





इंडोशन्युज़ INDOSHNEWS

कार्यस्थल पर सुरक्षा, स्वास्थ्य और पर्यावरण पर अर्द्ध-वार्षिक समाचार पत्र HALF YEARLY NEWSLETTER ON SAFETY, HEALTH AND ENVIRONMENT AT WORKPLACE









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MESSAGE

It gives me immense pleasure to bring out the first issue of the INDOSHNEWS for the year 2022 (January-June, 2022), the official newsletter of Directorate General Factory Advice Service and Labour Institutes (DGFASLI). Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of independence and the glorious history of its people, culture, and achievements. DGFASLI organized several programmes on Occupational Safety & Health viz. national conferences, workshop, national seminar, awareness campaigns for the benefit of workers during the Iconic Week celebration held from 7th of March, 2022 to the 13th of March, 2022 under Azadi Ka Amrit Mahotsav. We have also co-ordinated with the Ministry in organising the award distribution function during the ICONIC week celebration. Large number of workers and employees of the factories, construction sites, and ports are benefitted from the events organized during the 'Azadi Ka Amrit Mahotsav programme by DGFASLI. The booklet and manual on construction safety were prepared by DGFASLI and released during the Iconic Week for the benefit of workers and supervisors of construction industry.

I am also glad to inform that a Memorandum of Understanding between DGFASLI and The German Social Accident Insurance (DGUV), Germany was renewed on the 27th April, 2022. The MoU is aimed at establishing mutual collaboration to enhance safety and health at work, to reduce the occurrence of work-related accidents and diseases, and to promote the well-being of workers. The MoU provides for special focus on working conditions in the manufacturing, dock work and construction sector.

The current issue features scientific articles on selection of respiratory protective equipment, cardiopulmonary resuscitation techniques, transport safety in ports, role of safety committee for OSH performance in port sector, fire and gas detection system and quantitative indices for measurement of safety performance in industries. Safety card on Personal Protective Equipment in engineering industries, accident case reports in ports and manufacturing industry, injury statistics in industries and ports, and various safety posters are included in this issue for the benefit of the stakeholders. Like the previous issue, the information related to training programmes, workshops, safety audits and work environment monitoring studies conducted between January-June, 2022 by the Central Labour Institute and Regional Labour Institutes of DGFASLI are also presented in this newsletter.

I sincerely hope that the newsletter meets the expectations of all the stakeholders associated with the Occupational Safety and Health at workplaces.

Dr R K Elangovan)

Place: Mumbai Date: 31.7.2022

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NIOSH Standard of Particulate Respirator: "N-R-P" System

Abstract:

Occupational lung diseases are one of the most important public health issues worldwide. It has been estimated that worldwide one new case of pneumoconiosis and six new cases of other occupational chronic respiratory occurs every minute. As there is no cure of occupational lung diseases, the best way to prevent occupational lung diseases is to avoid the inhaled substances that causes lung diseases. So, selection of proper filtering face mask or particulate respirator is of utmost importance. Standard of particulate respirator or filtering face piece differs from countries to countries. In India, it is defined and described as per IS 9473:2003 standard, whereas in European Union countries described as per EN 149:2001+A1:2009 standard and in USA it is governed by NIOSH standard. In this article, an attempt has been made to discuss the "N-R-P" system of NIOSH standards in a nutshell.

1. Introduction

Occupational lung diseases like pneumoconiosis are one of the most important public health problems in the industries worldwide. Occupational lung diseases are mainly caused by long-term, repeated, exposure, but even a severe, single exposure to a hazardous agent can damage the respiratory system. It has also been established by various epidemiological studies that respiratory diseases like asthma, Chronic Obstructive Pulmonary Diseases (COPD) are also associated with the occupational exposure of hazardous agents. It has been estimated that worldwide one new case of pneumoconiosis and six new cases of other occupational chronic respiratory occurs minute.(1) Some agents of occupational lungs diseases like Asbestos are causally associated with the development of respiratory and non-respiratory occupational cancer. The best way to prevent occupational lung diseases is to avoid the inhaled substances that cause lung diseases. So, selection of proper filtering face mask or particulate respirator is of utmost importance.

2. Filtering Face Mask or Particulate Respirator:

A filtering half mask or filtering face piece or particulate respirator or protective mas is one in which the facepiece consists entirely or substantially of filter material or comprises a facepiece in which the main filter(s) form an inseparable part of the device. It belongs to personal protective device that is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer's risk of inhaling hazardous airborne particles (including dust particles, droplet nuclei and infectious agents).(2)

Air-borne particles may be naturally and artificially generated. These particles are likely to vary in both size, shape and content. The particle which is >5 μ m tend to remain trapped in the upper respiratory tract (oropharynx i.e. nose and throat areas), whereas droplets $\leq 5 \mu$ m have the potential to be inhaled into the lower respiratory tract (the bronchi and alveoli in the

lungs). Currently, the term droplet is often used to refer to air-borne particle>5 μm in diameter that fall rapidly to the ground under gravity, and therefore are transmitted only over a limited distance (e.g. ≤ 1 m). In contrast, the term droplet nuclei refer to air-borne particle ≤ 5 μm in diameter that can remain suspended in air for significant periods of time, allowing them to be transmitted over distances > 1 m.(3)

There are different types of respirators available include

- (1) Particulate respirators or filtering face mask, which filter out airborne particles:
- (2) "Gas masks," which filter out chemicals and gases;
- (3) Airline respirators, which use compressed air from a remote source; and
- (4) Self-Contained Breathing Apparatus (SCBA), which include their own air supply.

The category of particulate respirator or filtering face mask can be further divided into

- (1) Disposable or filtering facepiece respirators, where the entire respirator or filtering face mask is discarded when it becomes unsuitable for further use due to excessive resistance, sorbent exhaustion, or physical damage:
- (2) Reusable or elastomeric respirators, where the facepiece is cleaned and reused but the filter cartridges are discarded and replaced when they become unsuitable for further use; and
- (3) Powered Air Purifying Respirators (PAPRs), where a battery-powered blower moves the air flow through the filters.

Particulate respirators or filtering face mask are also known as "air-purifying respirators" because they make ashield around the nose and face by filtering particles out of the air during respiration. These respirators protect only against particles—not gases or vapors. Since airborne biological agents such as bacteria or viruses are particles and often transmitted as droplet nuclei, they can be filtered by particulate respirators.

2.1 NIOSH Standard of Particulate Respirator- "N-R-P" System:

a. National Institute of Occupational Safety and Health (NIOSH) approved non-powered air purifying Respiratorsare rated as N, R, or P alphabet for protection against oils. This rating is important in industry because some industrial oils after being air-borne can degrade the filter it doesn't filter performance so properly.Respirators are rated "N" if they are Not resistant to oil, "R" if somewhat Resistant to oil, and "P" if strongly resistant (oil Proof). This N or R or P alphabet is followed by95 or 99 or 100 which denotes filter efficiency. Respirator that filter out at least 95% of airborne particles during "worse case" testing using a "most-penetrating" sized particle is given a 95 rating. Those that filter out at least 99% receive a "99" rating. And those that filter at least 99.97% (essentially 100%) receive a "100" rating. Respirators in this family Thus, there are nine types of disposable particulate respirators (Table-1).

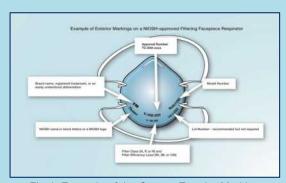


Fig-1: Example of the Correct Exterior Markings on a NIOSH-Approved Filtering Facepiece Respirator(4)

Table-1: NIOSH Standard for Particulate Respirator or Filtering face-piece Respirator

SI.	Nature of	NIOSH Certification System			
No	Testing				
	Particulate	Resistance	Filters	Filters	Filters
	Filter	to air-	at least	at least	at least
	Efficiency	borne Oil	95% of	99% of	99.97%
	Standard	particles	airborne	airborne	of
	Test		test	test	airborne
	Condition		particles	particles	test
					particles
1	Respirator	N ot	N95	N99	N100
	filters will be	resistant to			
	challenged by	oil			
	a 2% NaCl				
	aerosol at 25				
	±5℃ and a				
	relative				
	humidity of				

	30 ±10% that has been neutralized to the Boltzmann equilibrium state. The particle size distribution will be a count median diameter of 0.075 ± 0.020 µm and a geometric standard deviation not exceeding 1.86.Each respirator filter unit will be challenged with an aerosol concentration not exceeding 200 mg/m3				
2	Respirator filters will be challenged by a neat cold – nebulized DOP (Dioctyl phthalate) aerosol at 25 ±5 °C that has been neutralized to the Boltzmann equilibrium state. The particle size distribution will be a count median diameter of 0.185 ± 0.020 µm and a geometric standard deviation not exceeding 1.6.Each respirator filter unit will be challenged with an aerosol concentration not exceeding 200 mg/m3	Somewhat Resistant to oil	R95	R99	R100
3	Respirator filters will be challenged by a neat cold – nebulized	Strongly resistant to oil or oil P roof	P95	P99	P100

	DOP (Dioctyl				
	phthalate)				
	aerosol at 25				
	±5 °C that				
	has been				
	neutralized to				
	the				
	Boltzmann				
	equilibrium				
	state. The				
	particle size				
	distribution				
	will be a				
	count median				
	diameter of				
	0.185 ± 0.020				
	μ m and a				
	geometric				
	standard				
	deviation not				
	exceeding				
	1.6.Each				
	respirator				
	filter unit will				
	be				
	challenged				
	with an				
	aerosol				
	concentration				
	not				
	exceeding				
	200 mg/m3				
4	Surgica			l N95 respi	
	Respirator		NIOSH-ap	•	N95
				that has a	
				y the Food	J
				ation (FDA)	, USA as
			a surgical	mask.	

2.1.1 How to identify a counterfeit NIOSH Respirator (Fig-1):

- No markings at all on the filtering facepiece respirator
- No approval (TC) number on filtering facepiece respirator or headband
- No "NIOSH" markings
- NIOSH spelled incorrectly
- Presence of decorative fabric or other decorative add-ons (e.g., sequins)
- Claims for the of approval for children (NIOSH does not approve any type of respiratory protection for children)
- Filtering facepiece respirator has ear loops instead of headbands
- An online tool (https://wwwn.cdc.gov/niosh-cel/)
 has been provided by the Centers for Disease
 Control and Prevention, USA to verify the authenticity of the NIOSH approval.

2.12 Use and Service Limitation (5):

All respirators be properly fit-tested using a quantitative or qualitative fit test when initially assigned to a user and periodically thereafter. In addition to fittesting, respirator manufacturer has recommended fitchecking procedures that should be followed by the user each time the respirator is worn. The service life of all three categories of filters efficiency degradation (i.e., N-, R-, and P-series) is limited by considerations of hygiene, damage, and breathing resistance. All filters should be replaced whenever they are damaged, soiled, or causing noticeably increased breathing resistance (e.g., causing discomfort to the wearer). The selection of N-, R-, and P-series filters depends on the presence or absence of oil particles. If no oil particles are present in the work environment, use a filter of any series (i.e., N-, R-, or P-series). If oil particles (e.g., lubricants, cutting fluids, glycerin, etc.) are present, use an R- or P-series filter. If oil particles are present and the filter is to be used for more than one work shift, use only a P-series filter.

3. Conclusion

The correctselection of appropriate respiratory protective equipment like filtering facepiece is one of the most important steps for prevention of the occupational lung diseases. If not worn or selected appropriately, it is totally ineffective and may give the user a false sense of protection. It should only be used only be used where adequate control of exposure cannot be achieved by other means. It should be the last resort on the hierarchy of control measures.

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Hands-Only Cardio Pulmonary Resuscitation: Anyone Can Save A Life of a Worker

Abstract:

Sudden and unexpected death due to cardiac arrest is one of the important causes of mortality worldwide. It is estimated that, sudden cardiac arrest and arrhythmias (irregular rate or rhythm of the heart beat) are accountable for 15-20% of all death, globally. It has been estimated that about 7-lakh people die annually due to sudden cardiac arrest in India. Majority of the Sudden cardiac arrest occurs outside hospital at home, office, streets or markets and witnessed by relatives or bystanders. Immediate initiation of Cardio Pulmonary Resuscitation (CPR) is the key to survival in sudden cardiac arrest. As per The American Heart Association (AHA) timely CPR can double or triple the chance of survival from sudden cardiac arrest. Majority of sudden cardiac arrest patients succumbs because they do not receive life-saving Cardio Pulmonary Resuscitation within 4 to 6 minutes, before brain and permanent death start to occur. Conventional cardio pulmonary resuscitation including breathing, is still considered the gold standard approach to respond sudden cardiac arrest. In case of teens and adults, a simplified from of conventional CPR has been proposed which is based on chest compression only. Recent evidence strongly supports the superiority of bystander initiated "Hands-Only CPR" in term of survival among adults and teens.

