	Jammu & Kashmir	NA	NA	NA	NA	NA
15.	Jharkhand	1.05(0.3)	0.7(0.17)	0.62(0.13)	0.58(0.13)	0.37(0.09)
16.	Karnataka	NA	NA	NA	NA	NA
17.	Kerala	NA	NA	NA	NA	NA
18.	Lakshadweep	NA	NA	NA	NA	NA
19.	Madhya Pradesh	NA	NA	NA	2.03(0.14)	NA
20.	Maharashtra	NA	0.55(0.02)	0.37(0.03)	NA	NA
21.	Manipur	NA	NA	NA	NA	-
22.	Meghalaya	1.68(-)	1.04(0.23)	0.24(0.12)	0.22(0.11)	0.39(0.26)
23.	Mizoram	NA	NA	NA	NA	NA
24.	Nagaland	NA	-	-	-	-
25.	Odisha	NA	NA	0.50(0.11)	0.39(0.08)	0.32(0.08)
26.	Puducherry	0.34 (0.04)	0.24(0.08)	0.27(0.06)	0.25(0.02)	0.49(0.04)
27.	Punjab	NA	NA	NA	NA	NA
28.	Rajasthan	1.52 (0.11)	1.47(0.11)	0.84(0.05)	0.27(0.03)	0.99(0.08)
29.	Sikkim	NA	NA	NA	NA	NA
30.	Tamil Nadu	NA	NA	NA	4.36(0.95)	2.48(0.62)
31.	Telangana	0.3(0.12)	0.27(0.08)	0.22(0.07)	0.17(0.05)	0.24(0.07)
32.	Tripura	0.23 (0.07)	0.35(0.09)	0.07(0.04)	0.22(0.07)	0.34(0.09)
33.	Uttar Pradesh	NA	NA	NA	NA	NA
34.	Uttarakhand	NA	NA	0.15(0.07)	0.19(0.03)	0.1(0.03)
35.	West Bengal	NA	NA	NA	NA	NA
Total		0.37(0.08)	0.49(0.06)	0.33(0.05)	0.51(0.1)	0.33(0.07)

Table 7.3- State-wise Frequency Rates of Industrial Injuries in Factories

Note: (i) F.R. = Frequency Rate per lakh man-days worked

(ii) NA = Not Available

(iii) (-) = Nil or Negligible

(iv)Figures in bracket pertain to "Fatalities" and are included in the total

(v) For limitations of the data please refer note under table 7.1

(vi) Data for the year 2018 and beyond is yet to be updated by the Labour Bureau.

Sl.	State / UT	2013	2014	2015	2016	2017
1.	Andaman & Nicobar	NA	9.37(-)	7.25(-)	10.32(-)	16.22(-)
2.	Andhra Pradesh	1.18(0.25)	0.51(0.12)	0.32(0.11)	0.3(0.1)	0.24(0.07)
3.	Arunachal Pradesh	NA	NA	NA	NA	NA
4.	Assam	0.53(0.02)	0.34(0.06)	0.22(0.04)	0.22(0.05)	0.24(0.04)
5.	Bihar	0.85(0.02)	0.04(0.01)	0.95(0.05)	1.11(0.06)	0.51(0.09)
6.	Chandigarh	0.16(-)	-	-	0.08(0.08)	0.61(0.08)
7.	Chhattisgarh	0.59(0.37)	0.65(0.39)	0.44(0.26)	0.44(0.24)	NA
8.	Daman & Diu and DNH	NA	0.28(0.1)	0.38(0.06)	0.28(0.08)	0.23(0.08)
9.	Delhi	NA	NA	NA	NA	NA
10.	Goa	0.77(0.14)	1.17(0.07)	1(0.11)	0.64(0.03)	0.62(0.05)
11.	Gujarat	NA	NA	1.09(0.13)	0.86(0.15)	1.06(0.21)
12.	Haryana	0.09(0.05)	0.09(0.05)	0.1(0.05)	0.15(0.07)	0.14(0.07)
13.	Himachal Pradesh	NA	0.43(0.03)	0.02(-)	0.05(0.01)	0.03(0.01)
14.	Jammu & Kashmir	NA	NA	NA	NA	NA
15.	Jharkhand	0.51(0.14)	0.49(0.12)	0.53(0.11)	0.37(0.08)	0.28(0.07)
16.	Karnataka	NA	NA	NA	NA	NA
17.	Kerala	NA	NA	NA	NA	NA
18.	Lakshadweep	NA	NA	NA	NA	NA
19.	Madhya Pradesh	NA	NA	NA	0.68(0.05)	NA
20.	Maharashtra	NA	1.13(0.03)	0.79(0.07)	NA	NA
21.	Manipur	NA	NA	NA	NA	-
22.	Meghalaya	1.44(-)	0.82(0.18)	0.18(0.09)	0.21(0.11)	0.3(0.2)
23.	Mizoram	NA	NA	NA	NA	NA
24.	Nagaland	NA	-	-	-	-
25.	Odisha	NA	NA	1.01(0.23)	0.78(0.17)	0.66(0.17)
26.	Puducherry	0.35(0.04)	0.21(0.07)	0.25(0.06)	0.25(0.02)	0.44(0.03)
27.	Punjab	NA	NA	NA	NA	NA
28.	Rajasthan	1.53(0.11)	1.52(0.11)	1.3(0.07)	0.23(0.03)	0.73(0.06)
29.	Sikkim	NA	NA	NA	NA	NA
30.	Tamil Nadu	NA	NA	NA	0.26(0.06)	0.17(0.04)
31.	Telangana	0.4(0.15)	0.4(0.12)	0.31(0.1)	0.26(0.08)	0.3(0.09)
32.	Tripura	0.12(0.04)	0.14(0.03)	0.12(0.07)	0.09(0.03)	0.06(0.02)
33.	Uttar Pradesh	NA	NA	NA	NA	NA
34.	Uttarakhand	NA	NA	0.11(0.05)	0.14(0.03)	0.08(0.02)
35.	West Bengal	NA	NA	NA	NA	NA
Total		0.67(0.14)	0.71(0.08)	0.64(0.09)	0.42(0.08)	0.39(0.08)

Table 7.4- State-wise Incidence Rates of Industrial Injuries in Factories

Note: (i) I.R. = Incidence Rate per 1000 workers employed. (ii) NA = Not Available, (iii) (-) = Nil (iv)Figures in bracket pertain to "Fatalities" and are included in the total,

(v)For limitations of the data please refer note under table 7.1

(vi) Data for the year 2018 and beyond is yet to be updated by the Labour Bureau.

		NIC	201	2013		4	201	201	6	2017		
Sl.	Industry	Code 2008	Total Injuries	IR								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1.	All Textiles	13,14	521 (66)	1.46 (0.19)	844 (19)	1.24 (0.03)	1235 (85)	1.27 (0.09)	709 (64)	0.56 (0.05)	694 (94)	0.57 (0.08)
2.	Manufacture of Paper & paper products & printing, publishing & allied products	17,18	49 (14)	0.48 (0.14)	79 (18)	0.38 (0.09)	123 (23)	0.43 (0.08)	119 (33)	0.38 (0.11)	82 (23)	0.21 (0.06)
3.	Manufacture of Chemicals & Chemical products (Except Petroleum and coal products)	20	197 (36)	1.37 (0.25)	337 (31)	1.12 (0.1)	710 (102)	1.26 (0.18)	546 (146)	0.81 (0.22)	331 (73)	0.53 (0.12)
4.	Manufacture of Non- metallic mineral products	23	287 (48)	0.57 (0.10)	179 (58)	0.3 (0.1)	294 (47)	0.39 (0.06)	134 (56)	0.16 (0.07)	132 (48)	0.2 (0.07)
5.	Basic metal and alloys Industries	24	274 (101)	0.62 (0.23)	603 (134)	1.01 (0.22)	506 (154)	0.58 (0.18)	377 (144)	0.45 (0.17)	233 (91)	0.36 (0.14)
6.	Manufacture of metal products & Parts (except machinery & transport equipment)	25	57 (16)	0.25 (0.07)	259 (14)	0.53 (0.03)	417 (35)	0.66 (0.06)	313 (30)	0.53 (0.05)	174 (20)	0.41 (0.05)
7.	Manufacture of machinery, machine tools & parts tools (except electrical machinery)	28	13 (4)	0.08 (0.02)	293 (9)	0.92 (0.03)	199 (19)	0.48 (0.05)	139 (21)	0.35 (0.05)	137 (23)	0.39 (0.07)
												Contd

Table 7.5- Industrial Injuries and their Incidence Rate (IR) per Thousand Workers Employed by Important Industries

46

	Industry	NIC		201	2013		2014		2015		2016		.7
SI.		Code 2008	Total Injuries	IR									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
8.	Manufacture of transport equipment and parts	30	84 (4)	1.13 (0.05)	233 (9)	1.71 (0.07)	232 (13)	1.68 (0.09)	134 (5)	0.75 (0.03)	164 (13)	1.42 (0.11)	
9.	Electricity, Gas and Steam	35	112 (47)	1.09 (0.46)	131 (40)	0.78 (0.24)	173 (49)	0.81 (0.23)	167 (40)	0.57 (0.14)	101 (29)	0.74 (0.21)	
Total of (Sl. 1 to 9 Industries)			1594 (336)	0.75 (0.16)	2958 (332)	0.85 (0.09)	3889 (527)	0.81 (0.11)	2638 (539)	0.49 (0.1)	2048 (414)	0.45 (0.09)	
*Total of All Industries			2445 (494)	0.67 (0.14)	4499 (515)	0.71 (0.08)	5500 (789)	0.64 (0.09)	3906 (777)	0.42 (0.08)	3149 (668)	0.39 (0.08)	

Note: (i) Figures in brackets indicate "Fatalities" and are included in the Total

(ii)* The figures for All Industries include the figures of other industries apart from above Industries shown.

(iii) For limitations of data refer footnote of table 7.1

(iv) Data for the year 2018 and beyond is yet to be updated by the Labour Bureau.

SI.	Industry	NIC Code 2008	2013	2014	2015	2016	2017
1.	All Textiles	13,14	1.13	0.77	0.75	0.65	0.55
2.	Manufacture of Paper & paper products & printing, publishing & allied products	17,18	0.40	0.30	0.32	0.39	0.34
3.	Manufacture of Chemicals &		0.95	0.63	0.76	1.04	0.49
4.	Manufacture of Non- metallic mineral products	23	0.85	0.33	0.46	0.3	0.17
5.	Basic metal and alloys Industries	24	0.53	0.65	0.42	0.49	0.16
6.	Manufacture of metal products & Parts(except machinery & transport equipment)	25	0.26	0.40	0.48	1.06	0.88
7.	Manufacture of machinery, machine tools & parts (except electrical machinery)	28	0.07	0.55	0.32	0.48	0.44
8.	Manufacture of transport equipment and parts	30	0.90	0.90	0.89	0.99	1
9.	Electricity, Gas and Steam	35	0.64	0.41	0.41	0.61	0.42
	Total of (Sl. 1 to 9 Industries	0.68	0.58	0.56	0.64	0.38	
	* Total of All Industries	0.37	0.49	0.33	0.51	0.33	

Table 7.6- Frequency Rate of Total Injuries by Important Industries

Note:(i)* The figures for All Industries include the figures of other industries apart from above industries shown.

(ii) For limitations of data refer footnote of table 7.1

(iii) Data for the year 2018 and beyond is yet to be updated by the Labour Bureau.