1. Introduction

Sudden and unexpected death due to cardiac reason is one of the major public health problems worldwide. Sudden Cardiac Death is defined as death due to cardiovascular ailments that happens with in an hour of development of symptoms. Often, the terminologies, "Heart Attack" and "Cardiac Arrest" are used by the common people interchangeably, but they are not synonyms. During heart attack, blood flow within the heart muscle is blocked resulting in damage to the heart muscle i.e. myocardium. In sudden cardiac arrest heart suddenly stops beating or beating in a manner which is not sufficient to effectively maintain perfusion for survival.(1)Heart Attack is a problem of blood circulation within the heart, whereas Cardiac arrest is a problem of electrical conduction in the heart. However, these two heart ailments are different in nature, sometimes they are linked. Sudden cardiac arrest may occur in a patient suffering from heart attack and history of previous heart attack also increase the risk of sudden cardiac arrest. Patient succumbs to cardiac arrest, if it is not treated immediately. It is estimated that, sudden cardiac arrest and arrhythmias (irregular rate or rhythm of the heart beat) are accountable for 15-20% of all death. globally.(2) It has also been estimated that about 7lakh people die annually due to sudden cardiac arrest in India.(3)Majority of the Sudden cardiac arrest occurs outside hospital at home, office, streets or markets and witnessed by relatives or bystanders.

2. How to Identify Sudden Cardiac Arrest

 Sudden cardiac arrest strikes often with no warning. Symptoms and sings of sudden cardiac arrest are dramatic in nature includes sudden collapse with loss of consciousness, no palpable pulse and no normal breathing effort. Patient will remain unresponsive (no eye opening, no voice or no motor response) to verbal command (like "Can you hear me? or "What is your name?" or "Open your Eyes") andsome kind of stimuli like pressure on the nailbed or supra-orbital ridge, but not causing any injury to the patient. Some patients may experience dizziness, palpitations, discomfort, or near syncope prior to sudden cardiac arrest. (1)



3. Hands-Only Cardio Pulmonary Resuscitation (CPR)

Immediate initiation of Cardio Pulmonary Resuscitation (CPR) is the key to survival in sudden cardiac arrest. Majority of sudden cardiac arrest patients succumbs because they do not receive life-saving Cardio Pulmonary Resuscitation within 4 to 6 minutes, before brain and permanent death start to occur. Most of the cases, relatives or bystanders don't know what to do or to respond when someone collapses unexpectedly. (4) As per the American Heart Association (AHA) timely CPR can double or triple the chance of survival from sudden cardiac arrest.(5) Conventionally CPR is performed by chest compression along withbreathing. Conventional cardio pulmonary resuscitation including breathing, is still considered the gold standard approach to respond sudden cardiac arrest. Despite efforts to train bystander to recognize and manage sudden cardiac arrest, in reality numbers of performed conventional CPR remain very low. Reluctance to perform mouth-tomouth ventilation is one of the major reasons.(6)In case of teens and adults, a simplified from of conventional CPR has been proposed which is based on chest compression only. It is termed as "Hands-Only CPR". In a systematic review and meta-analysis evidence strongly support the superiority of bystander initiated "Hands-Only CPR" in term of survival.(7) Hands-Only CPR is easier to learn and remember and better percentage of bystanders would likely accept to perform it while avoiding mouth-to-mouth contact.(7).

STEPS OF HANDS ONLY CPR:

- Call for Help: If you see a teen or adult suddenly collapse and unresponsive, don't be afraid, ask someone (if available nearby, otherwise do it yourself using speaker mode while starting chest compression) to call for help immediately by dialing emergency medical supportnumber likeNational Ambulance Helpline 102 or state specific medical help line number or nearest health center help line number.
- 2. Start Chest Compression: Get directly over the patient. Put the heel of one hand in the center of the chest, then put your other hand on top of the first hand. Then push hard and fast in the center of the chest until emergency medical support arrives or someone arrives with an Automated External Defibrillator (AED) or person begins to respond. It is important to push at a rate of 100 to 120 compression per minute and to a depth of at least 2 inches (5 cm) for an average adult, while avoiding excessive chest compression depths (greater than 2.4 inches [6 cm].



4. Conclusion

Our hands are one of the most sophisticated instruments, can do may miracles, the most important of which may be saving someone's life by giving CPR in case of cardiac arrest. Considering the ongoing COVID-19 pandemic, Hands-Only CPR can also be performed unsure about the COVID-19 positivity status of the person. Don't afraid to start Hands only CPR when in need because this action can save a life.

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Transport Safety in Ports

ABSTRACT:

Transport Accidents on the lanes of major ports contribute to a major chunk of the total accidents/injuries in the major ports. A study on the reportable accidents happened in the major ports in the last five years shows that an average of 33% total reportable accidents are the transport accidents which are not directly related to cargo handling or dock work in the major ports.

1. INTRODUCTION: TRANSPORT ACCIDENTS

A study of the statistics available was done to highlight transport accidents happening in the major ports of India for the last 5 years i.e for the calendar years 2015-2019. It is inferred that atleast 1/3rd of the reportable accidents are transport related in the major ports of India.

2. STATISTICS:

Data of Reportable Accidents in Major Ports for the year 2015-2019 and percentage of Transport accidents is given below:

S. N o	Year	Means of transportatio n	Total	% Transpo rt related accident s
1	2015	16(03)	69(08)	16.84
2	2016	18(05)	51(09)	35.29
3	2017	20(13)	49(23)	40.82
4	2018	17(08)	41(11	
)	41.46
5	2019	11(10)	35(17)	31.43

Fig.2.1- Figures in brackets are fatal accidents.

3.0 Major causes of road accidents.

After carefully going to the accident investigation reports following major factors causing transport accidents have been listed below.

3.1 Speed Limit.

Trailer driver, Truck Drivers and Other vehicle owners normally have some target to be met. Sometimes out of competitive pressures drivers tend to speed up the vehicle resulting into the accidents.

The trailers/trucks drivers reaching from the various parts of the country for collection of cargoes brought by the Ships are also not much aware of the roads conditions, sharp turns and instructions inside the port area. There is a strong tendency of these drivers to immediately load their cargoes and move back to their

places and in the haste of doing so; they mostly do over speeding leading to accidents.

3.2 Pedestrians

Pedestrians and bikes are generally prohibited inside the ports. But, still a lot of pedestrians are found roaming inside the ports. Private bikes are also being used to move in and around the port area.

3.3 Illuminations.

There are many instances of road accidents where it is found that Truck, Trailers or other vehicles ran over the sleeping worker. On investigation in most of the cases, it was found that Port Trust or Private Terminal are not even complying the minimum with illumination level. Poor illumination reduces visibility thereby leading to accidents to such accidents.

3.4 Rest Shelters.

Each port should provide sufficient number of rest shelters so that workers engaged in cargo handling can take rest during free time. Sometimes due to the non-availability of the rest shelters and sometimes due to lethargic attitudes of the workers, they tend sleep beneath trailers or trucks and which on operations lead to accident/injuries.

3.5 Training of Drivers and Helpers.

Unskilled drivers and helper entering from various parts of the country are not aware of the hazards involved inside in the port. The lack of training and knowledge of SOP for handling cargoes also leads to accident. Eg: A helper of the truck removes stanchion and then unlashing chains used for holding cargo will lead to falling of the cargo over than helper.

4.0 Preventive steps to eradicate traffic accidents inside the port trust.

Preventive measures can be classified as:

4.1 Engineering control

i) Maintenance of the Transport Equipments:

Transport equipments which are traversing inside the Port areas i.e Internal Transport Vehicles (ITV) shall be thoroughly maintained as per Motor vehicle Act and

shall adhere to maximum speed limit as decided by the Port Authority.

- **ii) Speed Governor:** Central Motor Vehicles Rules 1989, Rule 118 make it mandatory for the vehicles to install speed governors in all commercial vehicles. Installation of speed governor will definitely reduce accidents to a larger extent.
- iii) Rear View Camera, Audio Visual Camera and Proximity Sensors: Most of the road accidents inside the port trust areas are not head-on collision between vehicles rather it is while parking or reversing. Installation of devices such as Rear View Camera, Audio Visual Camera and Proximity Sensors will reduce accidents to a large extent.
- iv) Rest Shelters and Urinals: Drivers shall be made aware of the hazards involved inside the port trust and shall be given took box talk at the entrance of the Port itself so as to make them conscious about the layout plan of the port areas and thereby prevent accidents. Drivers and helpers shall be forced to use urinal instead of going to open spaces where there are probabilities hitting by the trailer. Ambling in and around the loading areas shall be prohibited and rest shelters should be in their idle time.
- v) Maintenance of Roads: All the approaches and roads inside the port areas shall be maintained in good order. Poorly maintained road include faded road markings potholes, slippery and muddy surface and missing or damaged signs. Port Authorities and Private Terminals shall regularly maintain in good order.

4.2 Administrative control

- i) **Training of Drivers:** Although, training of drivers rarely coming inside from the various corners of the country is difficult, a basic training and tool box shall be given to them at the entrance itself to acquaint them with the hazards with the cargo handling and road conditions of the port area.
- ii) **Designated Parking Places:** Places inside the port premises shall be marked conspicuously like parking places, urinals, rest shelters for drivers etc, so that a new entrant can easily locate the designated place for a particular job.
- iii) Safe Behavior: About 88% of the all the accidents occurring are because of human factors .In other words, accidents happens because of the negligent behaviour of the pedestrians, helpers of the truck and

drivers of the trucks/trailers. Periodical training and continuously interrupting the wrong behaviour of the manpower involved will force workers to change wrong behavioral practices and thereby overcoming accidents and dangerous occurrences leading to injuries.

3. CONCLUSION

The paper gives general idea of causes of the road accidents occurring in the majors ports of the country. Although there are several factors leading to road accidents, but most the causes covered here on the basis of Investigation reports and recommendations suggested to the employers of the Dock Workers.

4. REFERENCE

- [1] Standard Reference Note (www.dgfasli.gov.in)
- [2) Investigations Reports of Fatal accidents and Dangerous Occurrences.

The Role of Safety Committee in Occupational Safety and Health of the Dock Workers

INTRODUCTION

The role of safety committee has gained immense importance in work related to the dock works in the port area. The statutory requirements for the safety committee are given in the Dock Workers (Safety, Health & Welfare) Act, 1986 and Regulation, 1990. In the docks where heavy jobs/cargoes are to be loaded, discharge and shifted from one height to another or one place to another, has lot of potential hazards. For maintaining safety and health of the dock workers, to prevent incidents/accidents in the dock works the effective safety committee is very much required as per dock safety statute.

SAFETY COMMITTEE

Safety Committee is a body consisting of equal representatives of management and workers to work exclusively for creating and maintaining safe and healthy work environment in a workplace.

DOCK WORK & DOCK WORKER

As per the Dock Workers (Safety, Health & Welfare) Act, 1986 the dock work and dock workers means,

Section 2 (d):

"dock work" means, any work in or within the vicinity of any port in connection with, or required, for, or incidental to, the loading, unloading, movement or storage of cargoes into or from ship or other vessel, port, dock, storage place or landing place and includes:

- (i) Work in connection with the preparation of ships or other vessels for receipt or discharge of cargoes or leaving port; and
- (ii) Chipping, painting or cleaning of any hold, tank, structure or lifting machinery or any other storage area in board the ship or in the docks.

Section 2 (e):

"dock worker" means a person employed or to be employed directly or by or through any agency (including a contractor) with or without knowledge of the principal employer, whether for remuneration or not, on dock work;

STATUTORY REQUIREMENTS

Reg. 114(1) of Dock Workers (Safety, Health & Welfare) Regulation, 1990 stipulates the requirement of Safety committee as given below:

At every port there shall be constituted a safety

committee which shall be headed by an officer not below the rank of Deputy Chairman of the Port.

ROLE OF THE SAFETY COMMITTEE

The important roles of the safety committee for improving the Occupational Safety and Health of the dockworkers shall be-

- To investigate into the causes of accidents and unsafe practices in dock work and to suggest remedial measures:
- To stimulate interest, of employers and workers in safety by organising safety weeks, safety competitions, talks and film shows on safety, preparing posters or taking similar other measures;
- To go round the dock with a view to check unsafe practices and detect unsafe conditions and to recommend remedial measures for their rectification;
- Undertaking education, training and promotional activities;
- To look into the health hazards associated with handling different types of cargoes and to suggest remedial measures including use of proper personal protective equipment; and
- 6) To suggest measures for improving welfare amenities inside the docks and other miscellaneous aspects of safety, health and welfare in dock work.
- Drawing up rules setting out safe system of work for operations, and revising them when necessary.
- 8) Dissemination of information to port workers and employers about hazards inherent in the work and ways of eliminating them or protecting themselves against them. This include the preparation of safety leaf-lets, posters, and so
- Assisting & co-operating with the port trust in achieving the aim and objectives in Health & Safety Policy.
- 10) Dealing with all matters related to SHE and to arrive at practicable solutions to the problem.
- 11) Creating safety awareness amongst all workers.

The safety committee shall be constituted by the Chairman of the port and shall include besides port officials, representatives of port users, the recognised labour unions and the Inspector of Dock Safety. The composition and functions of the port safety committee depends on the number of employers and workers in the port and the organization of work in it. Normally, the

committee is composed of representatives of management and workers in equal numbers.

In addition to the port safety committee, separate committees, affiliated to the port committee, should be setup by individual employers, Build-Operate-Transfer(BOT) operators etc. A representative of the port authority should attend some meeting of this committee to improve the safety and health of the dock workers.