SI.	Consticut	20	14	20	15	20	16	20	17
51.	Causation	Total	Fatal	Total	Fatal	Total	Fatal	Total	Fatal
1.	Prime movers	36	9	68	19	67	17	48	14
2.	Machinery moved by Mechanical Power	273	66	994	132	583	95	800	101
3.	Machinery not moved by Mechanical Power	87	8	258	28	170	24	135	19
4.	Transport whether moved by Power or not	58	22	46	5	112	29	43	21
5.	Electricity	77	44	87	36	185	91	106	51
6.	Explosions	36	15	200	54	118	44	81	40
7.	Fires	96	11	148	28	179	39	154	37
8.	Gassing	27	21	129	27	68	19	30	13
9.	Molten Metals & other Hot or Corrosive Substances	55	17	177	40	127	37	58	15
10.	Hand Tools	77	8	234	8	131	5	54	4
11.	Falling Bodies	107	17	218	21	229	52	129	29
12.	Persons Falling	264	69	515	114	324	89	413	116
13.	Stepping on or Striking against Objects	101	12	319	17	158	18	121	21
14.	Handling Goods or Articles	260	6	425	28	289	22	189	9
15.	Others	301	40	1353	135	934	115	656	116
	Total		365	5171	692	3674	696	3017	606

Note: (i) For limitations of data refer footnote of table 7.1

(ii) The Total in table 7.7 may not tally with the corresponding tables 7.1, 7.2 and 7.4 due to non- availability of cause-wise data of industrial injuries.

(iii)Data for the year 2018 and beyond is yet to be updated by the Labour Bureau.

8

Statistics on Status of compliance with statutory provisions of the Factories Act, 1948

DGFASLI receives information relating to factories covered under the provisions of the Factories Act, 1948 from States and Union Territories from time to time. This information is mainly collected through Factory Advice Service (FAS) Forms as well as through correspondence as and when required from the CIFs of the States/UTs. This information can be used to know the state-wise status of safety and health as well as compliance level with statutory standards in factories. The information can be used for estimation of various trends. It is emphasized here that for ascertaining the correctness or the updated information given in the following pages/tables, the State Governments/Union Territory Administration concerned may be contacted.

No. of registered factories	355478	
No. of working factories		300944
	Total	18552909
Employment	Women	2622627
No. of Safety Officers		5294
No. of Welfare Officers		4600
No. of Medical Officers	13066	
No. of factories having Sat	30560	
No. of factories having Sat	fety Committees	23695
No. of Hazardous Process	factories	39700
No. of factories having On	-site Emergency Plan	2052
No. of factories having Ca	nteens Facility	10639
No. of factories having Cre	8053	
Total Injuries	5054	
Fatal Injuries	1127	

Statistics of Factories at a Glance: 2019

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

N.B.: The above numbers does not include data pertaining to the state of West Bengal as it's not provided to DGFASLI. In this regard, a letter, six reminder letters and a DO letter were issued by DGFASLI to the CIF of West Bengal.

SI.	State/UT	2010	2011	2012	2013	2014
51.	State/01	FI/N-FI	FI/N-FI	FI/N-FI	FI/N-FI	FI/N-FI
1	Andaman & Nicobar	#/#	#/57	#/71	#/46	#/48
2	Andhra Pradesh	188/923	156/1258	106/487	97/472	82/147
3	Arunachal Pradesh	*/*	*/*	*/*	*/*	*/*
4	Assam	6/46	8/69	8/70	8/57	13/58
5	Bihar	1/15	4/91	9/126	4/156	2/7
6	Chandigarh	#/2	8/6	1/1	#/2	#/#
7	Chhattisgarh	84/341	97/222	103/164	97/43	113/75
8	DD & DNH	14/31	17/38	13/31	12/57	21/47
9	Delhi	15/39	29/43	6/18	13/14	1/9
10	Goa	12/97	11/92	7/86	10/44	5/81
11	Gujarat	221/2430	249/3014	279/2781	250/1611	209/1334
12	Haryana	38/51	61/87	37/41	51/46	35/58
13	Himachal Pradesh	5/11	17/25	10/11	11/23	13/23
14	Jammu & Kashmir	#/99	4/4	8/5	#/#	3/18
15	Jharkhand	43/149	19/94	33/149	37/92	32/96
16	Karnataka	92/779	87/1029	59/825	82/588	84/665
17	Kerala	7/79	19/369	14/426	27/386	24/234
18	Lakshadweep	*/*	*/*	*/*	*/*	*/*
19	Madhya Pradesh	68/848	55/650	45/749	48/465	41/383
20	Maharashtra	225/2540	183/2266	215/2333	199/2013	187/1687
21	Manipur	#/#	#/#	#/#	#/#	#/#
22	Meghalaya	2/12	#/1	1/1	3/3	1/1
23	Mizoram	#/#	#/#	#/#	#/#	#/#
24	Nagaland	#/#	#/#	#/#	#/#	#/#
25	Odisha	103/457	60/487	78/390	58/196	46/165
26	Puducherry	10/46	10/46	8/30	3/25	6/12
27	Punjab	14/212	34/183	46/129	29/103	16/98
28	Rajasthan	65/534	63/683	34/699	55/706	39/624
29	Sikkim	*/*	*/*	*/*	*/*	*/*
30	Tamil Nadu	75/860	117/624	110/314	109/415	105/293
31	Telangana	*/*	*/*	*/*	*/*	71/60
32	Tripura	1/5	#/3	2/5	2/4	2/8
33	Uttar Pradesh	64/152	#/#	#/#	#/#	45/47
34	Uttarakhand	9/24	#/#	23/65	11/35	7/42
35	West Bengal	97/19264	86/17364	62/18693	96/19250	63/19180
	Total	1459/30046	1394/28805	1317/28700	1312/26852	1266/25500

Table 8(a): Fatal Injuries and Non-Fatal Injuries in registered factories (2010-2014)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) FI – Fatal injuries and N-FI – Non-Fatal Injuries

(ii) *: There are no registered factories in this State/UT.

(iii) #: Data not available/not reported by the CIF/NIL Data.

Sl.	State /UT	2015	2016	2017	2018	2019
51.	State/UT	FI/N-FI	FI/N-FI	FI/N-FI	FI/N-FI	FI/N-FI
1	Andaman & Nicobar	#/46	#/70	#/69	#/39	#/43
2	Andhra Pradesh	68/78	68/247	68/103	61/182	72/154
3	Arunachal Pradesh	*/*	*/*	*/*	#/#	#/#
4	Assam	8/40	12/41	10/54	12/35	4/21
5	Bihar	10/188	11/184	17/80	21/67	8/52
6	Chandigarh	#/#	1/#	1/4	#/2	#/1
7	Chhattisgarh	74/50	81/56	72/84	91/67	86/65
8	DD & DNH	12/58	15/39	16/30	25/50	9/49
9	Delhi	6/20	10/26	37/37	5/26	6/23
10	Goa	8/71	3/56	5/52	3/36	3/26
11	Gujarat	206/1516	272/1169	229/1189	263/1036	216/718
12	Haryana	41/39	67/40	49/38	45/27	26/47
13	Himachal Pradesh	4/23	9/31	14/27	9/13	9/23
14	Jammu & Kashmir	#/14	1/2	#/1	#/1	2/5
15	Jharkhand	29/115	21/69	17/59	18/52	21/42
16	Karnataka	72/612	54/464	49/358	85/363	69/414
17	Kerala	20/326	18/158	16/236	22/145	29/122
18	Lakshadweep	*/*	*/*	*/*	*/*	*/*
19	Madhya Pradesh	44/348	30/358	30/268	22/265	44/299
20	Maharashtra	145/1471	150/1352	137/1167	142/1292	145/1089
21	Manipur	#/#	#/#	#/#	#/#	#/#
22	Meghalaya	#/1	2/1	3/3	4/5	1/2
23	Mizoram	#/#	#/#	#/#	#/#	#/#
24	Nagaland	#/#	#/#	#/#	#/#	#/#
25	Odisha	55/167	46/169	52/136	42/46	32/40
26	Puducherry	5/16	2/20	3/35	5/53	5/32
27	Punjab	21/100	23/115	20/117	16/85	64/83
28	Rajasthan	33/571	15/133	31/343	32/259	32/188
29	Sikkim	*/*	*/*	*/*	*/*	*/*
30	Tamil Nadu	87/327	104/344	71/192	84/205	122/206
31	Telangana	57/39	63/56	70/117	43/45	56/57
32	Tripura	4/3	1/3	#/#	2/6	#/#
33	Uttar Pradesh	39/57	46/63	58/52	48/62	46/79
34	Uttarakhand	21/21	10/44	9/15	15/41	20/47
35	West Bengal	38/13940	54/57	#/#	39/23	#/#
	Total	1107/20257	1189/5367	1084/4866	1154/4528	1127/3927

Table 8(b): Fatal Injuries and Non-Fatal Injuries in registered factories (2015-2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) FI – Fatal injuries and N-FI – Non-Fatal Injuries

(ii) *: There are no registered factories in this State/UT.

(iii) #: Data not available/not reported by the CIF/NIL Data.

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Table 8(c): OSH Data of registered factories (2010-2019)

Year	No. of Registered Factories	Total Employ- ment	Dangerous Occurrences	Fatal Injuries	Non-fatal injuries	Total Injuries	Fatal injuries per lakh workers	Non-fatal injuries per lakh workers	Total injuries per lakh workers	Fatal injuries per thousand registered factories	Non-fatal injuries per thousand registered factories	Total injuries per thousand registered factories
2010	337151	12719287	-	1459	30046	31505	11.47	236.22	247.69	4.33	89.12	93.44
2011	325209 (-3.54 %)	11634070 (-8.53 %)	649	1394 (-4.46 %)	28805 (-4.13 %)	30199 (-4.15 %)	11.98 (4.46 %)	247.59 (4.81 %)	259.57 (4.8 %)	4.29 (-0.95 %)	88.57 (-0.61 %)	92.86 (-0.63 %)
2012	353684 (8.76%)	14910645 (28.16%)	1310 (101.85%)	1317 (-5.52%)	28700 (-0.36%)	30017 (-0.6%)	8.83 (-26.28%)	192.48 (-22.26%)	201.31 (-22.44%)	3.72 (-13.13%)	81.15 (-8.39%)	84.87 (-8.61%)
2013	340226 (-3.81%)	14042410 (-5.82%)	1343 (2.52%)	1312 (-0.38%)	26852 (-6.44%)	28164 (-6.17%)	9.34 (5.78%)	191.22 (-0.65%)	200.56 (-0.37%)	3.86 (3.56%)	78.92 (-2.74%)	82.78 (-2.46%)
2014	361994 (6.4%)	20034859 (42.67%)	1534 (14.22%)	1266 (-3.51%)	25500 (-5.04%)	26766 (-4.96%)	6.32 (-32.37%)	127.28 (-33.44%)	133.60 (-33.39%)	3.50 (-9.31%)	70.44 (-10.75%)	73.94 (-10.68%)
2015	348429 (-3.75%)	16374546 (-18.27%)	1091 (-28.88%)	1107 (-12.56%)	20257 (-20.56%)	21364 (-20.18%)	6.76 (6.99%)	123.71 (-2.8%)	130.47 (-2.34%)	3.18 (-9.16%)	58.14 (-17.47%)	61.32 (-17.07%)
2016	360949 (3.59%)	17376854 (6.12%)	700 (-35.84%)	1189 (7.41%)	5367 (-73.51%)	6556 (-69.31%)	6.84 (1.21%)	30.89 (-75.03%)	37.73 (-71.08%)	3.29 (3.68%)	14.87 (-74.42%)	18.16 (-70.38%)
2017	339931 (-5.82%)	16409493 (-5.57%)	1382 (97.43%)	1084 (-8.83%)	4866 (-9.33%)	5950 (-9.24%)	6.61 (-3.46%)	29.65 (-3.99%)	36.26 (-3.89%)	3.19 (-3.19%)	14.31 (-3.73%)	17.50 (-3.63%)
2018	364268 (7.16%)	18724733 (14.11%)	1124 (-18.67%)	1154 (6.46%)	4528 (-6.95%)	5682 (-4.50%)	6.16 (-6.81)	24.18 (-9.49)	30.34 (-16.33)	3.17 (-0.63)	12.43 (-13.13)	15.60 (-10.86)
2019	355478 (-2.41%)	18552909 (-0.92%)	1371 (21.98%)	1127 (-2.34%)	3927 (-13.27%)	5054 (-11.05%)	6.07 (-1.39%)	21.17 (-12.44%)	27.24 (-10.21%)	3.17 (0.00%)	11.05 (-11.13%)	14.22 (-8.86%)

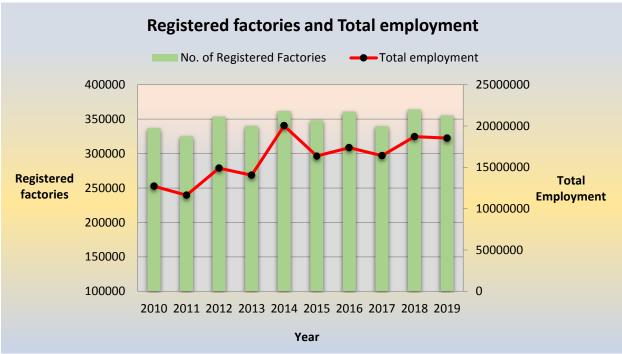
Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

N.B.: (i) Figures in the bracket indicate percentage change as compared to the previous year.