MEETING INTERVAL

The safety committee shall meet at regular intervals at least once in every quarter, and minutes of the meetings shall be circulated to the concerned departments of the Port, agencies and organisations, dock safety inspector well in advance for active participation in the committee.

EFFICTIVE FUNCTIONING

The following important points must be considered for the effective functioning of the safety committee,

- The decisions and recommendations of the safety committee shall be complied with by the port authorities, port users and the employers of dock workers.
- Scope of activities and authorities of the committee to be clearly expressed.
- Meeting to be regularly convened with prefixed agenda.
- Chairman, secretary and members should be fully aware of their functions.
- 5) Name of presentees and absentees with reasons should be recorded in the meeting.
- Late attendance and early leaving should be discouraged.
- 7) Repetitive failure to achieve safety target should be prevented.
- 8) Tendency to bring non safety problems should be prevented / stopped.
- Meeting should be taken up seriously by everybody and completed within scheduled time.
- 10) Difference of opinion should be resolved by discussion

MEMBERS OF THE SAFETY COMMITTEE

 Failure of past performance should be analysed and accountability fixed for future course of action.

KEY ACTIVITIES

To make a safety committee effective, it has to be build it on a foundation of seven key activities:

- 1) Accountability
- 2) Commitment
- 3) Employee Involvement
- 4) Hazard Identification
- 5) Accident Investigation
- 6) Record Keeping
- 7) Evaluation

1) Accountability

- All members of the committee should understand that the committee expects each of them to contribute.
- Everyone has to share responsibility for accomplishing goals.

2) Commitment

- Committee should have management support to encourage employees to get involved and act on committee recommendations.
- Representatives must show a commitment to committee by attending committee meetings regularly also complete the tasks assigned in a timely manner by encouraging others to get involved.

3) Employee Involvement

Get everyone involved in achieving a safe, healthy workplace by:

- Telling personnel how they can assist the committee.
- Encourage personnel to report hazards and unsafe work practices to a safety committee representative and recognize their contributions.
- Train the workers and tell the losses of unsafe work practice and environment, also include the advantages of Safety Culture.
- Keep the committee visible. Promote activities and accomplishments.
- Choose committee representatives who will promote safe work practices and will be committed to achieving the committee goals.

4) Hazard Identification

Prevent workplace hazards and unsafe work practices by:

- Training to recognize hazards and understand the basic principles for controlling them.
- Focusing on identifying hazards and unsafe work practices that are most likely to cause serious injuries.
- Using accident report information to focus on what type of hazards are actually causing the most injuries.
- Conducting workplace inspections at least quarterly.
- Documenting hazards found during inspections and discussing how to control them at monthly meetings.

5) Accident Investigation

- Establish procedures for investigating all safetyrelated accidents and illnesses.
- Secure the accident scene to preserve the evidence.
- Gather information.
- Analyze the facts.
- An accident investigation report will be written.
- Take corrective action.
- Follow up.

6) Recordkeeping

- Keep accurate, well-organized records.
- Record committee achievements.
- Essential documents to keep on file:
- Accurate minutes of each safety committee meeting.
- Committee reports, evaluations, and recommendations.
- Department head's response to committee recommendations.
- Personnel safety concerns, suggestions, and responses to each.
- Hazard reports and inspections.
- · Training rosters and certificates.

8) Evaluation

 An effective safety committee knows where they've been and where they are going.

- At least once a year schedule a half-day session to review progress on current goals and from new ones for the year to come.
- Evaluate strengths and weaknesses.
- Celebrate goals achieved!

REASON FOR FAILURE

The various reasons behind failure of Safety Committee are as follows,

- 1) Lack of participation
- 2) Lack of organization
- 3) No clear Agenda
- 4) Same old things reviewed over and over
- 5) Nothing gets done
- 6) Just a complaint session
- 7) No influence
- 8) People don't know why they are there
- 9) No decisions made
- 10) Lack of support from management
- 11) Lack of time to perform committee duties

CONCLUSION

A safety committee is an effective tool to identify and control hazards, prevent injuries, and avoid costly mistakes. The safety committee in a ports plays an important role in minimizing accidents occurrences, in that it helps the ports and the people concerned to convert a hazardous work situation into a safe work environment. But the success of the system will greatly depend upon the understanding the responsibility and strict compliance by all concerned.

REFERENCES

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- 2) The Dock Workers (Safety, Health and Welfare) Regulations, 1990
- 3) The Manufacture, Storage & Import of Hazardous Chemical Rules, 1989
- 4) Safety and health in ports, ILO Code of practice,ILO Publications,International Labour office,Geneva,2005.
- 5) www.dgfasli.gov.in
- 6) www.osha.gov.in

SAFETY PERFORMANCE MEASUREMENT IN INDUSTRIES

ABSTRACT:

'You can't manage what you can't measure' - Drucker

'If you don't know where you are going, chances are you will end up somewhere else' - Yogi Berra

The industry is one of the main sectors that contribute significant impact in the achievement of economy of countries. However, the industries that are always associated with high risk of hazards and dangerous activities. Performance assessment and measurements in industries are important mechanism in a continuous endeavor for improved efficiency. Moreover it is not enough only to assess and measure performance, but these activities should be integrated in the management systems to make sure that actions are initiated whenever substandard performance is observed through compiled data. The aim of this article is identify important factors and computation method that provide transparent key safety performance indicators in the industry.

1. INTRODUCTION:

Safety Performance measurement is a main key footstep in any management system and forms the basis of continual enhancement. If measurement is not carried out properly, the efficacy of the health and safety management system is undermined and there is no reliable information to brief managers how well the health and safety risks are controlled. This is important not only to make sure that measurement is effective but also to ensure effective use of the resources used to measure performance. Information from health and safety performance measurement is desirable by the people in the industries who have meticulous responsibilities within the health and safety management system.

'Each organization must create and communicate performance measures that Reflect its unique strategy' – Kaplan

The challenge for industries is to converse their performance in ways which are significant to their various stakeholders. The measuring process itself is vital element of the health and safety management system, so its operation also to be monitored.

2. Terminology

- a) Accident An unintended occurrence arising out of and in the course of employment of a person resulting in injury (as per IS-3786:1983)
- b) Accident An Unplanned/undesired event giving rise to death, ill health, injury, damage or other losses to personnel or property. (as per IS 18001:2007)
- Incident Event that gives rise to an accident or has the potential to lead to an accident. (as per IS 18001:2007)
- Near Miss

 An incident where no ill health, injury, damage or other loss occurs is referred as near miss. (as per IS 18001:2007)

- e) Safety state in which the risk of harm to person or damage to property is limited to a tolerable level. (as per IS 18001:2007)
- f) Injury It is physical characteristics of the injured person or the location of the injured person's body part (s)
- g) Disabling Injury An Injury causing disablement of the injured person, extending beyond the day of shift on which the accident occurred.
- h) **Unsafe Acts -** It is a set of actions deviated from commonly accepted safe procedures of work.
- i) Unsafe Conditions They are mechanical or physical conditions of work, related to the agency which leads to the occurrence of accident.
- j) Hazards They are potential conditions to create dangers.
- bangerous occurrence:- accident may result in body injury or not or property damage
- Death Fatality resulting from an accident. (as per IS-3786:1983)
- m) Disabling Injury (Lost Time Injury) An injury causing disablement extending beyond the day of shift on which the accident occurred. (as per IS-3786:1983)
- n) **Non-disabling Injury** An injury which requires medical treatment only, without causing any disablement whether of temporary or permanent nature. (as per IS-3786:1983)

- o) Reportable Disabling Injury (Reportable Lost Time Injury) - An injury causing death or disablement to an extent as prescribed by the relevant statute(as per IS-3786:1983)
- p) Partial Disablement This is of two types: disablement of a temporary nature which reduces the earning capacity of an employed person in any employment in which he was engaged at the time of the accident resulting in the disablement; and disablement of a permanent nature, which reduces his earning capacity in every employment which he was capable of undertaking at the time. (as per IS-3786:1983)
- q) Total Disablement Disablement, whether of a temporary or permanent nature, which incapacitates a workman for all work which he was capable of performing at the time of the accident resulting in such disablement, provided that permanent total disablement shall be deemed to result from every type of injury specified in Part A of Appendix A(In IS 3786:1983) or from any combination of injuries specified in Part B of Appendix A(In IS 3786:1983) where the aggregate percentage of the loss of earning capacity, as specified in that part against those injuries, amounts to one hundred percent(as per IS-3786:1983)

r) CALCULATION OF MAN-HOURS WORKED

- s) Man-hours worked shall be calculated from the pay roll or time clock recorded including overtime. When this is not feasible, the same shall be estimated by multiplying the total man-days worked for the period covered by the number of hours worked per day. The total number of man-days for a period is the sum of the number of men at work on each day of the period. If the daily hours vary from department to department separate estimates shall be made for each department and the result added together. When actual man-hours are not used, the basis on which the estimates are made shall be indicated. (as per IS-3786:1983)
 - 3. Computation Of Frequency, Severity And Incidence Rates
 - a) Frequency Rate The frequency rate shall be calculated both for lost time injury and reportable lost time injury as follows: (as per IS - 3786:1983)

- F.R. = (Number of reportable lost time injury x 1000000) / Man-hours worked.
- b) Severity Rate The severity rate shall be calculated from man- days lost both of lost time injury and reportable lost time injury as follows: (as per IS-3786:1983)
 - S.R. = (Man-days lost due reportable lost time injury x 1000000)/ Man-hours worked.
- c) Incidence Rates- General incidence rate is the ratio of the number of injuries to the number of persons during the period under review. It is expressed as the number of injuries per 1000 persons employed. (as per IS-3786:1983)

Lost Time Injury incidence rate = (No of Lost Time Injuries x1000) / Average Number of Person Employed

4. Statistical Period

Rates for any period, that is month, quarter or year shall include injuries which occurred during the period, together with any injuries which occurred in the previous 12 months and which have not already been included in earlier calculations. (as per IS-3786:1983)

- 5. Calculation of man-days lost. (as per IS-3786:1983)
 - Man-days lost due to TTD or TPD.
 - Man-days lost according to Scheduled Charges for death and permanent disabilities as given Appendix A (In IS 3786:1983)
 - In case of multiple injuries, the sum of the Schedule Charges should not exceed 6,000 man-days.
 - If Days lost due to injury in previous periods, then loss of time to be included in the period under purview
 - If any injury is treated as a lost time injury in one statistical period and subsequently turns out to be a permanent disability; the man-days charged to the injury shall be subtracted from the schedule charges for the injury when permanent disability becomes known.

- In other cases the day on which the injury occurred or the day the injured person returned to work are not to be included as man-days lost; but all intervening calendar days (including Sundays or days off or days of plant shut down) are to be included
- If after resumption of work, the person injured is again disabled for any period arising out of the injury which caused his earlier disablement, the period of such subsequent disablement is also to be included in the man-days lost.
- ➤ In the case of intermittent loss of time, each period should be included in the severity rate for the period in which the time is lost

6. LAG INDICATOR AND LEAD INDICATORS.

Safety performance can be deliberate in a number of ways, frequently through a combination of lag (output) and lead (input) indicators.

Lag indicators

Measure outcomes after an incident and is effectively a measure of past consequences.

Examples include:

- Injury frequency and severity
- Recordable injuries
- Lost workdays
- Worker's compensation costs

Best practices for using leading indicators

- Improved documentation
- Consistent communication
- Clear policies and procedures
- Regular training and recertification
- Efficient job safety analysis

Lead indicators

Measure activities to prevent or reduce the severity of an incident in the present or future. Some generalized categories of common safety efforts that can be used to derive leading measures of safety performance.

- · Safety System Audits
- Accident Investigations
- Near Miss Responses
- Safety Communications
- Safety Committee Activities
- JSA Completions
- · Safety Climate / Perception Surveys
- Observed Safe Behaviors

Best practices for using leading indicators

- Allow to observe miniature improvements in performance.
- Measure the optimistic: what people are doing versus failing to do.
- 3. Facilitate frequent feedback to all stakeholders
- 4. Be credible to performers
- 5. Be analytical
- Increase constructive problem solving around safety
- Make it clear what needs to be done to get better

7. INTERNATIONAL STANDARD (OSHA)

OSHA has established explicit mathematic calculations that facilitate any industry to report their recordable incident rates, lost time rates, and severity rates, so that they are comparable across any industry or organization. The standard base rate for the calculations is based on a rate of 2, 00,000 labor hours. This number (2, 00,000) equates to 100 employees, who work 40 hours per week, and who work 50 weeks per year. Using this standardized base rate, any organization can calculate their rate(s) and get a percentage per 100 employees.

OSHA Recordable Incident Rate

The OSHA Recordable Incident Rate (or Incident Rate) is calculated by multiplying the number of recordable cases by 200,000, and then dividing that number by the number of labor hours at the company.

Number of OSHA Recordable Cases X 200,000 IR = -----

Number of Employee labor hours worked

Lost Time Case Rate (LTC)

The Lost Time Case Rate is a similar calculation, only it uses the number of cases that contained lost work days. The calculation is made by multiplying the number of incidents that were lost time cases by 200,000 and then dividing that by the employee labor hours at the company.