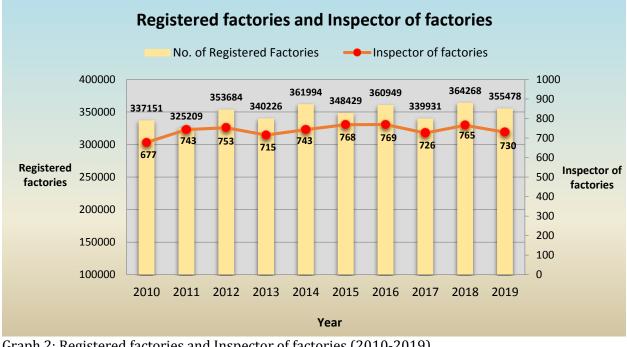
 (ii) The data in the table pertaining to the following years doesn't include data from the states mentioned against them as these states did not provide data to DGFASLI during that year: 2019 - West Bengal, 2017 - West Bengal, 2013 - Uttar Pradesh and Jammu & Kashmir, 2012 - Uttar Pradesh, 2011 - Uttarakhand and Uttar Pradesh, and 2010 - Himachal Pradesh. The above table shows Occupational Safety and Health data of last 10 years (2010-2019) of factories registered under Factories Act, 1948.

The following observations can be made from the data:

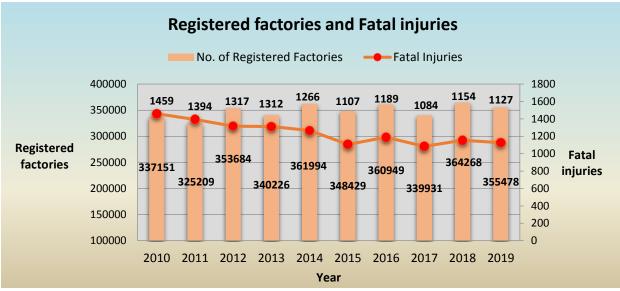
- The no. of registered factories and total employment in registered factories registered shows a general increasing trend during the last ten years. During the years 2010-2019, the no. of registered factories in India increased by 5.4% from 3,37,151 to 3,55,478 while the total no. of workers employed registered an increase of about 46% from 1,27,19,287 to 1,85,52,909.
- Both the fatal and non-fatal injuries registered a decline as compared to the base year 2010. The largest annual decline of 12.56% is seen in fatal injuries during the year 2015 while during the year 2016, non-fatal injuries registered the largest ever annual decline of 73.51%.
- There is a consistent decline every year in the no. of total injuries. Each year, the no. of total injuries reported is less than the previous year.
- There is decline of about 23% in the no. of fatal injuries in the registered factories since 2010 to 2019 i.e. fatal injuries in registered factories decreased from 1459 to 1127. During the corresponding period, the non-fatal injuries in the registered factories decreased by almost 87% from 30,046 to 3,927.
- It can be observed from the table that the decline in the no. of total injuries during the year 2016 is steeper vis-à-vis during the years preceding 2016. There is massive decline in the non-fatal injuries and thus, total injuries after the year 2015. After the year 2015, the state of West Bengal has reported a large decrease in the no. of non-fatal injuries during the year 2016 and 2018 as compared to previous years, while it didn't report data in the year 2017 and 2019.
- The no. of fatal injuries and non-fatal injuries per lakh workers in the registered factories have witnessed a general declining trend since the year 2010. It can be noted that the non-fatal injuries per thousand registered factories and total injuries per thousand registered factories have shown a consistent declining trend since 2010 and each year the incidence rate is lower than the previous year.
- The no. of fatal injuries per lakh workers reduced from 11.47 to 6.07 during the last 10 years; while during the corresponding period, the no. of non-fatal injuries per lakh workers reduced from 236.22 to 21.17. During the same period, total injuries (both fatal and non-fatal) per lakh workers reduced from 247.69 to 27.24.
- The no. of fatal, non-fatal and total injuries per thousand registered factories, showing a declining trend during the period 2010-2019, reduced from 4.33 to 3.17, 89.12 to 11.05 and 93.44 to 14.22 respectively.



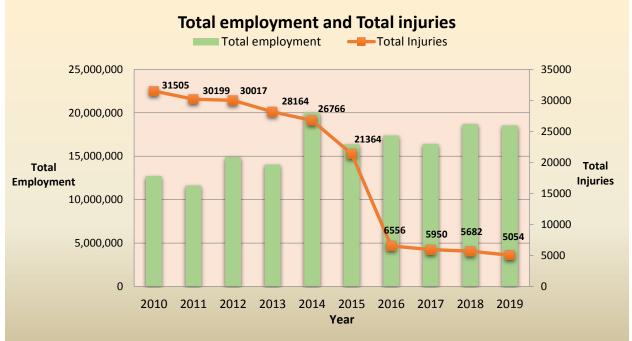
Graph 1: Registered factories and total employment in registered factories (2010-2019)



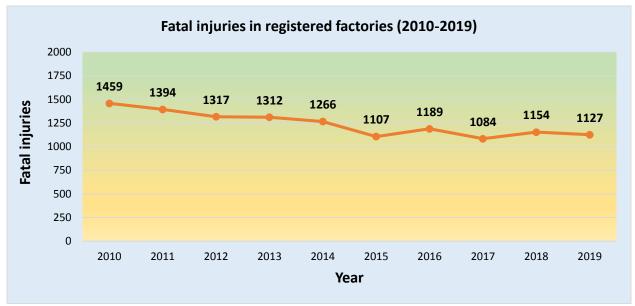
Graph 2: Registered factories and Inspector of factories (2010-2019)



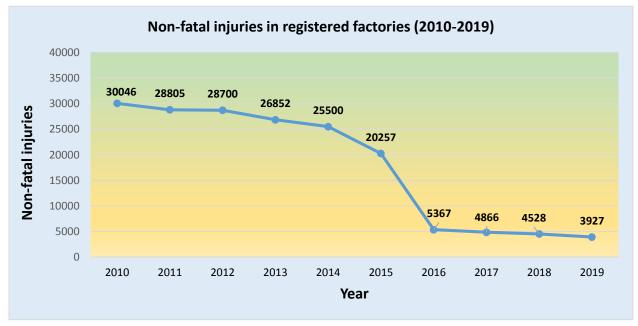
Graph 3: Registered factories and Fatal injuries in registered factories (2010-2019)



Graph 4: Total employment and Total injuries in registered factories (2010-2019)

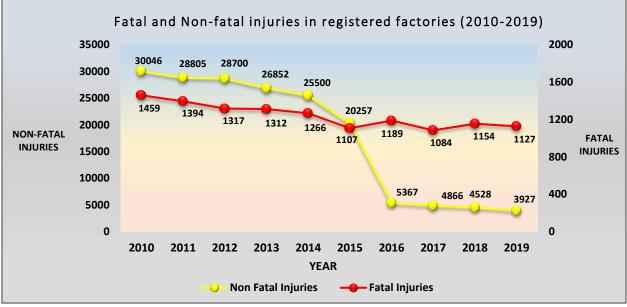


Graph 5: Fatal injuries in registered factories (2010-2019)

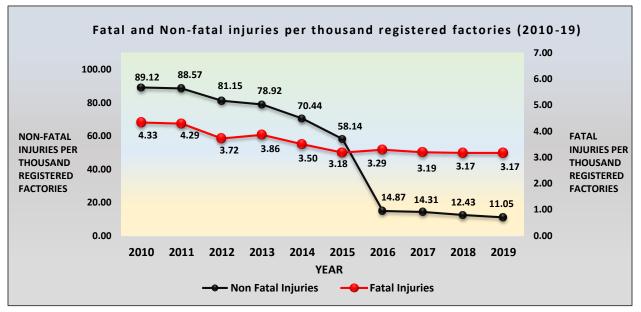


Graph 6: Non-fatal injuries in registered factories (2010-2019)

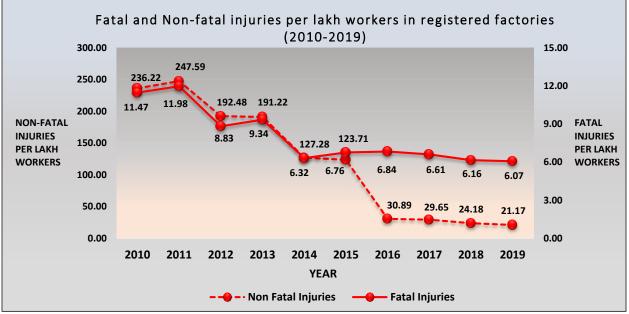
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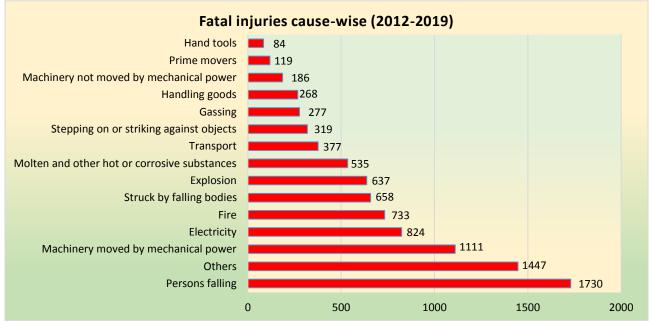
Graph 7: Fatal and Non-fatal injuries in registered factories (2010-2019)

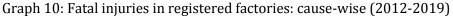


Graph 8: Fatal and Non-fatal injuries per thousand registered factories (2010-2019)

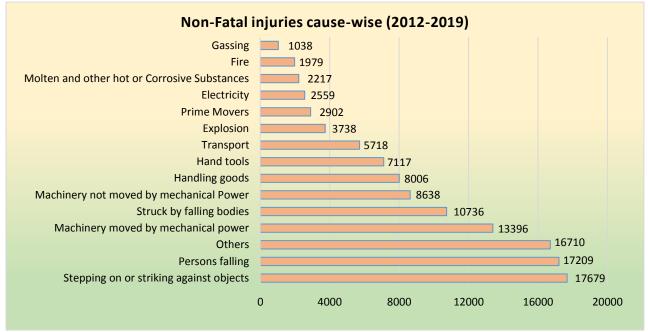


Graph 9: Fatal and Non-fatal injuries per lakh workers in registered factories (2010-2019)





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Graph 11: Non-fatal injuries in registered factories: cause-wise (2012-2019)

CI	State /UT	201	9
Sl.	State/UT	Sanctioned	Working
1	Andaman and Nicobar Islands	2	2
2	Andhra Pradesh	53	42
3	Arunachal Pradesh	1	3
4	Assam	29	25
5	Bihar	21	10
6	Chandigarh	#	6
7	Chhattisgarh	29	25
8	Daman and Diu & Dadra and Nagar Haveli	1	1
9	Delhi	16	9
10	Goa	7	7
11	Gujarat	153	88
12	Haryana	36	31
13	Himachal Pradesh	2	49
14	Jammu and Kashmir	5	5
15	Jharkhand	25	17
16	Karnataka	43	31
17	Kerala	58	58
18	Lakshadweep	*	*
19	Madhya Pradesh	41	19
20	Maharashtra	131	51
21	Manipur	3	3
22	Meghalaya	4	3
23	Mizoram	2	3
24	Nagaland	2	2
25	Odisha	32	24
26	Puducherry	9	3
27	Punjab	29	17
28	Rajasthan	44	34
29	Sikkim	*	*
30	Tamil Nadu	168	98
31	Telangana	35	28
32	Tripura	5	5
33	Uttar Pradesh	46	29
34	Uttarakhand	2	2
35	West Bengal	#	#
	Total	1034	730

Table 8.1- Inspectors of Factories (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

CI	State /UT	201	9
SI.	State/UT	Sanctioned	Working
1	Andaman and Nicobar Islands	#	#
2	Andhra Pradesh	2	#
3	Arunachal Pradesh	#	#
4	Assam	1	1
5	Bihar	2	#
6	Chandigarh	#	#
7	Chhattisgarh	1	1
8	Daman and Diu & Dadra and Nagar Haveli	#	#
9	Delhi	1	1
10	Goa	1	1
11	Gujarat	5	1
12	Haryana	5	4
13	Himachal Pradesh	#	#
14	Jammu and Kashmir	#	#
15	Jharkhand	#	#
16	Karnataka	1	1
17	Kerala	4	1
18	Lakshadweep	*	*
19	Madhya Pradesh	1	1
20	Maharashtra	2	#
21	Manipur	#	#
22	Meghalaya	#	#
23	Mizoram	#	#
24	Nagaland	1	1
25	Odisha	1	#
26	Puducherry	1	1
27	Punjab	3	2
28	Rajasthan	1	1
29	Sikkim	*	*
30	Tamil Nadu	#	#
31	Telangana	1	#
32	Tripura	#	#
33	Uttar Pradesh	#	#
34	Uttarakhand	#	#
35	West Bengal	#	#
	Total	34	17

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

Sl.	State /UT	201	9
51.	State/UT	Sanctioned	Working
1	Andaman and Nicobar Islands	#	#
2	Andhra Pradesh	1	1
3	Arunachal Pradesh	#	#
4	Assam	#	#
5	Bihar	2	1
6	Chandigarh	#	#
7	Chhattisgarh	#	#
8	Daman and Diu & Dadra and Nagar Haveli	#	#
9	Delhi	1	#
10	Goa	#	#
11	Gujarat	4	1
12	Haryana	5	5
13	Himachal Pradesh	1	#
14	Jammu and Kashmir	#	#
15	Jharkhand	#	#
16	Karnataka	#	#
17	Kerala	5	5
18	Lakshadweep	*	*
19	Madhya Pradesh	#	#
20	Maharashtra	#	#
21	Manipur	#	#
22	Meghalaya	#	#
23	Mizoram	#	#
24	Nagaland	#	#
25	Odisha	#	#
26	Puducherry	1	1
27	Punjab	#	#
28	Rajasthan	1	1
29	Sikkim	*	*
30	Tamil Nadu	#	#
31	Telangana	#	#
32	Tripura	#	#
33	Uttar Pradesh	#	#
34	Uttarakhand	#	#
35	West Bengal	#	#
	Total	21	15

Table 8.3- Chemical Inspectors of Factories (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

SI.	State/UT	2019	
		Sanctioned	Working
1	Andaman and Nicobar Islands	#	#
2	Andhra Pradesh	#	#
3	Arunachal Pradesh	#	#
4	Assam	#	#
5	Bihar	#	#
6	Chandigarh	#	#
7	Chhattisgarh	#	#
8	Daman and Diu & Dadra and Nagar Haveli	#	#
9	Delhi	#	#
10	Goa	#	#
11	Gujarat	4	#
12	Haryana	#	#
13	Himachal Pradesh	#	#
14	Jammu and Kashmir	#	#
15	Jharkhand	#	#
16	Karnataka	#	#
17	Kerala	1	#
18	Lakshadweep	*	*
19	Madhya Pradesh	#	#
20	Maharashtra	#	#
21	Manipur	#	#
22	Meghalaya	#	#
23	Mizoram	#	#
24	Nagaland	#	#
25	Odisha	#	#
26	Puducherry	#	#
27	Punjab	#	#
28	Rajasthan	#	#
29	Sikkim	*	*
30	Tamil Nadu	#	#
31	Telangana	#	#
32	Tripura	#	#
33	Uttar Pradesh	#	#
34	Uttarakhand	#	#
35	West Bengal	#	#
	Total	5	0

Table 8.4- Hygiene Inspectors of Factories (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

- **Note**: (i) *: There are no registered factories in this State/UT.
 - (ii) #: Data not reported by the CIF/Data not available/NIL.

	State/UT	201	2019	
Sl.		Sanctioned	Working	
1	Andaman and Nicobar Islands	#	#	
2	Andhra Pradesh	#	#	
3	Arunachal Pradesh	#	#	
4	Assam	#	#	
5	Bihar	#	#	
6	Chandigarh	#	#	
7	Chhattisgarh	#	#	
8	Daman and Diu & Dadra and Nagar Haveli	#	#	
9	Delhi	#	#	
10	Goa	#	#	
11	Gujarat	21	14	
12	Haryana	3	2	
13	Himachal Pradesh	#	#	
14	Jammu and Kashmir	#	#	
15	Jharkhand	#	#	
16	Karnataka	1	1	
17	Kerala	2	2	
18	Lakshadweep	*	*	
19	Madhya Pradesh	#	#	
20	Maharashtra	#	#	
21	Manipur	#	#	
22	Meghalaya	#	#	
23	Mizoram	#	#	
24	Nagaland	#	#	
25	Odisha	#	#	
26	Puducherry	1	1	
27	Punjab	#	#	
28	Rajasthan	1	1	
29	Sikkim	*	*	
30	Tamil Nadu	#	#	
31	Telangana	#	#	
32	Tripura	#	#	
33	Uttar Pradesh	#	#	
34	Uttarakhand	#	#	
35	West Bengal	#	#	
	Total	29	21	

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

Sl.	State/UT	201	2019	
		Sanctioned	Working	
1	Andaman and Nicobar Islands	#	#	
2	Andhra Pradesh	#	#	
3	Arunachal Pradesh	#	#	
4	Assam	3	2	
5	Bihar	#	#	
6	Chandigarh	#	#	
7	Chhattisgarh	#	#	
8	Daman and Diu & Dadra and Nagar Haveli	#	#	
9	Delhi	1	1	
10	Goa	#	#	
11	Gujarat	21	6	
12	Haryana	#	#	
13	Himachal Pradesh	#	#	
14	Jammu and Kashmir	#	#	
15	Jharkhand	#	#	
16	Karnataka	#	#	
17	Kerala	#	#	
18	Lakshadweep	*	*	
19	Madhya Pradesh	#	#	
20	Maharashtra	1	1	
21	Manipur	#	#	
22	Meghalaya	#	#	
23	Mizoram	#	#	
24	Nagaland	#	#	
25	Odisha	#	#	
26	Puducherry	1	1	
27	Punjab	#	#	
28	Rajasthan	#	#	
29	Sikkim	*	*	
30	Tamil Nadu	9	5	
31	Telangana	#	#	
32	Tripura	#	#	
33	Uttar Pradesh	#	#	
34	Uttarakhand	#	#	
35	West Bengal	#	#	
	Total	36	16	

Table 8.6- Certifying Surgeons (employed) in Factories (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

- **Note**: (i) *: There are no registered factories in this State/UT.
 - (ii) #: Data not reported by the CIF/Data not available/NIL.

SI.	State/UT	201	2019		
51.		Sanctioned	Working		
1	Andaman and Nicobar Islands	4	4		
2	Andhra Pradesh	#	#		
3	Arunachal Pradesh	#	#		
4	Assam	#	#		
5	Bihar	#	#		
6	Chandigarh	#	#		
7	Chhattisgarh	#	#		
8	Daman and Diu & Dadra and Nagar Haveli	#	1		
9	Delhi	1	1		
10	Goa	1	1		
11	Gujarat	#	#		
12	Haryana	#	#		
13	Himachal Pradesh	#	12		
14	Jammu and Kashmir	#	#		
15	Jharkhand	#	#		
16	Karnataka	#	#		
17	Kerala	#	#		
18	Lakshadweep	*	*		
19	Madhya Pradesh	#	#		
20	Maharashtra	#	#		
21	Manipur	#	#		
22	Meghalaya	#	#		
23	Mizoram	#	#		
24	Nagaland	#	#		
25	Odisha	#	#		
26	Puducherry	#	#		
27	Punjab	#	#		
28	Rajasthan	#	#		
29	Sikkim	*	*		
30	Tamil Nadu	#	#		
31	Telangana	#	#		
32	Tripura	20	20		
33	Uttar Pradesh	#	#		
34	Uttarakhand	#	#		
35	West Bengal	#	#		
	Total	26	39		

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

- **Note**: (i) *: There are no registered factories in this State/UT.
 - (ii) #: Data not reported by the CIF/Data not available/NIL.

Sl.	State/UT	2019
1	Andaman and Nicobar Islands	46
2	Andhra Pradesh	25279
3	Arunachal Pradesh	233
4	Assam	7216
5	Bihar	8117
6	Chandigarh	846
7	Chhattisgarh	5309
8	Daman and Diu & Dadra and Nagar Haveli	6678
9	Delhi	13166
10	Goa	810
11	Gujarat	43721
12	Haryana	15487
13	Himachal Pradesh	5173
14	Jammu and Kashmir	1779
15	Jharkhand	5616
16	Karnataka	16767
17	Kerala	24204
18	Lakshadweep	*
19	Madhya Pradesh	6798
20	Maharashtra	37102
21	Manipur	988
22	Meghalaya	272
23	Mizoram	4
24	Nagaland	923
25	Odisha	4505
26	Puducherry	3070
27	Punjab	20132
28	Rajasthan	11741
29	Sikkim	*
30	Tamil Nadu	45198
31	Telangana	20715
32	Tripura	1991
33	Uttar Pradesh	18197
34	Uttarakhand	3395
35	West Bengal	#
	Total	355478

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT. (ii) #: Data not reported by the CIF/Data not available/NIL.

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Sl.	State/UT	2019
1	Andaman and Nicobar Islands	46
2	Andhra Pradesh	19716
3	Arunachal Pradesh	230
4	Assam	5249
5	Bihar	6166
6	Chandigarh	390
7	Chhattisgarh	5108
8	Daman and Diu & Dadra and Nagar Haveli	4937
9	Delhi	8622
10	Goa	810
11	Gujarat	35338
12	Haryana	15075
13	Himachal Pradesh	5173
14	Jammu and Kashmir	1196
15	Jharkhand	4985
16	Karnataka	15517
17	Kerala	23735
18	Lakshadweep	*
19	Madhya Pradesh	6323
20	Maharashtra	35759
21	Manipur	988
22	Meghalaya	259
23	Mizoram	4
24	Nagaland	923
25	Odisha	2378
26	Puducherry	2104
27	Punjab	19814
28	Rajasthan	11741
29	Sikkim	*
30	Tamil Nadu	28613
31	Telangana	16459
32	Tripura	1829
33	Uttar Pradesh	18062
34	Uttarakhand	3395
35	West Bengal	#
	Total	300944

Table 8.9-State-wise Status of Working Factories (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

- **Note**: (i) *: There are no registered factories in this State/UT.
 - (ii) #: Data not reported by the CIF/Data not available/NIL.