Number of Lost Time Cases x 200,000

LTC Rate = -----
Number of Employee Labor Hours Worked

DART Rate (Days Away/Restricted or Job Transfer Rate)

The DART rate is relatively new to industry. This rate is calculated by adding up the number of incidents that had one or more Lost Days, one or more Restricted Days or that resulted in an employee transferring to a different job within the company, and multiplying that number by 200,000, then dividing that number by the number of employee labor hours at the company.

Total Number of DART incidents x 200,000

DART Rate = -----
Number of Employee Labor Hours Worked

Severity Rate (SR)

The severity rate is a calculation that gives a company an average of the number of lost days per recordable incident. Please note, that very few companies use the severity rate as a calculation, as it only provides an average. The calculation is made by dividing the total number of lost workdays by the total number of recordable incidents.

Total number lost workdays

SR = -----
Total number of recordable incidents

8. CONCLUSION

The measurement of statistic related to safety performance of industries should propose information to allow decisions to be made about what remedial action is necessary and where and when it is necessary. The derived measures need to be reviewed often to ensure that they remain appropriate, functional and cost-effective. There should not be frequent changes of measures because this can lead to uncertainty. This might best be done using a team approach involving managers, supervisors, employees and safety professional.

Performance measurement is a vital part of achieving effectiveness in continuous improvements. Performance measurements only are, however, not sufficient, but they should be incorporated in some kind of a proper analysis on numerous levels to identify needs for enhancement.

9. REFERENCES

- 1. IS 3786: 1983 Method for Computation of Frequency and Severity Rates for Industrial Injuries and Classification of Industrial Accident. (First Revision)
- 2. IS 18001:2007 Occupational Health and Safety Management System.
- 3. Managing for health and safety HSG 65
- 4. Health and safety climate survey tool Information pack HSE Books

Fire and Gas Detection System

Abstract:

This article provides the fire & gas detection philosophy to be applied at surface facilities. It also provides the approach for detecting fires and combustible gas releases, alerting personnel, and the means of initiating executive actions to reduce the consequences of such events. The prime objective of this philosophy is to ensure that the design and installation of the Fire and Gas Detection System offers the best possible protection to personnel, the environment and assets by early detection of fire & gas scenarios and also meet the statutory requirements. In doing so, it takes due cognizance of all relevant aspects including design, installation, human factors, emergency response and operational needs in respect to the predicted hazards.

This also describes the rationale for the proper selection of the various fire & gas detectors, mitigation schemes such as voting, and means of initiating executive actions. It will serve as a foundation for the Fire &Gas Detector Location Plans and Fire & Gas Cause and Effect Matrix.

1. Introduction

The prime objective of F&G philosophy is to ensure that the design and installation of the Fire and Gas Detection System offers the best possible protection to personnel, the environment and assets by early detection of fire & gas scenarios and also meet the statutory requirements. In doing so, it takes due cognizance of all relevant aspects including design, installation, human factors, emergency response and operational needs in respect to the predicted hazards. Fire and Gas System (FGS) equipment and layouts shall require approval by the competent authority. The FGS shall be an integral part of the Safeguarding, Safety System (SSS), as defined within the

Automation Master Plan. The SSS shall be composed

- The Process Shutdown System
- The Emergency Shutdown System
- The Fire & Gas System
- The High Integrity Pressure Protection System

Fire and gas detection control and alarm systems are intended to provide early detection of fire and release of combustible gas to alert personnel via the FGS. Where executive actions are defined in the FGS, Cause & Effect logic, and hard-wired outputs shall be connected to the ESD for process shutdown initiation. Automatic process shutdown shall not be initiated by the FGS.

The fire & Gas system control logic function shall, as a minimum, include the following interfaces:

- ESD
- HVAC
- PA/GA
- Fire Protection Systems (firewater pumps, deluge valves, etc.)
- Plant Fire Station
- · Operations base Incident Response Centre
- Human Machine Interface (HMI)

The FGS controller, with dedicated FGS HMI and fire protection system executive action capability, shall be located in the Central Control Room (CCR), and a second FGS controller shall be located in an alternative location preferably in a Building. The FGS' controllers shall verify the condition of end devices by supervisory monitoring, receive all of the signals from end devices, perform logic, and communicate with other systems such as the ESD (emergency shutdown) system and PAGA (public address/general alarm). Fire and gas data shall be displayed on the HMI (Human Machine Interface) screens and provide status of field devices and each local panel.

2. Objective

These goals shall be:to help understand the design concepts of Fire and Gas System

- Reducing the risks to persons arid the environment to a level that is As Low As Reasonable Practicable (ALARP)
- Continuously monitoring all areas of the installation where either a fire hazard may exist or an accumulation of flammable gases may occur.
- Meeting the performance standards developed for the Fire and Gas Detection System including detection of specified fire, and gas cloud dimensions and respective response times.
- Alerting personnel at the CCR to the presence, location, and nature of the fire or gas emergency.
- Alerting personnel in the plant to the hazard via the PA system or thru any suitable audio visual in noisy area.
- Implementing executive control actions and/or shutdown events.
- Activating mitigation systems.
- Complying with all applicable Indian regulations.

In addition, the design shall minimize the frequency of spurious alarms and executive actions

i. Specific goals

(A) Detection

The FGS shall be designed to:

i. Specific goals

(A) Detection

The FGS shall be designed to:

- Detect fires at their incipient stage that the risks to personnel and damage to equipment are minimized,
- Detect accumulations of flammable gases as quickly as possible through optimum placement and selection of detectors.

(B) Alert Personnel

The FGS shall be designed to:

- Alert the operator by means of audible and visual devices upon detection of any detected fireand/or hazardous flammable gases along with its approximate location and extent so that appropriate and timely action can be taken to minimize the threat to life, the installation, orthe environment.
- Alert all personnel throughout the respective installations of hazardous events so that theyare able to take appropriate and timely action.
- Provide a means by which personnel throughout the installation can quickly alert the CCR ofany hazardous event and its approximate location.

Note: In case of noisy area additional flashing type lights shall be provided for alerting.

(C) Initiate Executive Actions

The FGS shall be designed to initiate executive actions to:

- Minimize the consequences of an event.
- Minimize the inventory of flammable materials that may be released following a loss of containment via emergency shutdown, sectionalisation and/or depressurization by sending a hard-wired digital signal to the ESD System to carry out ESD Cause & Effect responses.
- Minimize potential sources of ignition to which an accumulation of a flammable gas is exposed.
- Activate fire protection systems, where applicable.
- Minimize the spread of any smoke that may impair escape routes, muster areas, accommodations, and evacuation facilities.

ii. F & G Detection Design Criteria

To achieve a high level of safety and protection the facility shall be segregated into fire areas and zones based on physical separation or mitigation measures. The definition of a fire area /zone will be an area sufficiently segregated by distance from other areas and/or a zone protected by its own dedicated fire protection system(s). The type of fire & gas detection installed in each fire area/zone is determined by a qualitative evaluation of the type and magnitude of the risks within the area/zone. This evaluation considers the design, construction, arrangement, operation, materials, pressures, temperatures, and physical arrangement of equipment within each area. The basic risks are combustible gas release and fire. From this evaluation the facility is divided into characteristic The following sections describe the representative areas of a facility and fire & gas detection provided. Note that these representative areas will contain multiple fire zones, e.g. each process area may be a separate or multiple fire zones but have the same fire & gas detection scheme.

The layout of the fire and gas detectors shall be based on the characteristics of the detectors, the physical arrangement, and the voting scheme identified in the following sections. Due consideration shall be provided for detector accessibility to permit inspection, maintenance, and calibration.

With the exception of Buildings and packages that shall have addressable type detectors connected to discreet NFPA 72 control panels reporting back to the central fire and gas system, all other fire and gas detectors in the field shall be of a conventionally wired type.

Each fire area, zone, shall have a respective Fire and Gas Cause Effect drawing associated with it to provide the required logic associated with each area in respect of cause (input) and effect (output).

A. Process Areas

The process area shall be continuously manned by security personnel and provided with CCTV for security purposes. The area shall be provided with adequately designed Manual Call Points near hazardous areas along the Zone perimeter or egress paths so that personnel are able to initiate the Fire Alarm while retreating from thearea. Additional manual call points shall be provided so that the travel distance to the nearest Call point will not be in excess of 61 m (200 ft) measured horizontally. As per OISD-189, Hydrocarbon Detectors shall be provided in all Zone 1 and Zone 2 Hazardous Areas.

Location and Quantity of the HC gas detectors shall be in such a way that a potential leak is detected by more than one detector. Where well-pads are provided with the separation facility the F&G Detection in the Production line downstream of the separator shall aim at Fire Detection.

The process area receives production fluids and contains equipment for chemical or gas, oil, and water separation such as pressure vessels, pumps, shell and tube heat exchangers, and air coolers.

The means for fire & gas detection in the process areas are provided by optical infra red flame detection, fusible plugs, combustible gas detection of the open path and point types, manual fire alarm stations, and deluge release push buttons.

It shall be ensured that selection of Fire and Gas detection system are consistent with the properties of the hazardous material being handled and the result of the dispersion / consequence modelling studies.

Fire Detection

Automatic fire detection shall be achieved by optical flame detection and temperature sensing elements in pneumatic loop systems (fusible plugs). To a lesser extent, fire detection can be achieved by manual fire alarm stations strategically located throughout the process areas and by operator surveillance using the closed circuit television system. However, reliance shall be placed on automatic detection. The provision of two categories of automatic fire detection provides a reliable and robust means for detecting fires.

Modern optical infra-red flame detectors (Triple IR) have quick response time and are immune to nuisance sources such as sunlight and welding. The placement of optical infra-red flame detectorsshall be arranged around each fire zone with sufficient overlap to allow 2 out of n (n = 3 or more) voting i.e., the activation of two optical flame detectors will result in a confirmed fire..

The fusible plugs have a slower reaction time compared to optical infra red flame detectors but are simple systems: being mechanical. The fusible plugs shall be considered as a secondary backup to the optical flame detectors. Where deluge protection is provided, Project specific decision shall be made on whether to use the fusible plug system pneumatically connected to the deluge valve for instantaneous activation of the deluge system or to provide a detection line with Quartzoid Bulb Detectors charged with water under pressure

Where deluge systems are provided manual push buttons will be located along the fire area/zone perimeter or egress paths so that personnel are able to initiate deluge while retreating from the area. Manual alarm call points shall as a minimum be located

adjacent to every other fire water hydrant located along road access ways.

Gas Detection

Combustible gas detection shall be achieved by open path (line of sight) and point gas detectors.

Open path detectors consist of a transmitter and receiver that can provide detection along a linear path up to a distance of 200 meters. Since the open path detectors are essentially one-dimensional, adequate coverage is achieved by placing them around the perimeter of an area or in a manner which allows sufficient overlap for a gas release to cross the path of at least one set of detectors. Line of Sight gas detection shall vote on a 2 out of N principle where (N is equal to 3 or more). Point type combustible gas detectors shall be the infrared, type located where combustible gas leaks associated with equipment failure may occur. These areas may include piping flanges, vessel nozzles, pumps, etc. Point type combustible gas detectors shall be arranged with sufficient quantity and overlap to provide voting groups (2out of N, where N is equal to 3 or more) for confirmed gas detection. As a result of the application of both point and line of sight type gas detection in process areas the principle of cross voting between detector types shall be used. In this case the vote shall be 2 out of N where N is equal to or more than 3. Gas detectors shall be spaced such that a 5 meter diameter gas cloud can be readily detected.

Gas detections located in exposed external areas shall:

- Suitable for the environment to that which they are exposed, and
- Be supplied with weatherproof caps.

B. Chemical / Hydrocarbon Storage Tank Areas

The chemical / hydrocarbon storage tank areas contain products at atmospheric pressure. These areas are provided with dikes to contain releases and offer separation from process areas such as pump stations. Products include stabilized crude, settling tank, off-spec oil tank and diesel fuel etc. The primary hazard associated with these areas is the large inventories involved. Ignition is unlikely, but without mitigation, there is the potential for a long duration event that may escalate to other areas.

Fire detection in the storage tank areas can be achieved by manual fire alarm stations strategically located throughout the area and by operator surveillance using the closed circuit television system.

Fixed foam systems for storage tank fires will be manually activated from the CCR, locally at the deluge valve, or by deluge release push buttons. Consideration shall be given for flame detection in the Tank area and Alarm at the Central Control Room on 1 out of N voting. Deluge activation for foam application shall be done manually from Central Control Room.

C. Utility Areas

Utility Areas typically consist of water treatment, power generation and associated facilities that have a relative hazard that is less than the hydrocarbon / chemical processing area. However, some areas still contain hydrocarbons in the form of fuel supply for power or stream generation, or residual quantities and flammable chemical injection liquids. The inventories and pressures are generally less than those encountered in the process area. Fire and combustible gas detection for power or steam generation equipment is equivalent to that provided for packaged equipment. Depending on the final arrangement of the equipment, open path gas detectors may be provided. In addition fire detection can be achieved by manual fire alarm stations strategically located throughout the utility areas and by operator surveillance using the closed circuit television system. Fire & Gas detection shall also be considered for the Waste Storage Area.