Sl.	State/UT	2019
1	Andaman and Nicobar Islands	5435
2	Andhra Pradesh	958024
3	Arunachal Pradesh	7517
4	Assam	287563
5	Bihar	201970
6	Chandigarh	1089
7	Chhattisgarh	340273
8	Daman and Diu & Dadra and Nagar Haveli	197480
9	Delhi	434350
10	Goa	100522
11	Gujarat	1834792
12	Haryana	1113571
13	Himachal Pradesh	353020
14	Jammu and Kashmir	70290
15	Jharkhand	312823
16	Karnataka	1578320
17	Kerala	619738
18	Lakshadweep	*
19	Madhya Pradesh	426297
20	Maharashtra	2603179
21	Manipur	14527
22	Meghalaya	14959
23	Mizoram	285
24	Nagaland	12854
25	Odisha	383982
26	Puducherry	81988
27	Punjab	746731
28	Rajasthan	554652
29	Sikkim	*
30	Tamil Nadu	2161021
31	Telangana	607260
32	Tripura	58019
33	Uttar Pradesh	1793371
34	Uttarakhand	677007
35	West Bengal	#
	Total	18552909

Table 8.10- State-wise Status of Employment in Factories (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

Sl.	State/UT	2019
1	Andaman and Nicobar Islands	494
2	Andhra Pradesh	237404
3	Arunachal Pradesh	50
4	Assam	37383
5	Bihar	118
6	Chandigarh	#
7	Chhattisgarh	12363
8	Daman and Diu & Dadra and Nagar Haveli	39496
9	Delhi	31300
10	Goa	11057
11	Gujarat	141783
12	Haryana	139358
13	Himachal Pradesh	20730
14	Jammu and Kashmir	7856
15	Jharkhand	23541
16	Karnataka	522890
17	Kerala	167720
18	Lakshadweep	*
19	Madhya Pradesh	38548
20	Maharashtra	190273
21	Manipur	6354
22	Meghalaya	600
23	Mizoram	6
24	Nagaland	2166
25	Odisha	#
26	Puducherry	5787
27	Punjab	38284
28	Rajasthan	14266
29	Sikkim	*
30	Tamil Nadu	753719
31	Telangana	64988
32	Tripura	8982
33	Uttar Pradesh	75161
34	Uttarakhand	29950
35	West Bengal	#
	Total	2622627

Table 8.11- State-wise Status of Women Employment in Factories (2	019)
Tuble offic blace whoe blacks of Women Employment in Factories (=	v j

Note: (i) *: There are no registered factories in this State/UT.

Sl.	State/UT	2019
1	Andaman and Nicobar Islands	2
2	Andhra Pradesh	588
3	Arunachal Pradesh	9
4	Assam	24
5	Bihar	97
6	Chandigarh	#
7	Chhattisgarh	712
8	Daman and Diu & Dadra and Nagar Haveli	25
9	Delhi	413
10	Goa	120
11	Gujarat	12042
12	Haryana	2469
13	Himachal Pradesh	410
14	Jammu and Kashmir	426
15	Jharkhand	708
16	Karnataka	1427
17	Kerala	2306
18	Lakshadweep	*
19	Madhya Pradesh	1440
20	Maharashtra	5662
21	Manipur	7
22	Meghalaya	171
23	Mizoram	#
24	Nagaland	2
25	Odisha	699
26	Puducherry	234
27	Punjab	154
28	Rajasthan	945
29	Sikkim	*
30	Tamil Nadu	1416
31	Telangana	2239
32	Tripura	33
33	Uttar Pradesh	4153
34	Uttarakhand	767
35	West Bengal	#
	Total	39700

- **Note**: (i) *: There are no registered factories in this State/UT.
 - (ii) #: Data not reported by the CIF/Data not available/NIL.

Sl.	State/UT	2019
1	Andaman and Nicobar Islands	177
2	Andhra Pradesh	209441
3	Arunachal Pradesh	625
4	Assam	18350
5	Bihar	42346
6	Chandigarh	#
7	Chhattisgarh	212740
8	Daman and Diu & Dadra and Nagar Haveli	1050
9	Delhi	17395
10	Goa	29709
11	Gujarat	630031
12	Haryana	73532
13	Himachal Pradesh	115189
14	Jammu and Kashmir	16986
15	Jharkhand	123296
16	Karnataka	239746
17	Kerala	37729
18	Lakshadweep	*
19	Madhya Pradesh	99790
20	Maharashtra	647548
21	Manipur	838
22	Meghalaya	11998
23	Mizoram	#
24	Nagaland	73
25	Odisha	195219
26	Puducherry	10161
27	Punjab	19909
28	Rajasthan	114874
29	Sikkim	*
30	Tamil Nadu	188413
31	Telangana	225685
32	Tripura	1673
33	Uttar Pradesh	413117
34	Uttarakhand	166250
35	West Bengal	#
	Total	3863890

Table 8.13- State-wise Status of Workers in Hazardous Factories	(2019)
Tuble of to blace while blacks of thorners in malar abus ractories	

Note: (i) *: There are no registered factories in this State/UT.

SI.	State/UT	All	Hazardous	
		Factories	Factories	
1	Andaman and Nicobar Islands	12	2	
2	Andhra Pradesh	1462	554	
3	Arunachal Pradesh	#	#	
4	Assam	515	24	
5	Bihar	96	16	
6	Chandigarh	#	#	
7	Chhattisgarh	733	454	
8	Daman and Diu & Dadra and Nagar Haveli	195	30	
9	Delhi	684	34	
10	Goa	74	26	
11	Gujarat	16930	4342	
12	Haryana	1362	272	
13	Himachal Pradesh	1293	410	
14	Jammu and Kashmir	536	34	
15	Jharkhand	808	190	
16	Karnataka	8421	1021	
17	Kerala	14905	1006	
18	Lakshadweep	*	*	
19	Madhya Pradesh	1662	530	
20	Maharashtra	3190	1171	
21	Manipur	217	7	
22	Meghalaya	140	80	
23	Mizoram	1	#	
24	Nagaland	62	2	
25	Odisha	921	699	
26	Puducherry	994	165	
27	Punjab	1999	109	
28	Rajasthan	1268	355	
29	Sikkim	*	*	
30	Tamil Nadu	21487	709	
31	Telangana	5917	1912	
32	Tripura	1449	33	
33	Uttar Pradesh	220	66	
34	Uttarakhand	218	16	
35	West Bengal	#	#	
	Total	87771	14269	

Table 8.14- No. of Factories Inspected (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

- **Note**: (i) *: There are no registered factories in this State/UT.
 - (ii) #: Data not reported by the CIF/Data not available/NIL.

		No. of p	orosecutio	ons	No. of	Penalty	imposed
SI.	State/UT	pending from previous year	launched during the year	decided during the year	convic- tions	Imprison ment	Total fine imposed
1	Andaman and Nicobar Islands	#	#	#	#	#	#
2	Andhra Pradesh	1234	196	115	96	#	1022000
3	Arunachal Pradesh	#	#	#	#	#	#
4	Assam	122	11	#	#	#	#
5	Bihar	211	32	#	#	#	#
6	Chandigarh	#	#	#	#	#	#
7	Chhattisgarh	219	312	167	117	#	14744499
8	Daman and Diu & Dadra and Nagar Haveli	#	#	#	#	#	#
9	Delhi	262	48	104	104	#	1109000
10	Goa	16	3	6	5	#	118500
11	Gujarat	15346	2922	1623	1871	#	15098580
12	Haryana	6850	6108	2883	1944	#	15698600
13	Himachal Pradesh	427	147	119	119	#	1270000
14	Jammu and Kashmir	42	18	34	#	#	108400
15	Jharkhand	353	27	3	#	#	#
16	Karnataka	610	247	161	115	#	3067600
17	Kerala	190	57	46	52	#	1272000
18	Lakshadweep	*	*	*	*	*	*
19	Madhya Pradesh	3639	144	16	#	#	1588000
20	Maharashtra	2115	636	300	300	#	8283000
21	Manipur	#	#	#	#	#	#
22	Meghalaya	#	#	#	#	#	#
23	Mizoram	#	#	#	#	#	#
24	Nagaland	#	#	#	#	#	#
25	Odisha	2542	69	5	3	#	34000
26	Puducherry	5	13	8	#	#	258000
27	Punjab	1126	29	53	22	#	816000
28	Rajasthan	280	28	25	#	#	203300
29	Sikkim	*	*	*	*	*	*
30	Tamil Nadu	11226	1830	2129	2113	3	28789300
31	Telangana	1806	388	458	238	#	1746000
32	Tripura	8	8	2	#	#	17000
33	Uttar Pradesh	2354	58	48	48	#	1206500
34	Uttarakhand	16	23	20	#	#	#
35	West Bengal	#	#	#	#	#	#
	Total	50999	13354	8325	7147	3	96450279

Note: (i) *: There are no registered factories in this State/UT.

2019			19		
		No. of fac	tories	No. of Safety officers	
SI.	State/UT	Requiring Safety officers	Having Safety officers	Required in factories	Working in factories
1	Andaman and Nicobar Islands	#	#	#	#
2	Andhra Pradesh	149	122	130	111
3	Arunachal Pradesh	3	1	3	#
4	Assam	9	9	70	70
5	Bihar	31	22	54	43
6	Chandigarh	3	3	3	3
7	Chhattisgarh	162	167	223	250
8	Daman and Diu & Dadra and Nagar Haveli	25	30	37	44
9	Delhi	14	#	14	#
10	Goa	61	99	115	132
11	Gujarat	784	744	1071	1004
12	Haryana	157	150	178	170
13	Himachal Pradesh	21	21	21	21
14	Jammu and Kashmir	46	21	46	22
15	Jharkhand	67	67	181	172
16	Karnataka	234	243	327	304
17	Kerala	104	67	106	71
18	Lakshadweep	*	*	*	*
19	Madhya Pradesh	130	128	148	148
20	Maharashtra	771	705	934	897
21	Manipur	4	4	4	4
22	Meghalaya	1	11	1	12
23	Mizoram	#	#	#	#
24	Nagaland	#	#	#	#
25	Odisha	125	111	345	394
26	Puducherry	10	9	10	9
27	Punjab	#	#	87	75
28	Rajasthan	114	116	124	135
29	Sikkim	*	*	*	*
30	Tamil Nadu	436	372	443	378
31	Telangana	1249	451	1254	457
32	Tripura	1	#	1	#
33	Uttar Pradesh	297	194	378	236
34	Uttarakhand	148	132	148	132
35	West Bengal	#	#	#	#
Total 5156 3999 6456			5294		

Table 8.16- State-wise Status of Safety Officers (SO) (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

		2019			
SI.	State/UT	No. of factories			
51.	State / 01	Requiring Safety policy	Having Safety policy		
1	Andaman and Nicobar Islands	#	#		
2	Andhra Pradesh	#	#		
3	Arunachal Pradesh	3	1		
4	Assam	128	128		
5	Bihar	12	12		
6	Chandigarh	#	#		
7	Chhattisgarh	501	446		
8	Daman and Diu & Dadra and Nagar Haveli	65	80		
9	Delhi	4352	#		
10	Goa	359	230		
11	Gujarat	7466	7381		
12	Haryana	2090	1835		
13	Himachal Pradesh	371	371		
14	Jammu and Kashmir	46	11		
15	Jharkhand	644	433		
16	Karnataka	1759	1612		
17	Kerala	560	552		
18	Lakshadweep	*	*		
19	Madhya Pradesh	1983	1975		
20	Maharashtra	3985	3294		
21	Manipur	6	6		
22	Meghalaya	259	259		
23	Mizoram	#	#		
24	Nagaland	#	#		
25	Odisha	1639	1333		
26	Puducherry	30	29		
27	Punjab	561	483		
28	Rajasthan	539	514		
29	Sikkim	*	*		
30	Tamil Nadu	2921	2849		
31	Telangana	853	669		
32	Tripura	#	#		
33	Uttar Pradesh	6667	5407		
34	Uttarakhand	680	650		
35	West Bengal	#	#		
	Total	Total 38479 3056			

Note: (i) *: There are no registered factories in this State/UT. (ii) #: Data not reported by the CIF/Data not available/NIL.

		20	2019			
Sl.	State/UT	No. of fa	No. of factories			
011	State / O I	Requiring Safety Committee	Having Safety Committee			
1	Andaman and Nicobar Islands	#	#			
2	Andhra Pradesh	1355	1072			
3	Arunachal Pradesh	1	#			
4	Assam	128	128			
5	Bihar	#	#			
6	Chandigarh	#	#			
7	Chhattisgarh	494	428			
8	Daman and Diu & Dadra and Nagar Haveli	67	86			
9	Delhi	186	#			
10	Goa	359	343			
11	Gujarat	5478	5478			
12	Haryana	1083	977			
13	Himachal Pradesh	371	371			
14	Jammu and Kashmir	1	1			
15	Jharkhand	200	172			
16	Karnataka	1663	1461			
17	Kerala	201	190			
18	Lakshadweep	*	*			
19	Madhya Pradesh	1518	1498			
20	Maharashtra	2417	1959			
21	Manipur	6	6			
22	Meghalaya	90	20			
23	Mizoram	#	#			
24	Nagaland	#	#			
25	Odisha	563	368			
26	Puducherry	30	29			
27	Punjab	482	442			
28	Rajasthan	657	637			
29	Sikkim	*	*			
30	Tamil Nadu	2682	2485			
31	Telangana	887	775			
32	Tripura	10	1			
33	Uttar Pradesh	5686	4118			
34	Uttarakhand	680	650			
35	West Bengal	#	#			
	Total	27295	23695			

Table 8.18 State-wise Constitution of Safety Committee	(2019)	1
Table 0.10 State wise constitution of Safety committee	[2017]	,

Note: (i) *: There are no registered factories in this State/UT.

		201	2019		
Sl.	State/UT	No. of factories			
51.	State / 01	Required to draw Emergency plan	Having drawn Emergency plan		
1	Andaman and Nicobar Islands	2	2		
2	Andhra Pradesh	86	86		
3	Arunachal Pradesh	3	1		
4	Assam	24	24		
5	Bihar	39	39		
6	Chandigarh	#	#		
7	Chhattisgarh	37	37		
8	Daman and Diu & Dadra and Nagar Haveli	#	35		
9	Delhi	15	15		
10	Goa	15	15		
11	Gujarat	494	493		
12	Haryana	58	47		
13	Himachal Pradesh	8	8		
14	Jammu and Kashmir	10	10		
15	Iharkhand	20	20		
16	Karnataka	80	80		
17	Kerala	42	42		
18	Lakshadweep	*	*		
19	Madhya Pradesh	90	90		
20	Maharashtra	368	365		
21	Manipur	6	6		
22	Meghalaya	#	#		
23	Mizoram	#	#		
24	Nagaland	2	2		
25	Odisha	35	35		
26	Puducherry	3	3		
27	Punjab	59	59		
28	Rajasthan	107	107		
29	Sikkim	*	*		
30	Tamil Nadu	165	162		
31	Telangana	92	81		
32	Tripura	9	8		
33	Uttar Pradesh	165	140		
34	Uttarakhand	40	40		
35	West Bengal	#	#		
_	Total	2074	2052		

Table 8.19- State-wise Onsite Emergency Plan (in respect of MAH Units) (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

		2019				
		No. of medical officers				
SI.	State/UT	Full tin	ne basis	Retainership/ part time basis		
		Required	In position	Required	In position	
1	Andaman and Nicobar Islands	1	#	#	#	
2	Andhra Pradesh	586	502	#	#	
3	Arunachal Pradesh	3	#	#	#	
4	Assam	#	#	#	#	
5	Bihar	27	22	3	3	
6	Chandigarh	#	#	#	#	
7	Chhattisgarh	179	137	300	211	
8	Daman and Diu & Dadra and Nagar Haveli	20	20	#	85	
9	Delhi	6	#	384	#	
10	Goa	66	32	66	98	
11	Gujarat	532	378	3205	2223	
12	Haryana	108	82	138	121	
13	Himachal Pradesh	377	377	2539	2539	
14	Jammu and Kashmir	11	#	34	13	
15	Iharkhand	95	86	146	99	
16	Karnataka	564	474	363	298	
17	Kerala	23	22	52	58	
18	Lakshadweep	*	*	*	*	
19	Madhya Pradesh	158	150	329	318	
20	Maharashtra	818	559	1931	1203	
21	Manipur	1	1	5	5	
22	Meghalaya	10	8	65	22	
23	Mizoram	#	#	#	#	
24	Nagaland	#	#	#	#	
25	Odisha	131	162	107	80	
26	Puducherry	10	9	29	23	
27	Punjab	#	#	#	#	
28	Rajasthan	114	80	65	92	
29	Sikkim	*	*	*	*	
30	Tamil Nadu	286	198	371	312	
31	Telangana	106	96	65	63	
32	Tripura	5	3	1	1	
33	Uttar Pradesh	369	231	2688	1410	
34	Uttarakhand	240	55	200	105	
35	West Bengal	#	#	#	#	
	Total	4846	3684	13086	9382	

Table 8.20- State-wise Medical Facilities in Factories (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

	2019					
	State/UT	No. of factories				
Sl.		Requiring Ambulance Vans	Having Ambulance Vans	Requiring Ambulance Rooms	Having Ambulance Rooms	
1	Andaman and Nicobar Islands	1	1	1	1	
2	Andhra Pradesh	#	#	200	176	
3	Arunachal Pradesh	3	#	#	#	
4	Assam	18	18	18	92	
5	Bihar	30	25	30	25	
6	Chandigarh	#	#	#	#	
7	Chhattisgarh	174	162	128	115	
8	Daman and Diu & Dadra and Nagar Haveli	#	34	#	38	
9	Delhi	6	#	6	#	
10	Goa	66	96	66	28	
11	Gujarat	509	515	444	462	
12	Haryana	164	146	147	130	
13	Himachal Pradesh	208	208	208	208	
14	Jammu and Kashmir	3	3	9	9	
15	Jharkhand	68	61	86	74	
16	Karnataka	519	460	449	421	
17	Kerala	19	24	37	38	
18	Lakshadweep	*	*	*	*	
19	Madhya Pradesh	148	141	163	158	
20	Maharashtra	871	512	502	385	
21	Manipur	2	2	2	2	
22	Meghalaya	15	#	1	#	
23	Mizoram	#	#	#	#	
24	Nagaland	#	#	#	#	
25	Odisha	147	159	101	159	
26	Puducherry	10	9	10	9	
27	Punjab	#	#	114	98	
28	Rajasthan	94	77	151	141	
29	Sikkim	*	*	*	*	
30	Tamil Nadu	301	263	448	409	
31	Telangana	115	109	115	111	
32	Tripura	5	3	5	3	
33	Uttar Pradesh	1713	1089	1131	561	
34	Uttarakhand	200	65	250	200	
35	West Bengal	#	#	#	#	
	Total 5409 4182 4822 4053					

Table 8.21- State-wise Ambulance Van and Ambulance Room (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

Table 8.22- State-wise Canteens, Shelters, Rest Rooms and Crèches (2019)

		2019						
Sl.	State/UT	Cante	en	Shelter, Rest Room, Lunch Room		r rochoc		es
		Requiring	Having	Requiring	Having	Requiring	Having	
1	Andaman and Nicobar Islands	3	3	3	3	2	2	
2	Andhra Pradesh	461	423	711	657	428	354	
3	Arunachal Pradesh	9	2	9	2	#	#	
4	Assam	32	115	42	120	25	52	
5	Bihar	112	34	133	48	1	1	
6	Chandigarh	4	4	4	4	#	#	
7	Chhattisgarh	174	161	211	201	20	20	
8	DD and DNH	210	265	285	354	48	82	
9	Delhi	129	#	493	#	#	#	
10	Goa	97	104	180	335	90	60	
11	Gujarat	1384	1312	2379	2146	416	432	
12	Haryana	604	543	1005	880	144	121	
13	Himachal Pradesh	398	398	120	120	124	124	
14	Jammu and Kashmir	24	24	80	80	4	4	
15	Jharkhand	144	139	260	265	28	19	
16	Karnataka	916	934	1310	1269	1613	1443	
17	Kerala	274	267	1153	1158	768	769	
18	Lakshadweep	*	*	*	*	*	*	
19	Madhya Pradesh	271	265	562	555	84	82	
20	Maharashtra	1657	1318	2340	2052	586	509	
21	Manipur	6	6	10	10	21	21	
22	Meghalaya	15	28	11	40	8	2	
23	Mizoram	2	1	2	1	2	1	
24	Nagaland	82	51	#	#	#	#	
25	Odisha	203	188	363	364	62	54	
26	Puducherry	37	29	53	39	7	4	
27	Punjab	296	267	405	380	100	87	
28	Rajasthan	384	369	693	684	105	105	
29	Sikkim	*	*	*	*	*	*	
30	Tamil Nadu	1919	1859	3044	3042	3345	3164	
31	Telangana	250	224	398	357	213	179	
32	Tripura	3	2	3	2	1	#	
33	Uttar Pradesh	995	949	3108	2774	366	314	
34	Uttarakhand	450	355	250	155	65	48	
35	West Bengal	#	#	#	#	#	#	
	Total	11545	10639	19620	18097	8676	8053	

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

		2019				
	State/UT	No. of fac	ctories	No. of welfa	No. of welfare officers	
SI.		Requiring welfare officers	Having welfare officers	Required in factories	Working in factories	
1	Andaman and Nicobar Islands	2	1	1	1	
2	Andhra Pradesh	268	245	287	239	
3	Arunachal Pradesh	5	#	5	#	
4	Assam	18	85	18	85	
5	Bihar	45	21	50	33	
6	Chandigarh	3	3	3	3	
7	Chhattisgarh	123	116	108	101	
8	Daman and Diu & Dadra and Nagar Haveli	51	51	76	76	
9	Delhi	43	#	43	#	
10	Goa	66	40	66	45	
11	Gujarat	549	557	674	662	
12	Haryana	260	231	220	192	
13	Himachal Pradesh	96	96	96	96	
14	Jammu and Kashmir	9	4	9	4	
15	Jharkhand	76	72	113	107	
16	Karnataka	479	491	560	550	
17	Kerala	51	51	51	52	
18	Lakshadweep	*	*	*	*	
19	Madhya Pradesh	159	152	172	169	
20	Maharashtra	673	640	717	649	
21	Manipur	1	1	1	1	
22	Meghalaya	3	2	3	2	
23	Mizoram	#	#	#	#	
24	Nagaland	#	#	#	#	
25	Odisha	148	110	132	147	
26	Puducherry	10	9	10	9	
27	Punjab	#	#	138	112	
28	Rajasthan	181	179	176	180	
29	Sikkim	*	*	*	*	
30	Tamil Nadu	725	621	742	632	
31	Telangana	110	99	109	102	
32	Tripura	1	1	1	1	
33	Uttar Pradesh	425	211	513	218	
34	Uttarakhand	165	132	165	132	
35	West Bengal	#	#	#	#	
	Total	4745	4221	5259	4600	

Table 8.23- State-wise Welfare Officers (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

Note: (i) *: There are no registered factories in this State/UT.