D. Buildings

Buildings located in the process or utility areas shall have a level of addressable fire & gas detection provided that is dependent on the location of the building with respect to hydrocarbonand chemical hazards and the contents/occupancy of the building (office, switchgear, battery room). Manual pull fire alarm stations shall be provided as a minimum,

internally at the exit of each exterior door for personnel to initiate an alarm while evacuating.

Buildings located in areas susceptible to hydrocarbon / chemicalrelease (e.g. motor control centers in the process or utility areas) shall have fire & gas detection that is able to detect hazardous conditions originating outside the building that have the potential to affect personnel and equipment inside the building , and hazardous conditions that originate inside the building. In order to detect hazardous conditions originating outside the building the HVAC air inlets shall be provided with one of the following:

 Duct-mounted point type gas detectors shall be set to activate at 10 and 20% LEL. Gasdetectors shall vote 2 out of 3 (2003). An aspiration unit provided within the building and housed with two optical smoke detectors and two point gas detectors.

The selected method of HVAC intake detection shall be provided for each HVAC air inlet when multiple air inlets are provided. Where a building is located such that it is deemed necessary to have air locks then each air lock shall be provided with a voted group of point type combustible gas detectors and a voted group of smoke detectors.

Buildings/packages housing diesel generators especially the Emergency and Fire Pumps, shall have two gas detectors located to monitor for gas ingress through each engines combustion air inlet where voting is 2 out of N and N=2. Confirmed high level gas detection at 20% if the engine is not running, shall inhibit start of the engine, however if the engine is already running no action will be taken and unit will trip on over speed.

E. Protection of building interior

Fire detection inside the buildings shall be achieved by a combination of photoelectric type smoke detectors, and air sampling smoke detection depending on the characteristics of the room. Manufacturer's listed spacing and NFPA 72 requirements shall be followed in deciding the Quantity and location of photoelectric smoke detectors and Heat detectors. The voting arrangement for the air sampling smoke detector shall be as proposed and agreed by COMPANY.

F. Electrical Switchgear and Instrument Rooms

Rooms containing electrical switchgear, marshalling cabinets, instrument control panels, or control rooms have a low fire load but contain safety critical equipment. Rooms such as this shall employ voted point photoelectric smoke detectors, an air sampling smoke detection system and fixed temperature point heat detectors. Where a raised floor is provided for routing cables, air sampling smoke detection shall be provided in the sub floor. An air sampling smoke detection system is capable of rapid detection and is even capable of detecting the products of combustion from smoldering equipment before an open flame develops. Such detection is beneficial for electrical and electronic equipment because rapid intervention can' limit damage. If such rooms are provided with clean agent fire extinguishing systems, voted heat detection shall be considered.

G. Workshops and Warehouses

Rooms such as workshops and warehouses have a moderate fire load and store flammable or combustible liquids such as paint, solvents, and lubricants. Since the ambient environment may be dusty and dirty smoke detection is not provided: automatic fire detection shall be provided by the sprinkler system and manual fire alarm call points.

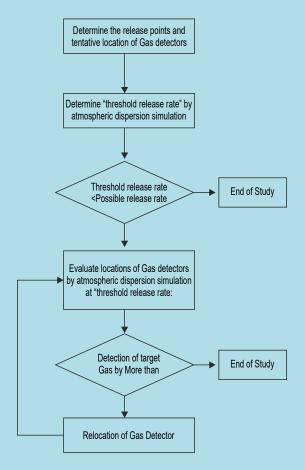
H. Offices

Rooms such as offices and class rooms may contain light storage of cellulosic or plastic materials (no flammable or combustible liquids) will be provided with photoelectric smoke detectors and most likely be provided with automatic sprinkler systems.

iii. Fire and Gas Optimisation

(A) Gas Detectors

Optimization of gas detectors shall be carried out according to following



Manufacturer Recommendation shall be followed for Triple IR Flame Detectors. Quantity and location of the IR Flame Detectors shall be based on the Cone of Vision of the Detector. Placement shall be done in such a way that a potential fire is detected by atleast two detectors.

Necessary overlap shall be done to achieve the above and the coverage shall be demonstrated through a 3D / 2D modeling.

Placement of Fusible Plugs shall be done through a Qualitative Evaluation and shall be approved by COMPANY.

(B) H2S Detectors

Toxic gas detectors shall be located In areas that potentially contain hydrogen sulphide (H2S), and a source of accidental release has been identified that can generate a significant concentration of H2S.Electrochemical point type toxic gas detectors shall be of a type resistant to poisoning, respond to a level of accumulation, and be designed to alarm at two pre-set levels. The first alarm level will initiate a low level alarm set at 5 parts-per-million (ppm) and the second alarm level will initiate a high level alarm and relevant shutdowns at 10 pm.

(C) Flame Detectors

Flame detectors are typically used in open areas outdoors, but can also be used indoors. They are used to protect high risk areas such as oil rigs, fuel stores, petro-chemical plants, hangers etc. Hot objects (engines / exhausts / heaters) are potential false alarm sources, including the Sun. Following type of flame detectors are generally used.

- Ultra Violet detectors
- Single Channel IR detectors
- Combined UV and Single channel IR
- Dual Channel IR flame detectors
- Triple Channel IR flame detectors
- CCTV flame detection

iv. Design Process / Work Activities for Fire & Gas Detection System

The work activities for designing fire and gas detection system are divided into three steps which

(A) Inputs / Role of Different disciplines for Designing of Fire and Gas Systems:

These are further divided into:

- Inputs / Role of other disciplines (piping, Instrumentation, Process)
- Inputs from HSE

This input means the activities which are performed by different disciplines (Piping, Process and Instrumentation) and their output deliverables (information) are used as input for designing the F&G system.

After getting the inputs from all the disciplines and studying the unit area plot plan, we identify the hazardous area where the flammable / toxic gases and hydrocarbon materials are presents. Specific hazards like flammable gas, toxic gas or fire and explosion hazard are also identified with respect to the hazard assessment in each area.

Based on the above exercise different types of detectors are selected & Placed in respective area and their location is fixed as per the 'General and Specific criteria for selecting fire and gas detection system'. These different detectors are marked on the unit plot plan as per their requirement in each process area. This will give the Fire and Gas Layout drawings for each area and that are issued as a Design HSE deliverable. These drawings are then used by instrumentation for 3D modelling.

(B) Design Process / Work activities for F & G System:

The design process gives the idea regarding the work activities while designing the Fire and Gas Detection system and this is also further divided into two phase. The first phase includes study of design philosophy and specifications for F & G system design which contains the design objective, goals and performance criteria. The second phase is separated into fire detection design and gas detection design.

To identify the Hazard present in each area we also perform the consequence modelling using the software tool, also we prepare the hazardous area layouts which will give the idea regarding the material present in each process area showing the hazardous area extent. This all information is used for selecting the proper detector in the respective process area.

(C) Output Deliverables:

The above work activities are part of design HSE discipline, after completion of these activities the

output deliverables are issued for designing of Fire and Gas detection system. These output deliverables are shown in the following Figure. The Fire and gas drawings are prepared with respect to the detectors location in each area and shall be divided into uniquely numbered fire zones which are bounded by Fire or Blast rated divisions, walls, roadways, pipe racks and / or determined by the extent of fixed fire protection system. Based on this the separate fire and gas zone layouts are also prepared for each area.

The fire and gas control system functional logic, together with alarm and shutdown requirements, for the individual fire zones within each unit will be identified on 'Fire and Gas detection Cause and Effect charts' which is also one deliverable of design HSE. Figure below shows the different Design HSE deliverables for the Fire and Gas Detection Design system.

v. General Criteria for Selecting Fire and Gas Detection and Alarm Devices

General selection criteria for each type should be as follows:

- Smoke detectors for enclosed areas where domestic type fires (Class A), flaming liquid fires (Class B) and electrical fires (Class C) are expected and where quick detection of such fires are required either due to the area's unmanned nature or for providing early warning to enable the personnel to protect the plant, processes and equipments.
- Combustible gas detectors and toxic gas detectors for areas where leakage of such gases is possible and can escalate to cause harm to personnel and /or affect plant, process and equipments.
- Wherever gas release leads to the presence of toxic gas and/or flammable gas in the same area, only toxic gas detectors need to be provided as toxic gas detection notification takes precedence.
- Flammable gas beam detectors to be used in open plant process area to detect flammable gas presence over those locations. These should be used in combination with point type flammable gas detectors.
- Hydrogen gas detectors where hydrogen gas release and accumulation is possible e.g., battery rooms. Flame detectors are provided in the open plant areas where hydrocarbon / chemicalliquid pool fire risk is predominant.

 Manual Alarm Call point (MAC) should be provided along all escape routes at every 50 m interval and at open plant areas where maximum travel distance to nearest MAC exceeds 30 m. Break Glass type MAC's will be provided at every building exit (preferably inside).

vi. Location and Spacing of Fire & Gas Detectors

For all detectors and alarm devices, manufacturer's recommendations on location and spacing will override the guidelines mentioned below.

1. Smoke Detection (Ionization and Optical)

These are to be located at ceiling level of enclosures and the false floors/raised floors/vaults with distance between two detectors not exceeding 9m. Maximum distance from walls/beams to a smoke detector is to be 5m. Generally, one detector would be used for every 50m^2 area coverage inside the cable vaults/trenches and false floors and one detector for every 25 m^2 for other area coverage in enclosed spaces.

2. Thermal Detectors (ROR)

They are to be located at ceiling level of enclosures and building at intervals not exceeding 9m. Maximum distance from walls/beams to a detector to be 5m and minimum distance to be not less than 500 mm. Generally one detector would be required for every 50 $\rm m^2$ area coverage.

3. Flame Detection

They to be located in the vicinity of liquid chemical/hydrocarbon fire sources with reasonably clear line of vision to the hazard and to be positioned so as not to expose the detection element to direct sunlight. Maximum distance between the area/equipment being monitored and the detector to be 15m.

4. Fusible Plugs or Frangible Bulb

 For horizontal vessels, fusible plugs where installed, are to be spaced at 2.5 m intervals and should be minimum 600 mm from the equipment surface. For vessels up to and including 4.6m diameter, two rows of fusible plugs are to be provided near the top (one on either side). For vessels exceeding 4.6 m in diameter additional two rows (one on either side) to be provided near the bottom. For Vertical vessels (more than 1 m diameter), a single ring at not more than 2.5 m from the grade to be provided. Minimum clearance between the vessel surface and plugs should be 600 mm. Plugs to be spaced at 2.5 m intervals. If the equipment is provided with a deluge water spray system, the fusible plug/ frangible bulb detection system activates the deluge system.

5. Toxic Gas (H₂S) Detection

 H_2S is heavier than air, hence all detectors should be located at between 500mm to 1m from the grade or the sump floor or a working platform. In open plant areas, the detectors should be located in a gridded manner at intervals not exceeding 30m along the length and width of the plant. Minimum three numbers near air intake of HVAC, and Minimum two numbers in the HVAC air intake ducts where such ducting exists.

6. Point Type Flammable Gas Detection

If a lighter than air flammable gas leak is expected, detector should be located where gas accumulation is expected (e.g., under the roof) else minimum 1m above the grade or near expected leak source. If a heavier than air flammable gas leak is expected, detector should be located where gas accumulation is expected (e.g., near gas compressor base).

7. H₂ gas detectors

To be located in battery rooms where lead acid batteries are handled or stored. To be installed at ceiling level of each room/each floor. Minimum two numbers to be installed in the air flow path to exhaust fans, at least 2m from the fans.

vii. Detection and Alarm system

All loops and detectors (except MAC) shall be arranged such that any arising hazard can be easily located. The fire and gas cause and effect charts shall detail the alarm and executive action taken on fire. The fire and gas detection system works on the following loop respectively:

Firstly the signal is initiated by detection devices (Fire & Gas detectors). This signal is transmitted by means of transmission devices (cable) to the fire and gas panel / DCS (see Figure below).

All output from the fire and gas panel shall be open contact with line monitoring. On detection of a fire or gas release, output shall be provided for:

- The notification devices like Audio alarms (Hooter/Buzzer, Siren, and Bell) and Visual alarms (Beacon, LED in panel) in control room and plant wide alarms to alert personnel. Also manual alarm callpoints shall be strategically located throughout the unit area to provide alarm points in emergency situations
- Automatic control HVAC fans and dampers to minimize risk to personnel
- Initiate appropriate shutdown signals to ESD systems
- Initiate firewater pump start and actuation of respective fire protection systems on confirmed fire detection.

1. Set point - Fire Detectors

Fire detector set point is defined as the minimum level/concentration of combustion products at detection device, at which the detector will initiate an alarm signal.

2. Set Point - Gas Detectors

Gas detector set point is defined as the minimum level/concentration of gas or vapour (flammable/toxic) at detection device, at which the detector will initiate an alarm signal. e.g.: 20% LFL (Flammable gas Detector), 10 ppm of H_2S Gas (Toxic gas Detector)

All the Layout drawings are used as an input for 3D modelling of Fire and Gas detection system. In these drawing the tentative location of detector is marked within the unit areas but the exact placing of these detectors shall be done as per the 'Location and Spacing Criteria of Fire and Gas detectors'. This modelling and tagging of all the detector is done by instrument discipline and after that design HSE team has to review this modelling with respect to the different points like detectors location, their placing, any obstruction coming in their path, sufficient no. of detectors are there to detect the hazard, what type of executive actions are initiating by them, also check whether manual alarm callpoints are provided along the escape route or not, etc. The 3D model for various detector locations which gives the idea regarding the placing of fire and gas detectors.