		2019			
Sl.	State/UT	Dangerous	Fatal	Non-fatal	
		occurrences	injuries	injuries	
1	Andaman and Nicobar Islands	53	#	43	
2	Andhra Pradesh	8	72	154	
3	Arunachal Pradesh	#	#	#	
4	Assam	#	4	21	
5	Bihar	#	8	52	
6	Chandigarh	1	#	1	
7	Chhattisgarh	#	86	65	
8	Daman and Diu & Dadra and Nagar Haveli	#	9	49	
9	Delhi	#	6	23	
10	Goa	5	3	26	
11	Gujarat	324	216	718	
12	Haryana	38	26	47	
13	Himachal Pradesh	29	9	23	
14	Jammu and Kashmir	5	2	5	
15	Jharkhand	#	21	42	
16	Karnataka	483	69	414	
17	Kerala	83	29	122	
18	Lakshadweep	*	*	*	
19	Madhya Pradesh	#	44	299	
20	Maharashtra	200	145	1089	
21	Manipur	#	#	#	
22	Meghalaya	#	1	2	
23	Mizoram	#	#	#	
24	Nagaland	#	#	#	
25	Odisha	11	32	40	
26	Puducherry	#	5	32	
27	Punjab	#	64	83	
28	Rajasthan	2	32	188	
29	Sikkim	*	*	*	
30	Tamil Nadu	82	122	206	
31	Telangana	47	56	57	
32	Tripura	#	#	#	
33	Uttar Pradesh	#	46	79	
34	Uttarakhand	#	20	47	
35	West Bengal	#	#	#	
	Total	1371	1127	3927	

Note: (i) *: There are no registered factories in this State/UT.

Sl.	State	Occupational Diseases	2019
1	Andaman and Nicobar Islands	-	NIL
2	Andhra Pradesh	-	NIL
3	Arunachal Pradesh	-	NIL
4	Assam	-	NIL
5	Bihar	-	NIL
6	Chandigarh	-	NIL
7	Chhattisgarh	-	NIL
8	Daman and Diu & Dadra and Nagar Haveli	-	NIL
9	Delhi	-	NIL
10	Goa	-	NIL
11	Gujarat	Noise Induced Hearing Loss	10
12	Haryana	Silicosis	240
13	Himachal Pradesh	-	NIL
14	Jammu & Kashmir	-	NIL
15	Íharkhand	-	NIL
16	Karnataka	-	NIL
17	Kerala	-	NIL
18	Lakshadweep	-	*
19	Madhya Pradesh	-	NIL
20	Maharashtra	Irritant Contact Dermatitis	3
21	Manipur	-	NIL
22	Meghalaya	-	NIL
23	Mizoram	-	NIL
24	Nagaland	-	NIL
25	Odisha	-	NIL
26	Puducherry	-	NIL
27	Punjab	-	NIL
28	Rajasthan	-	NIL
29	Sikkim	-	*
30	Tamil Nadu	-	NIL
31	Telangana	-	NIL
32	Tripura	-	NIL
33	Uttar Pradesh	-	NIL
34	Uttarakhand	-	NIL
35	West Bengal	-	#
	Total		253

Table 8.25- Occupational diseases (2019)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) of States/UTs.

- **Note**: (i) *: There are no registered factories in this State/UT.
 - (ii) #: Data not reported by the CIF.

9

Statistics on Occupational Safety and Health in Dock Works of Major Ports

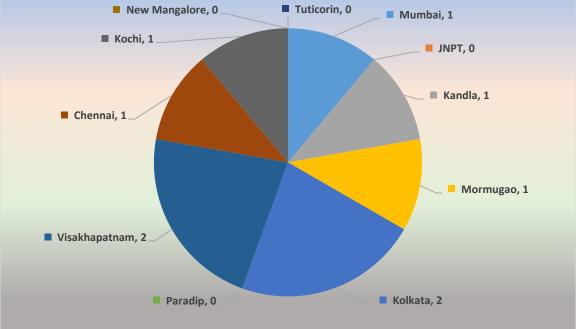
DGFASLI enforces the Dock Workers (Safety, Health & Welfare) Act, 1986 and Regulations 1990 in all the major ports of the country. The Inspectorate of Dock Safety offices located in the major ports enforce the Act and Regulations. Under Regulations 91(1) & (6) it is obligatory on the part of the Employers of the Dock Workers to report the accidents/dangerous occurrences to the Inspectorates.

Important Statistics on Occupational Safety & Health in the major Ports of the country for the year 2020 are given in the subsequent tables:

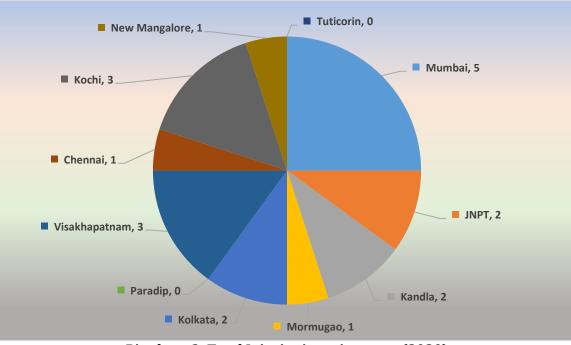
Sl. No.	Port	Fatal	Total (Including Non-Fatal)	Dangerous Occurrences
1.	Mumbai	01	05	01
2.	JNPT	00	02	01
3.	Kandla	01	02	00
4.	Mormugao	01	01	01
5.	Kolkata	02	02	00
6.	Paradip	00	00	01
7.	Visakhapatnam	02	03	00
8.	Chennai	01	01	01
9.	Kochi	01	03	00
10.	New Mangalore	00	01	03
11.	Tuticorin	00	00	00
	Total	09	20	08

Table 9.1- Reportable Accidents	& Dangerous Occurrences	in major Ports during the year 2020
· · · · · · · · · · · · · · · · · · ·		





Pie chart-1: Fatal Injuries in major ports (2020)



Pie chart-2: Total Injuries in major ports (2020)

Table 9.2-Average Daily Employment & Rates of Reportable Accidents in major Ports duringthe year 2020

Sl. No.	Port	Port Average Daily Employment		ncy Rate	*Incidence Rate of injuries per Thousand persons employed		
			Fatal Total		Fatal	Total	
1.	Mumbai	902	0.38	1.91	1.11	5.54	
2.	JNPT	5788		0.12		0.35	
3.	Kandla	3700	0.09	0.19	0.27	0.54	
4.	Mormugao	848	0.41	0.41	1.18	1.18	
5.	Kolkata	7665	0.09	0.09	0.26	0.26	
6.	Paradip	1407	0.00		0.00	0.00	
7.	Visakhapatnam	2141	0.32	0.48	0.93	1.40	
8.	Chennai	1181	0.29	0.29	0.85	0.85	
9.	Kochi	291	1.19	3.56	3.44	10.31	
10.	New Mangalore	50	0.00	6.91	0.00	20.00	
11.	Tuticorin	457					

* Formula (As per IS: 3786 of 1983)

Frequency Rate = No. of Reportable Accidents X 1,000,000/Man-hours worked#.

Incidence Rate = No. of Reportable Accidents X 1000/ Avg. No. of Persons Employed.

Man-hours worked are calculated on the basis of 362 working days in a year

-- : Not Available

	Agency	Mumbai	JNPT	Kandla	Mormugao	Kolkata	Paradip	Visakha patnam	Chennai	Kochi	New Mangalore	Tuticorin	TOTAL
I.	Lifting appliances		1	1									2
II.	Loose gear & Ropes												
III.	Unitized & Break bulk cargo	1						1(1)		2	1		5(1)
IV.	Bulk cargo												
V.	Electrical equipment												
VI.	Tools & Implements	1											1
VII.	Means of Access												
VIII.	Means of Transportat- ion	2(1)	1	1(1)		1(1)		1(1)		1(1)		-	7(5)
IX.	Other agencies				1(1)	1(1)			1(1)				3(3)
	TOTAL	4(1)	2	2(1)	1(1)	2(2)	0	2(2)	1(1)	3(1)	1	0	18(9)

Table 9.3-Classification of Reportable Accidents in Major Ports – According to Agency for the Year-2020

Note: Figures in brackets represent Fatal Accidents.

Sl. No.	ТҮРЕ	Mumbai	JNPT	Kandla	Morm- ugao	Kolkata	Paradip	Visakha- patnam	Chennai	Kochi	New Mangalore	Tuticorin	Total
1.	Fall of persons				1(1)	1(1)			1(1)	1			4(3)
2.	Fall of objects	1											1
3.	Stepping on, striking against or struck by objects excluding falling objects.	1	1	2(1)		1(1)		2(2)		2(1)			9(5)
4.	Caught in or between	1									1		2
5.	Over exertion or wrong movement												0
6.	Exposure to or contact with extreme temperature												0
7.	Exposure to or contact with electric current												0
8.	Exposure to or contact with dangerous goods												0
9.	Explosion												0
10.	Others	1(1)	1										2(1)
	TOTAL	4(1)	2	2(1)	1(1)	2(2)	0	2(2)	1(1)	3(1)	1	0	18(9)

Table 9.4- Classification of Reportable Accidents in Major Ports – According to Type for the year 2020

Note: Figures in brackets represent Fatal Accidents.

Sl.	Port	Ship	Docks	Gear	Isolated Storage/ Pipelines	Other Visits
1.	Mumbai	17	21	14	05	93
2.	JNPT	07	31	00	02	30
3.	Kandla	00	111	92	09	100
4.	Mormugao	47	40	46	00	28
5.	Kolkata	108	54	119	00	107
6.	Paradip	31	47	31	02	80
7.	Visakhapatnam	54	28	56	01	204
8.	Chennai	44	54	56	00	42
9.	Kochi	42	74	125	00	27
10.	N. Mangalore	70	96	15	00	26
11.	Tuticorin	33	053	36	04	62
	Total	453	609	590	23	799

Table 9.5- Details of Inspections and other visits in Major Ports during the year 2020

Table 9.6- Details of Prosecution in Major Ports during the year 2020

Sl.	Port	Pending From Previous Year	Launched during the year	Decided during the year	Convicted
1.	Mumbai	05	02	00	00
2.	JNPT	02	00	00	00
3.	Kandla	07	05	00	00
4.	Mormugao	05	00	00	00
5.	Kolkata	18	04 01		01
6.	Paradip	09	02	00	00
7.	Visakhapatnam	02	01	00	00
8.	Chennai	07	00	00	00
9.	Kochi	01	02	00	00
10.	N. Mangalore	00	03	00	00
11.	Tuticorin	07	01	00	00
	Total	63	20	01	01

Sl.	Port	Pending from Previous Year	Initiated during the year	Concluded during the year
1.	Mumbai	03	02	01
2.	JNPT	00	00	00
3.	Kandla	09	01	07
4.	Mormugao	02	02	00
5.	Kolkata	03	03	03
6.	Paradip	01	01	02
7.	Visakhapatnam	01	02	02
8.	Chennai	02	01	00
9.	Kochi	00	01	02
10.	New Mangalore	01	04	03
11.	Tuticorin	01	00	01
	Total	23	17	21

Table 9.7- Investigation into Reportable Fatal Accidents/Dangerous Occurrences in	1 2020 ·
Table 7.7 Investigation into reportable ratar recluents/ Dangerous Occurrences in	12020

Sl.	Port	Committee Meeting	Safety Weeks		
1.	Mumbai	01	01		
2.	JNPT	02	14		
3.	Kandla	03	02		
4.	Mormugao	01	00		
5.	Kolkata	05	03		
6.	Paradip	02	01		
7.	Visakhapatnam	04	01		
8.	Chennai	02	01		
9.	Kochi	01	01		
10.	New Mangalore 01		01		
11.	Tuticorin	01	00		
	Total	23	25		

			Total Nos. of	Ships Called		
Sl.	Port	Oil Ta	nkers	Others		
		2019	2020	2019	2020	
1.	Mumbai	0855	0634	0639	0673	
2.	JNPT	0587	0420	3304	2826	
3.	Kandla	1735	1505	1603	1531	
4.	Mormugao	0103	0069	0528	0518	
5.	Kolkata	1281	1081	2248	2135	
6.	Paradip	0559	0412	1453	1522	
7.	Visakhapatnam	0583	0473	1471	1610	
8.	Chennai	0299	0257	1240	1033	
9.	Kochi	0417	0399	1218	1440	
10.	New Mangalore	0746	0717	0592	0516	
11.	Tuticorin	0200	0164	1246	1084	
	Total	7365	6131	15542	14888	

Table 9.9- Total Number of Ships Called in the Major Ports during 2019 and 2020

Table 9.10- Cargo Handled in Major Ports during 2019 and 2020

			Cargo Handled							
Sl.	Port	Containe	r in TEUs	POL (Tons)	Others (Tons)				
		2019 2020 2019 2020		2019	2020					
1.	Mumbai	27140	23076	38076117	33757728	23276570	18775120			
2.	JNPT	5100918	4474948	26218158	3497957	1029865	3246797			
3.	Kandla	407613	491016	17455452	5120443	105445263	114567527			
4.	Mormugao	32114	20524	884841	433930	14797737	18335949			
5.	Kolkata	847941	634655	15764000	9759000	36145000	31014000			
6.	Paradip	11089	14585	39160386	31912715	73303801	79600767			
7.	Visakhapatnam	494520	482303	18410902	16740905	42638965	46101744			
8.	Chennai	1452925	1277953	13611034	10409562	35390184	31012639			
9.	Kochi	633947	631751	22085610	16994635	2908783	3682020			
10.	New Mangalore	143736	150339	22740423	21964539	15421864	14771635			
11.	Tuticorin	790618	734712	512570	488632	18738987	17538962			
Total 9942561 8935862 214919493 15108004				151080046	369097019	378647160				

93

		Safety Facilities				
SI.	Port	No. of Safety Officers	No. of Visits to Safety Exhibition Centers	No. of Competent persons		
1.	Mumbai	03	00	18		
2.	JNPT	21	00	04		
3.	Kandla	01	00	06		
4.	Mormugao	03	00	02		
5.	Kolkata	07	00	10		
6.	Paradip	07	00	05		
7.	Visakhapatnam	06	00	12		
8.	Chennai	01	00	08		
9.	Kochi	03	00	03		
10.	New Mangalore	01	02	04		
11.	Tuticorin	01	00	07		
Total 54		54	02	79		

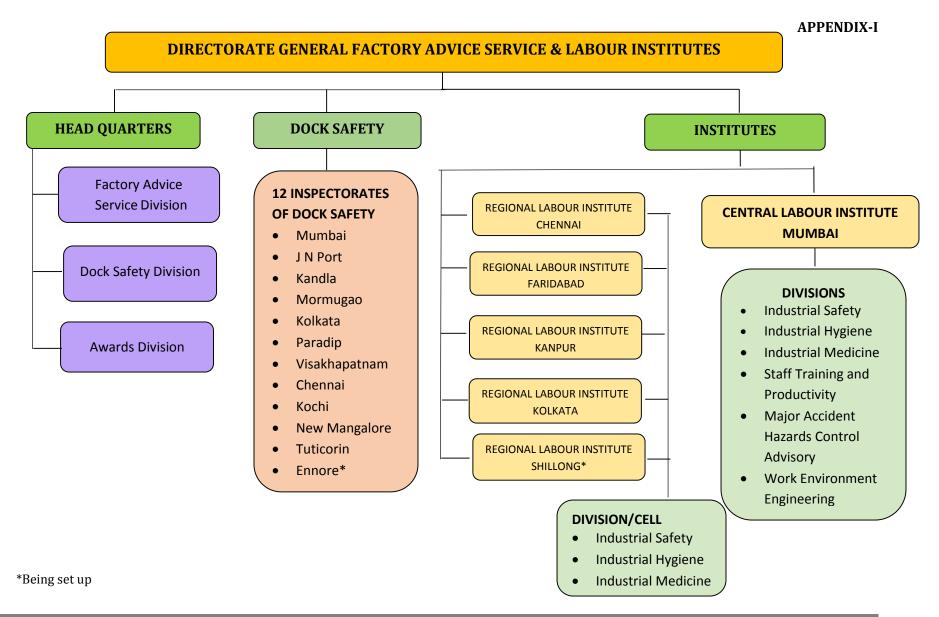
Table 9.11- Safety Facilities in Ma	ior Ports during the year 2020
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 Table 9.12- Health Facilities in Major Ports during the year 2020

		Health Facilities				
SI.	Port	OSH Centers	Ambulance Rooms	First Aid Centers	Empaneled Doctors	
1.	Mumbai	01	02	112	05	
2.	JNPT	03	04	53	03	
3.	Kandla	01	02	01	01	
4.	Mormugao	01	01	01	01	
5.	Kolkata	02	04	54	01	
6.	Paradip	01	03	06	00	
7.	Visakhapatnam	01	02	23	01	
8.	Chennai	01	01	01	01	
9.	Kochi	01	02	02	01	
10.	New Mangalore	01	01	01	01	
11.	Tuticorin	01	03	03	00	
	Total	14	25	257	15	

		Welfare Facilities				
Sl.	Port	No. of Welfare Officers	Canteens	Drinking Water	Washing	Urinals
1.	Mumbai	06	17	027	152	704
2.	JNPT	11	10	087	216	349
3.	Kandla	01	04	020	030	030
4.	Mormugao	01	07	052	053	073
5.	Kolkata	02	05	167	156	222
6.	Paradip	01	05	041	014	033
7.	Visakhapatnam	06	10	041	049	103
8.	Chennai	02	05	115	030	040
9.	Kochi	01	06	047	125	109
10.	New Mangalore	00	01	014	000	077
11.	Tuticorin	01	02	010	007	012
	Total	32	72	621	832	1752

Table 9.13 Welfare Facilities in Major Ports during the year 2020
Table 5.15 Wenare racintles in Major rolts during the year 2020



APPENDIX - II

Address of DGFASLI and its subordinate offices:

HEADQUARTERS

Directorate General Factory Advice Service & Labour Institutes, Mumbai

N. S. Mankikar Marg, Sion (East), Mumbai-400 022 PBX No. 91-22-24074538 Fax: 022-24071986 e-mail: fasli@dgfasli.nic.in

CENTRAL LABOUR INSTITUTE

Central Labour Institute, Mumbai

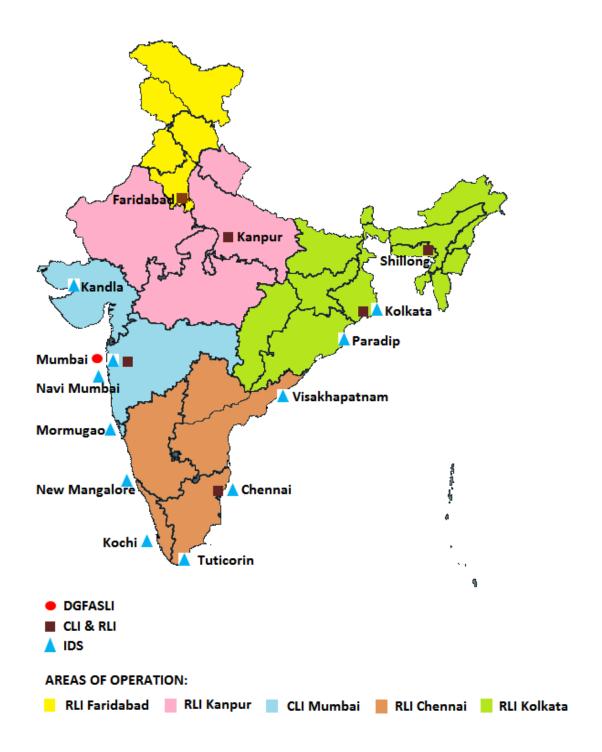
N. S. Mankikar Marg, Sion (East), Mumbai-400 022 PBX No. 91-22-24074538 Fax: 022-24071986 e-mail: <u>cli@dgfasli.nic.in</u>

REGIONAL LABOUR INSTITUTES

Regional Labour Institute, Chennai	Regional Labour Institute, Faridabad
Sardar Patel Road, Adyar, TTTI PO,	Sector 47, Faridabad-121 003
Chennai-600 113	Haryana
Tel: 044-22350737, 22351569, 22355690	Tel: 0129-2468022
Fax : 044- 22352457	Fax: 0129-2437064
e-mail: <u>rlichennai@dgfasli.nic.in</u>	e-mail: <u>rlifaridabad@dgfasli.nic.in</u>
Regional Labour Institute, Kanpur	Regional Labour Institute, Kolkata
Regional Labour Institute, Kanpur Sarvoday Nagar,	Regional Labour Institute, Kolkata Lake Town,
0 1	
Sarvoday Nagar,	Lake Town,
Sarvoday Nagar, Kanpur-208 005	Lake Town, Kolkata-700 089

THE INSPECTORATES OF DOCK SAFETY				
Inspectorate Dock Safety, Mumbai	Inspectorate Dock Safety, Kandla			
MbPT OSC Bldg., 3 rd floor,	Near Bunder Gate, Kandla Port, New Kandla,			
Opp. GPO, P. D'Mello Road,	Post Box No.18, Dist Kutch,			
Mumbai- 400 038	Pin-370 210, Gujarat			
Office Tel.: 22692180 / 66565558	Office Tel.: 02836 - 270249			
Fax: 022-22613391	Fax: 02836 - 270249			
Email : <u>idsmumbai@dgfasli.nic.in</u>	Email : <u>idskandla@dgfasli.nic.in</u>			
Inspectorate Dock Safety, Mormugao	Inspectorate Dock Safety, Navi Mumbai			
Civil Maintenance Office Building	Jawaharlal Nehru Port,			
Mormugao Port Trust, Headland Sada,	P.O.C. Canteen Bldg., Ground Floor, Sheva,			
Mormugao, Goa- 403 804	Navi Mumbai-400 707			
Office Tel.: 0832-2520752	Office Tel.: 022-27245099			
Fax: 0832-2520752	Fax: 022-22623391			
Email : <u>idsmormugao@dgfasli.nic.in</u>	Email : <u>idsjnpt@dgfasli.nic.in</u>			
Increastorate Deck Sofety, Vellista	Increastorate Deals Safety, Daradin			
Inspectorate Dock Safety, Kolkata	Inspectorate Dock Safety, Paradip			
Nizam Palace, 1 st floor, 2 nd M.S.O.Bldg.	Badapadia, Post Box no.126, Paradip-754 142, Odisha			
234/4 A.J.C. Bose Road, Kolkata-700 020	Office Tel.: 06722-222413			
Office Tel.: 033-22830718 / 22830719 Fax: 033-22830718	Fax: 06722-222413			
Email : <u>idskolkata@dgfasli.nic.in</u>	Email : <u>idsparadip@dgfasli.nic.in</u>			
Inspectorate Dock Safety, Visakhapatnam	Inspectorate Dock Safety, Chennai			
Ex. D.L.B. Bldg., 5 th floor,	3 rd floor, Anchor Gate Bldg.,			
Visakhapatnam Port Area,	Rajaji Salai,			
Visakhapatnam-530 035	Chennai-600 001			
Office Tel.: 0891-2563857	Office Tel.: 044 - 25220888,			
Fax: 0891-2563857	044 - 25246419			
Email : <u>idsvizag@dgfasli.nic.in</u>	Email : <u>idschennai@dgfasli.nic.in</u>			

Inspectorate Dock Safety, Tuticorin	Inspectorate Dock Safety, Cochin	
Tuticorin Port Trust, Admn. Office Bldg.	C.D.L.B. Dispensary Bldg., G. V. Ayyar Road,	
Harbour Estate,	Willington Island, Cochin-682 003	
Tuticorin-628 004	Office Tel.: 0484-2666532	
Office Tel.: 0461-2352372	Fax: 0484-2666532	
Fax: 0461-2352372	Email : <u>idscochin@dgfasli.nic.in</u>	
Email : idstuticorin@dgfasli.nic.in		
Inspectorate Dock Safety, New Mangalore	Inspectorate Dock Safety, Ennore	
New Mangalore Port, Panambur,	(being set up)	
New Mangalore-575 010	Operated from Inspectorate Dock Safety, Chennai	
Office Tel.: 0824-2407781		
Fax: 0824-2407781		
E-mail: <u>idsmangalore@dgfasli.nic.in</u>		



N.B.: i) This pictorial Map of India does not purport to be the Political Map of India. ii) Map not to scale. The map shows offices of DGFASLI/CLI/RLI/IDS as on 31.12.2020.