6. Conclusion

A fire and/or gas (flammable, toxic etc.) release hazard is an inherent part of installation, and should be minimised to the lowest level practicable for maximum safeguarding of personnel, capital investment and the environment, in the case of such an event occurring.

Should the afore-mentioned event occur, the fire & gas system assists in bringing the plant and operating personnel to a safe condition by detecting fire and/or gas leaks, initiating the appropriate active fire protection system, the appropriate process shutdown, and depressurising and alerting the plant personnel.

The design and engineering of fire & gas detection system should be a structured activity. Some of the criteria for selection and design of the system are provided in the following sections so that an optimum, cost effective, and easy to operate and maintain installation is provided to the plant operator.

7. References

- IS 2189: Selection, Installation and Maintenance of Automatic Fire Detection and Alarm System Code of Practice.
- IS 2175: Specification for heat sensitive fire detectors for use in automatic fire alarm system.
- iii) IS 11360: Specification for smoke detectors for use in automatic electrical fire alarm system.
- iv) API RP 14G Recommended Practice for Fire Prevention and Control on Open Type Offshore Production Platforms (Equivalent to ISO 13702).
- by BS 5839-1, Fire detection and fire alarm systems for buildings - Code of practice for system design, installation, commissioning, and maintenance.

Acknowledgement

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- Shri Aditya Lama, Assistant Director (Safety), IDS, Jawahrlal Nehru Port, DGFASLI



Government of India Ministry of Labour and Employment



DGFASLI SAFETY CARD

ELECTRICAL WORK

Personal Protective Equipment (PPE)

Electricity is the basic need for carrying out any type of industrial activities. Every year, a large number or workers get injured, burn or die due to electric shock or electrocution.

When engineering and administrative controls are not adequate to minimize these risks to an acceptable level, the Personal Protective Equipment (PPE) is used as the last line in protecting workers. PPE does not eliminate the hazard at source but it works as a barrier between the person and the hazard.

To protect our body from electric shock and other associated hazards, following PPR's should be used.

Head Protection

Helmets reduce the force of impact of falling objects and also reduce the danger of electric shock or burn due to contact with live electrical conductors. There are specified helmets for different electrical work / voltage level.

Remember! Only the recommended safety helmets should be used while working with different voltage levels. Regular inspection of helmets should be carried out to maintain them in a safe & reliable condition. Replace the helmets immediately if found with dents, cracks, holes or deterioration.

Eye and Face Protection

Eye and face protections is required whenever there is danger of injury to the eyes or face from electric arcs or flashes or flying objects resulting form electrical spark or explosion. Wherever there is a possibility or electrical arcs or explosion, workers must wear non-conductive face shield and safety glasses.

Remember! Safety glasses should always be worn underneath a face shield. A face shield alone does

not provide enough protection.

Hand & Arm Protection

To protect hands and arms against electric shocks or arc flashes or burn due to contact with live wires or live electrical conductors, workers must wear 'Insulated Safety Gloves'.

Remember! Only the recommended gloves as per the specific voltage levels should be used. Never exceed the voltage level. Gloves must be tested before first use and every six months thereafter or whenever required.

Foot Protection

To protect foot against exposure to electrical hazards, workers must wear. Electrical Safety Shoes with resistant soles and heels. The Safety Shoes must be able to withstand the voltage level.

Remember! Damaged, untested and / or worn out Electrical Safety Shoes must be replaced immediately.

Body Protection

Wherever there is possibility of exposure to an electric arc flash above the threshold level, workers must wear Flame Resistance Clothing (FR clothing).

Regular inspection of FR Clothing should be carried out and maintained it in a safe & reliable condition.

Fall Protection

To protect the worker against falling from height due to electric shock, recommended safety harness, belt, lanyards etc. should always be used in the prescribed manner.

In addition to PPE electrical workers should use Insulated Protective Equipment (IPE), such as line hoses, rubber hoods, rubber blankets and insulated live-line tools such as hot sticks, switch sticks or shotgun sticks, earthing rod etc., for protection.

Always inspect your PPE before each use to make sure they are in good condition and will work properly.

Remember! PPE is the last line fo defence for protecting workers.

The Diploma Certificate Award Function for the 38th batch students of RLI, Chennai



Left to Ridht: Dr. Jayaraj, OHS Consultant, Chennai, Shri. K. Jagathesan, Director of ISH, Government of Tamil Nadu, Dr.R.K. Elangovan, Director General, DGFASLI, Mumbai, Shri G.P. Nijalingappa, Director(Safety), RLI, Chennai.

The Regional Labour Institute Chennai, under DGFASLI organized the Diploma Certificate Awarding Function for the 38th batch students of RLI, Chennai on 21st February, 2022 in the webinar hall of Regional Labour Institute, Chennai. The award function was inaugurated by Dr. R.K. Elangovan, Director General, DGFASLI, Mumbai. Dr R. Jayaraj, OHS Consultant, Chennai addressed the DIS students, Shri K.Jagathesan, Director-ISH(FAC), Government of Tamilnadu, delivered the Key Note address and Shri G. P. Nijalingappa, Director-in-Charge of Regional Labour Institute, Chennai delivered the welcome address and vote of thanks was proposed by Shri N. Balamurugan, leader of the 38th Batch of DIS Students.

Dr. R. K. Elangovan, Director General, DGFASLI, Mumbai in his inaugural address highlighted the importance of safety officers in industries and also responsibilities of safety officers under coming OSH&WC Code-2020 and its relevance to employees and employers of industries, ports and construction sector and their responsibilities towards ensuring Safety, Health and safe working conditions for the workforce engaged in the above said sectors.

Shri K.Jagathesan, Director-ISH (FAC), Government of Tamil Nadu, in his Key Note address emphasized on the safety aspects in the areas of construction sector.

Dr. G. Jayaraj, OHS Consultant in his Special Address expressed, the importance of health issues arising in industrial activities and ways and means to mitigating such health issues in order to promote health and safety in industries.

One-day Online National Seminar on Occupational Health and Diseases

An online National seminar on "Occupational Health and Diseases" was organized on 7th March, 2022 from 10.00 AM to 05.00 PM. with the objective:

- To exchange experience and ideas regarding new approaches, methods & strategies towards prevention of occupational diseases.
- To promote occupational health practices in the workplace
- To share best practices on occupational health services at workplace
- To promote closer interaction among OSH stakeholders and government functionaries.

This seminar is primarily designed for factory medical officers, certifying surgeons, occupational health practitioners, occupational health nurses, general medical practitioners, occupational health specialists, academicians, under graduate and post graduate medical students, industrial hygienists. The topics covered were:

- Heat Stress and Its Management
- Basic Occupational Health Services (BOHS)
- Medical Management of Radiation Exposure at workplace
- Occupational Health Risk Reduction Strategies with Case Studies
- Occupational Health Surveillance and Biomonitoring
- Occupational Lung Diseases

The seminar was inaugurated by Dr. R. K. Elangovan, Director-General, DGFASLI, Mumbai. Technical sessions on different aspects of occupational health and diseases were discussed by eminent experts in the field of occupational health. The program was attended by a total of 560 delegates from more than 300 industries. The seminar was concluded with a vote of thanks to the Chair, all the delegates and esteemed faculty members.

The Presentation Ceremony for Vishwakarma Rashtriya Puraskar (VRP) & National Safety Awards (NSA) for the performance year 2018



Shri Bhupender Yadav, Hon'ble Minister of Labour & Employment and Environment, Forest & Climate Change, Govt. of India is presenting the Award to one of the winners. On the dias (L-R) Dr. Shashank Goel, Additional Secretary, MoLE, Shri Rameswar Teli, Hon'ble Minister of State for Labour and Employment and Petroleum and Natural Gas, Shri. Sunil Barthwal, Secretary, MoLE, Ms. Vibha Bhalla, Joint Secretary, MoLE, Dr. R K Elangovan, Director General, DGFASLI, MoLE, Mumbai.

The Awards Presentation Ceremony for Vishwakarma Rashtriya Puraskar (VRP) & National Safety Awards (NSA) was held on 8th March, 2022 from 03.00 PM to 06.00 PM at Vigyan Bhavan, New Delhi. Shri. Bhupender Yadav, Hon'ble Minister of Labour & Employment and Environment, Forest & Climate Change, Government of India in presence of Shri. Rameswar Teli, Hon'ble Minister of State for Labour an Employment and Petroleum and Natural Gas presented the Awards to the Winners and Runners Up of different schemes and categories. Shri. Sunil Barthwal, Secretary, Ministry of Labour & Employment delivered the keynote address.

The winners of the National Safety Awards were presented with a certificate of merit and a shield. The winners of the Vishwakarma Rashtriya Puraskar were presented with a cash award and certificate of merit. A total of 700 people attended the programme. There were 96 and 98 Awards under VRP and NSA respectively.

One-day National Seminar on Fire Safety in Factories, Construction and Dock Work.

A one-day National Seminar on Fire Safety in Factories, Construction and Dock Work was organized on 9th March in CLI, Mumbai with the objective:

- To exchange experience and ideas regarding new approaches, methods & strategies towards fire safety.
- Gap analysis and to find out measures for removing gaps with fire safety.
- To share best practices on fire safety and related issues.
- To promote closer interaction among OSH stakeholders and government functionaries.
- To discuses adequate preventive and control techniques.

The seminar was attended by 243 participants. The seminar was divided into five technical sessions. Eminent speakers from the Industries and academic Institutions shared the knowledge and experiences in the technical session. The seminar presented the participants the knowledge to prevent the fire hazards and also the control techinques in fire prevention. The seminar was ended with concluding address by Dr. R. K. Elangovan, Director-General, DGFASLI, Mumbai.

National conference on Occupational Safety and Health in Construction Industry.



Left To Right: Gp Capt R. Vijayakumar VSM (Rtd.) Executive Director, Madras Management Association, Chennai.Shri C.V. Subba Rao, President of MMA, Chennai,Dr. R.K. Elangovan, Director General, DGFASLI, Mumbai,Shri T. Padam Dugar, President, CREDAI, Chennai.Shri G.P. Nijalingappa, Director In-Charge of the Regional Labour Institute, Chennai.

The Regional Labour Institute, Chennai, under DGFASLI organised a National Conference on Occupational Safety and Health in Construction Industry" in collaboration with Confederation of Real Estate Developers' Associations of India (CREDAI) and Madras Management Association (MMA). The

conference was held at MMA in hybrid mode from 09.30 hrs to 16.00 hrs. on 11th March, 2022. The function was inaugurated by the Chief Guest Dr. R.K.Elangovan, Director General, DGFASLI, Mumbai. The other dignitaries present on this occasion were Gp Capt. R.Vijaya Kumar (Rtd.) VSM, Shri C.V. Subba Rao, Chola MS Risk, Shri T. Padam Dugar and Shri G.P. Nijalingappa, Director(Safety), RLI, Chennai. The conference was attended by 281 delegates.

The inaugural address delivered and released of Bulletin and Manual on Construction Safety by the Chief Guest Dr. R.K.Elangovan, Director General, DGFASLI, Mumbai. Other dignitaries emphasised and highlighted on the importance of Occupational Safety and Health in Construction Industries and application of knowledge at workplace to attain the highest productivity preserving human life and environment. Shri G.P. Nijalingappa, Director (Safety), RLI Chennai, delivered the vote of thanks.

The Diploma Certificate Award Function for the 39th batch students of RLI, Chennai.



L to R: Shri. Anbarasu Ramachandran, DGM of SRF Ltd(Retd.), Dr.R.K. Elangovan, Director General, DGFASLI, Mumbai, Shri G.P. Nijalingappa, Director(Safety), RLI, Chennai.

The Regional Labour Institute, Chennai, under DGFASLI organized the Diploma Certificate Awarding Function for the 39th batch students of RLI, Chennai on 11th March, 2022 in the Auditorium of Regional Labour Institute, Chennai.

The award function was inaugurated by Dr. R.K. Elangovan, Director General, DGFASLI, Mumbai, Shri Anbarasu Ramachandran, Retd. DGM (HR), SRF Limited, Chennai, delivered the Key Note address, Shri G. P. Nijalingappa, Director-in-Charge of Regional Labour Institute, Chennai delivered the welcome address and vote of thanks was proposed by Shri M.Srinivasan, leader of the 39th Batch of DIS Students.

Dr. R. K. Elangovan, Director General, DGFASLI, Mumbai in his inaugural address highlighted the importance of OSH&WC Code-2020 in relation to industries, ports, and construction sectors and also expressed the separate standards on fire safety are being framed. He advised that the Safety Professionals enhance their knowledge with the inputs received during their studies at RLI, Chennai in order to be more competent with forthcoming changes in OSH&WC Code -2020. Further he expressed that they should play a substantial role in coordination with employers so as to reduce the rate of accidents in industries, ports and construction sectors.

Shri Anbarasu Ramachandran, Retd. DGM (HR), SRF Limited, Chennai, in his Key Note address emphasized that safety being everyone's responsibility can only be achieved in the organization through integrated approach of all the stakeholders including HR and Management at different levels.

57th Virtual Conference of Chief Inspectors of Factories



Dr. R. K. Elangovan, Director General, DGFASLI, Mumbai inaugurating 57th all India Conference of Chief Inspectors of Factories held through online

The 57th all India Conference of Chief Inspectors of Factories was organized through online on 10th March 2022 from 10:00 hrs to 14:00 hrs at Directorate General of Factory Advice Service and Labour Institutes (DGFASLI), Mumbai, Govt. of India, Ministry of Labour and Employment under the chairmanship of

Dr. R. K. Elangovan, Director General, DGFASLI, Mumbai, Ministry of Labour and Employment. Govt. of India

The Conference is one of the important fora wherein matters relating to Safety and Health of the workers engaged in the manufacturing sector covered by the Factories Act, 1948 are discussed and deliberated upon by CIF's from the States/ U.Ts and DGFASLI, Central /State Government officials. The Conference was attended by 28 delegates from 20 States and Union Territories. The conference deliberated on the following aspects.

- Discussion on the reports/ comments of the Working groups.
- Discussion on fresh agenda points as received from the CIFs of States/U.Ts, CLI and RLIs.

4.0 OSH Workshop and Training Programmes

Central Labour Institute, Mumbai



- Advance Diploma course in Industrial Safety (ADIS-2021-22) was conducted for one year.
 Forty three candidates from thirty two organizations participated in the course.
- Industrial Safety division conducted a half day online training programme on "Monitoring and control of physical hazards at workplace" on 18th January, 2022. One participant from one organization attended the program.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted an online awareness training programme for the employees of SAIL on 18th January, 2022. One hundred twenty six participants attended the programme.
- Industrial Safety division conducted a half day online training programme on "Accident prevention and Loss Control Programme" on 19th January, 2022. One participant from one organization attended the program.
- Industrial Safety division conducted a half day online training programme on "Occupational Hazard and their Control at Workplace" on 21st January, 2022. Two participants from two organizations attended the program.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted a half day online training programme on "Measures for prevention and control of Major accidents in Factories" on 24th January, 2022. Five participants from five organizations attended the program.

- Industrial Safety division conducted a half day online training programme on "Safety in Mechanical Handling and storing of Materials" on 27th January, 2022. One participant from one organization attended the program.
- Industrial Safety division conducted a half day online training programme on "Hazard Identification and Risk Assessment" on 4th February, 2022. Four participants from four organizations attended the program.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted an online awareness programme on 10th February, 2022. Seventy participants from seven organizations attended the program.
- Industrial Safety division conducted a half day online training programme on "Mechanical Hazards and their prevention and control measures" on 16th February, 2022. Three participants from three organizations attended the program.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted an online awareness training programme on "HIRA" for the employees of SAIL on 17th February, 2022. One hundred fifty five participants attended the programme.
- Industrial Safety division conducted a half day online training programme on "Occupational Safety and Health Audit in Industries" on 18th February, 2022. Nine participants from nine organizations attended the program.
- Industrial Safety division conducted a half day online training programme on "Electrical Safety at the Workplace" on 23rd February, 2022. Twenty participants from four organizations attended the program.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted an online programme on 25th February, 2022. Eighty participants from seven organisations attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted an awareness training programme on "Safety Management and Remedial Measures for Prevention of Accidents" for the employees of Grasim Industries Ltd (Birla Paints Division), on 1st March, 2022. Two hundred participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an awareness training programme on "BOCW Acts and Rules and OSH in Construction Industries" for the employees of Grasim Industries Ltd (Birla Paints Division), on 4th March, 2022. Fifty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted online awareness programme for various Port Users of VOC Port, Tuticorin on 07th March, 2022. One hundred fifty participants attended the programme.
- Industrial Safety division conducted one day online national seminar on "Fire Safety in Factories, Construction and Dock Work" on 9th March, 2022. Two hundred forty three participants attended the program.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted PPEs awareness campaign at L&T construction site Powai on 12th March, 2022. Two hundred participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted Safety and PPE awareness programme for employees of Tata Steel Ltd, Nainital, Uttarakhand on 12th March, 2022. Two hundred fifty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit

- Mahotsav) Industrial Safety division conducted PPE awareness program at Indian oil Tanking Ltd. Navghar, Navi Mumbai on on 12th March, 2022. Forty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted PPE awareness campaign at B.G. Shirke Construction Pvt. Ltd, Goregaon, Mumbai on 13th March, 2022. Three hundred twenty three participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted PPE awareness at Tata Projects Ltd., Vile Parle, Mumbai on 13th March, 2022. One hundred ninety six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted PPE awareness program at J Kumar Infra Projects Ltd Andheri, Mumbai on 13th March, 2022. Thirty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online awareness training program on 15th March, 2022. Ninety five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online awareness training programmes for the employees of the SAIL on 22nd March, 2022. Two hundred eighty four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an awareness training programme on 07th April, 2022. One hundred seventy eight participants from twelve organisations attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online awareness training programme for the employees of Grasim Industries Ltd (Birla Paints Division), on 13th April, 2022. One hundred seventy participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online awareness training programme for the employees of Grasim Industries Ltd (Birla Paints Division), on 26th April, 2022. Two hundred twenty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online awareness training programme for the employees of SAIL, on 29th April, 2022 Four hundred thirty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online programme on 13th May, 2022. Two hundred forty seven participants from twelve organisations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted online awareness programme for participants from SAIL on "Confined space safety" on 31st May, 2022. Three hundred fifty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online programme on "Hazardous process" 27th June, 2022. One hundred four participants from nine organisations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted an online programme for construction sector

- on 28th June, 2022. Eighty six participants from nine organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted online training programme for employees of Steel Authority of India Limited (SAIL) on 28th June, 2022. One hundred twenty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav Training & Productivity division conducted online awareness programme on "Occupational Safety & Health" on 12th January, 2022. Two hundred thirty four participants from SAIL attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted awareness programme on "Occupational Safety & Health" on 19th & 20th January, 2022. Three hundred forty eight participants from Construction Industry attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted online awareness programme on "Occupational Safety & Health" on 22nd February, 2022. Two hundred thirty participants from BHEL attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity conducted awareness division online programme on "Behaviour Based Safety (BBS)" on. Two hundred twenty five participants from SAIL attended programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted online awareness programme on "Occupational Safety & Health"

- on 11th March, 2022. Two hundred twenty three participants from M/s. Phoneix Mill Ltd. attended the programme.
- Staff Training & Productivity division conducted online awareness campaign for Industrial workers on 12th August, 2021. One Hundred and eighty eight participants from Steel Authority of India Ltd. attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted online awareness programme on "Role of Effective participation in improving Safety & Health at workplace" on 24th March, 2022. One hundred sixty participants from M/s. Godrej Agrovet Ltd (GAVL) attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted online awareness programme on "Occupational Safety & Health" on 24th March, 2022. One hundred sixty participants from M/s. Godrej Agrovet Ltd (GAVL) attended the programme.
- Staff Training & Productivity division conducted training programme on "Role of Effective participation in improving Safety & Health at workplace" from 26th to 28th April, 2022. Twenty Six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted online awareness programme on "Occupational Safety & Health" on 28th April, 2022. Two hundred fifty participants from BHEL attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted online awareness programme on "Occupational Safety & Health" on 26th May, 2022. Two hundred fifty

- participants from BHEL attended the programme.
- Staff Training & Productivity division conducted training to casual workers in Safety & Health in association with DTNBWED at Ulhasnagar (Thane) on 1st May, 2022. One hundred fifty participants attending the programme.
- Staff Training & Productivity division conducted training programme on Effective participation Skills in SHE" from 25th to 27th May, 2022. Forty one participants attending the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted online awareness programme on Occupational Safety & Health on 29th June, 2022. One hundred eighty five participants from BHEL attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Staff Training & Productivity division conducted awareness programme in collaboration with CGHS was conducted at CLI on 3rd June, 30 delegates attended the programme.
- Staff Training & Productivity division conducted training programme on "Industrial Safety Management to reduce injuries & accident at workplace" from 21st to 23rd June, 2022. Ten participants attending the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted online awareness campaign for Industrial workers on 11th January 2022. One Hundred and nine participants from GAIL attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Major Accident Hazards Control in

- Factories" on 25th January, 2022. Twenty four participants attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Onsite Emergency Planning in Industries" on 28th January, 2022. Nine participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted online awareness campaign for Industrial workers on 28th January, 2022. Ninety five participants from GAIL attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Offsite Chemical Emergency Planning" on 1st February, 2022. Six participants attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Management of Hazardous substances" on 22nd February, 2022. Twenty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted online awareness campaign for Industrial workers on 23rd February, 2022. Two hundred nine participants from Mathura Refinery Attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted online awareness campaign for Industrial workers on 8th March, 2022. Two hundred and forty one participants from Mathura Refinery Attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted offline PPE awareness campaign for Industrial workers on 12th March, 2022. Fifty two participants from

- Indian Oil Tanking Ltd. Attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Disaster Management in Chemical Industries" on 22nd March, 2022. Twenty four participants attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Safety in Chemical Industries" on 25th March, 2022. Twenty four participants attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Offsite Chemical Emergency Planning Industries" on 19th April, 2022. Twenty four participants attended the programme.
- Major Accident Hazards Control Advisory division conducted online training programme on "Major Accident Hazards Control in Factories" on 22nd April, 2022. Twenty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted online awareness campaign for Industrial workers on 29th April, 2022. Two hundred and seven participants from Kanpur Fertilizers and Cement Limited attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted online awareness campaign for Industrial workers on 24th May, 2022. Two hundred and six participants from various Industries attended the programme
- Major Accident Hazards Control Advisory division conducted online training programme on "Management of Hazardous Substances in Industries" on 27th May, 2022. Twenty six participants attended the programme.
- Major Accident Hazards Control Advisory division conducted three days training programme on "Major Accident Hazards

Control in Factories" from 15th to 17th June, 2022. Twenty nine participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Major Accident Hazards Control Advisory division conducted online awareness campaign for Industrial workers on 28th June, 2022. Two hundred and six participants from Steel Authority of India Limited attended the programme
- Major Accident Hazards Control Advisory division conducted online training programme on "Onsite Emergency Preparedness in Chemical Industries" on 30th June, 2022. Twenty four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) WEED division conducted an awareness campaign on 1st and 2nd June, 2022. Five hundred and fifty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted an awareness programme on "Industrial Hygiene" on 09th June, 2022. Fifty five participants attended the programme.
- The Industrial Hygiene division conducted a half day online training programme on Ergonomics in Designing of Workstation on 13th January, 2022. Two participants from two organization were benefited from the programme.
- The Industrial Hygiene division conducted a half day online training programme on Work Environmental Monitoring in Industries on 20th January, 2022 Three participants from three organizations were benefited from the programme.
- The Industrial Hygiene division conducted a half day online training programme on Management of Physical Hazard and Chemical Hazard in Industries on 11th February, 2022 .Five participants from five

- organizations were benefited from the programme.
- The Industrial Hygiene division conducted a half day online training programme on Management of Heat Stress and Ventilation in Industries was conducted on 18th February, 2022 Three participants from three organizations were benefited from the programme.
- The Industrial Hygiene division conducted a half day online training programme on Management of Work Environment Hazards in Industries on 27th June, 2022 Nineteen participants from eleven organizations were benefited from the Programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) CAS division conducted an awareness campaign for construction workers on 19th and 20th January, 2022. Six hundred ninety six workers attended the programme.
- CAS division conducted fifteen days full time certificate course on "Safety in Working at Height and Scaffolding" from 2nd to 20th February, 2022. Eleven participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) CAS division conducted an awareness campaign for construction workers on 11th March, 2022. Four hundred forty six workers attended the programme.
- RTL/NRTL conducted a half day online training programme on "Personal Protective Equipment" on 6th January, 2022. Four participants from four organizations attended the programme.
- RTL/NRTL conducted a half day online training programme on Management of Chemical Hazards in Industries on 12th January, 2022. Seven participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an

- awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Construction workers" on 19th January, 2022. Fifty nine participants from L&T attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Construction workers" on 19th January, 2022. Sixty four participants from L& T Realty, Seawood, Navi Mumbai attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Industrial workers" on 21st January, 2022. Thirty four participants from Western Railway Workshop attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Industrial workers" on 2nd February, 2022. Forty nine participants from Ordnance Factory attended the programme.
- RTL/NRTL conducted a half day online Training Programme on Personal Protective Equipment – Fall Prevention on 4th February, 2022. Seven participants from seven organizations attended the programme.
- RTL/NRTL conducted half day online Training Programme on "Assessment of Work Environment Chemical Exposure" on 8th February, 2022. Four participants from four organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an online awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Industrial workers" on 24th

- February, 2022. Sixty four participants from RCCPL Pvt. Ltd. attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an online awareness campaign CAS division conducted fifteen days full time certificate course on "Safety in Working at Height and Scaffolding" from 2nd to 20th February, 2022. Eleven participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an online awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Industrial workers" on 4th March, 2022. Thirty six participants from RCCPL Pvt. Ltd. attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an online awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Industrial workers" on 9th March, 2022. One hundred fifteen participants from Technova Imaging System Pvt. Ltd., Taloja and Nasik attended the programme.
- RTL/NRTL conducted a half day online training programme on "OHS with Confined Spaces" on 10th March, 2022. Twenty three participants from seven organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an online awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Industrial workers" on 10th March, 2022. Twenty five participants from Raymond Uco Denim Pvt Ltd, Amravati attended the programme
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an online awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Construction workers" on 11th

- March, 2022. Two hundred twenty three participants from Phoneix Mill Ltd., Mumbai, Pune and Bangaluru attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted anawareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Construction workers" on 13th March, 2022. Eighty nine participants from L& T Realty, Powai, Mumbai attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted online an awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Industrial workers" on 13th March, 2022. Two hundred and fifty participants from Tata Motors Ltd, Uttarakhand attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Construction workers" on 13th March, 2022. Three hundred twenty three participants from B G Shirke Construction Pvt Ltd, Mumbai attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) RTL/ NRTL conducted an awareness campaign on "Proper Use, Care and Maintenance of Personal Protective Equipment for Construction workers" on 13th March, 2022. One hundred forty seven participants from Tata Projects Ltd, Mumbai attended the programme.

Respiratory Testing Laboratory (RTL)

RTL is equipped with Equipment/instruments for testing of different respiratory personal protective equipment like dust respirator, breathing air cylinders etc. RTL has tested a total number of 42 nos. breathing air cylinders and 24 nos. of dust masks for the period from January to June, 2022.

Non-Respiratory Testing Laboratory (NRTL)

NRTL is equipped with equipment / instruments for testing of different non-respiratory personal protective equipment like safety helmets, safety shoes, safety goggles, safety belts, safety gloves etc. NRTL has tested a total number of 3 nos. safety helmets, 06 nos. safety goggles, 4 nos. safety hand gloves, 13 nos. safety shoes, 6 nos. safety belts and 2 nos. clothing for the period from January to June, 2022.

Regional Labour Institute, Chennai



- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 4th January, 2022. Twenty eight participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Transport Equipment Hazards and its prevention in Industries and Major Ports" on 6th January, 2022. Nine participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 8th January, 2022. Thirty five participants from one organization attended the programme.

- Industrial Safety division conducted a half day online training programme on "Accident Causation and Analysis" on 18th January, 2022. Four participants from four organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 19th January, 2022. Seventy eight participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Safety Inspection at Workplace" on 20th January, 2022. Three participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 25th January, 2022. One hundred participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Work permit System in Industries" on 25th January, 2022. Five participants from five organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th January, 2022. Seventy seven participants from one organization attended the programme.
- Industrial Hygiene division conducted a half day online training programme on "Industrial Dust Exposure at Workplaces" on 27th January, 2022. Two participants from two organizations attended the programme.

- Industrial Medicine division conducted a half day online training programme on "Occupational Health Practices for Paramedics at OHC" on 27th January, 2022. Seven participants from seven organizations attended the programme.
- Industrial Safety division conducted a half day online training programme on "System Reliability and Safety Analysis at Industries" on 28th January, 2022. Two participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 28th January, 2022. Sixty two participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Excavation Safety at Construction Site" on 28th January, 2022. Two participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 28th January, 2022. One hundred eighteen participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness Industrial Workers campaign for "Occupational Safety, Health and Productivity in Industries" on 29th January, 2022. Thirty one participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on

- "Occupational Safety, Health and Productivity in Industries" on 29th January, 2022. One hundred sixty two participants from one organization attended the programme
- Industrial Safety division conducted a half day online training programme on "Safe use of Lifting Appliances & Loose Gears at Construction Sites" on 31st January, 2022. Six participants from six organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 1st February, 2022. Thirty six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 2nd February, 2022. Fifty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers "Occupational Safety, Health and Productivity in Industries" on 4th February, 2022. Thirty participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Basic Crane and Rigging Safety" on 7th February, 2022. Eight participants from seven organizations attended the programme.
- Industrial Safety division conducted a half day online training programme on "Safety Leadership in Industries" on 9th February, 2022. Nine participants from five organizations attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 9th February, 2022. Seventy eight participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "PSM Audit" on 10th February, 2022. Eight participants from six organizations attended the programme.
- Industrial Safety division conducted a half day online training programme on "Hazard Identification and Risk Assessment at Construction Site" on 10th February, 2022. Three participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 17th February, 2022. One hundred ten participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 17th February, 2022. Forty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 18th February, 2022. Twenty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit

Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 23rd February, 2022. Two hundred seventy participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 24th February, 2022. Two hundred fifty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness Campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 25th February, 2022. Twenty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 3rd March, 2022. Fourteen participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 5th March, 2022. Sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 7th

- March, 2022. Ninety two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 8th March, 2022. Fifty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 9th March, 2022. Four hundred participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness for Industrial Workers campaign "Occupational Safety, Health and Productivity in Industries" on 9th March, 2022. participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness Industrial Workers campaign for "Occupational Safety, Health and Productivity in Industries" on 10th March, 2022. Thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 11th March, 2022. One hundred twenty four participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 12th March, 2022. One hundred seventy participants from four organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 12th March, 2022. Two hundred fifty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 12th March, 2022. Two hundred thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness for Industrial Workers campaign "Occupational Safety, Health and Productivity in Industries" on 13th March, 2022. Two fiftv participants hundred from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness Industrial campaign for Workers "Occupational Safety, Health and Productivity in Industries" on 13th March, 2022. hundred twenty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted

- a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 23rd March, 2022. One hundred thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 23rd March, 2022. One hundred twenty participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Occupational Health & Safety Audit as per IS: 14489:2018" on 30th March, 2022. Forty three participants from twenty seven organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 11th April, 2022. One hundred eight participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 11th April, 2022. One hundred seventeen participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 19th April, 2022. Two hundred participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 23rd April, 2022. One hundred sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 28th April, 2022. One hundred thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 29th April, 2022. One hundred seventy five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 4th May, 2022. Fifty three participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 5th May, 2022. Forty one participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on

- "Occupational Safety, Health and Productivity in Industries" on 6th May, 2022. Thirty six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 6th May, 2022. Forty six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 6th May, 2022. Ninety participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 6th May, 2022. Thirty six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 7th May, 2022. Ninety participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 10th May, 2022. One hundred four participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 10th May, 2022. Thirty six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 11th May, 2022. Thirty one participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 12th May, 2022. One hundred thirty nine participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 13th May, 2022. One hundred three participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness for Industrial Workers campaign "Occupational Safety, Health and Productivity in Industries" on 17th May, 2022. Hundred participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Slings & Hoisting Safety in Industries and Ports" on 18th May, 2022. Twenty six participants from six organizations attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 19th May, 2022. Eighty four participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 24th May, 2022. One hundred and sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 25th May, 2022. One hundred forty five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 26th May, 2022. One hundred forty three participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 28th May, 2022. One hundred seventy participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Fork Lift Safety" on 31st May, 2022. Twenty three participants

from seventeen organizations attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 2nd June, 2022. Forty one participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 2nd June, 2022. Forty one participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 3rd June, 2022. Fifty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 3rd June, 2022. Fifty two participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Safety with Hand and Portable Power Tools at Workplaces" on 6th June, 2022. Twenty participants from thirteen organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety,

- Health and Productivity in Industries" on 7th June, 2022. One hundred ninety participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 7th June, 2022. Sixty one participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 9th June, 2022. Sixty six participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Ergonomics and Safe Manual Material Handling" on 14th June, 2022. Twenty three participants from thirteen organizations attended the programme.
- Industrial Safety division conducted OSH online training program for Causal workers / Contract workers employed in Construction Sector on 27th June, 2022. Thirty four participants from one organization attended the programme.
- Industrial Safety division conducted Occupational Safety and Health online training program for Causal workers / Contract workers employed in Hazardous Process Industries on 28th June, 2022. Forty participants from one organization attended the programme.
- Industrial Safety division conducted a half day online training programme on "Techniques of Accident Investigation and report writing for Manufacturing Industries" on 30th June, 2022. Sixty one participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit

Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 14th June, 2022. Seventy five participants from one organization attended the programme.

Regional Labour Institute, Kanpur



- To commemorate the 75th Anniversary of Indian Independence day (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 6th January, 2022. One hundred sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 24th January, 2022. One hundred five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 25th January, 2022. One hundred twenty five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 28th January,

- 2022. One hundred ten participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Occupational Injury and Illness Classification system" on 13th January, 2022. Five participants from five organizations attended the programme.
- The institute conducted a half day online training programme on "Occupational Health & Safety Management System" on 19th January, 2022. Six participants from six organizations attended the programme.
- The institute conducted a half day online training programme on "Safety Audit" on 21st January, 2022. Seven participants from seven organizations attended the programme.
- The institute conducted a half day online training programme on "Safety Working in Machinery" on 25th January, 2022. Three participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 3rd February, 2022. One hundred forty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 4th February, 2022. One hundred participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 10th February, 2022. One hundred participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 14th February, 2022. One hundred three participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 15th February, 2022. One hundred six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 16th February, 2022. Forty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 17th February, 2022. One hundred participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 18th February, 2022. Sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 18th February, 2022. Thirty Nine participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 21st February, 2022. One hundred twenty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 21st February, 2022. Three hundred eighteen participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 22nd February, 2022. Eighty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 23rd February, 2022. One hundred twenty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 24th February, 2022. One hundred participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Occupational Safety, Health and Working Condition in Industries" on 11th February, 2022. Three participants from three organizations attended the programme.
- The institute conducted a half day online training programme on "Prevention of Eye

- Injury and Illness at workplace" on 15th February, 2022. Six participants from six organizations attended the programme.
- The institute conducted a half day online training programme on "Occupational Health Practices for Nurses & Medical Assistants Working in Occupational Health Centre" on 17th February, 2022. Thirty one participants from twenty five organizations attended the programme.
- The institute conducted a half day online training programme on "Safety in Material Handling" on 25th February, 2022. The programme was attended by Thirty Seven participants from three organizations attended the programme.
- The institute conducted a half day online training programme on "Injury Prevention and Loss Control" on 25th February, 2022. Twenty three participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 7th March, 2022. Five hundred sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 7th March, 2022. Forty eight participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 8th March, 2022. Fifty nine participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 8th March, 2022. Thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 9th March, 2022. Seventy participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 10th March, 2022. One hundred forty nine participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 11th March, 2022. Forty six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 11th March, 2022. One hundred participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 12th March, 2022. One hundred fifty participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 13th March, 2022. Two hundred fifty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 14th March, 2022. Fifty participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Basic Occupational Health Services in Industries and Ports" on 24th March, 2022. Twenty one participants from fourteen organizations.
- The institute conducted a half day online training programme on "Role and responsibilities of health professional in Industrial emergency preparedness" on 30th March, 2022. Twenty four participants from nineteen organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on Occupational Safety, Health and Productivity in Industries on 13th April, 2022. Seventy six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 18th April, 2022. Seventy five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted

- a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 19th April, 2022. One hundred participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 27th April, 2022. Forty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) the Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 28th April, 2022. Thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 29th April, 2022. Forty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 30th April, 2022.Thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 7th May, 2022. Fifty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit

Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 13th May 2022. One hundred twenty five participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 25th May 2022. Forty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 26th May, 2022. One hundred participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Prevention of Occupational Lung Diseases and ILO Radiography System" on 23rd May, 2022. Twenty participants from twenty organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 23rd June, 2022. Seventy five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign on "Occupational Safety, Health and Productivity in Industries" on 30th June, 2022. Fifty participants from one organization attended the programme.

Regional Labour Institute, Kolkata



- The institute conducted a half day online training programme on "Role and Responsibility of Safety Officer" on 4th January, 2022. Three participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Importance of Management Information System in SHE" on 6th January, 2022. One participant from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 6th January, 2022. One hundred seventy participants from five organizations attended the programme.
- The institute conducted a half day online training programme on "Safe Handling of Chlorine Gas" on 7th January, 2022. Two participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Personal Protective Equipments" on 7th January, 2022. Two participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 11th January, 2022. One

- hundred fifty four participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 12th January, 2022. One hundred fifty seven participants from seven organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 13th January, 2022. One hundred fifty three participants from six organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 18th January, 2022. One hundred fifty three participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "OHS Policy" on 19th January, 2022. Two participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Injury Prevention during Manual Handling" on 20th January, 2022. Fourteen participants from three organizations attended the programme.
- The institute conducted a half day online training programme on "Importance of Safety Audit in Industries" on 20th January, 2022. Twenty four participants from five organizations attended the programme.
- The institute conducted a half day online training programme on "Importance of Safety Audit in Industries" on 21st January, 2022.

- Twenty four participants from five organizations attended the programme.
- The institute conducted a half day online training programme on "Safety in Work at Height" on 24th January, 2022. Seven participants from six organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th January, 2022. One hundred thirty five participants from three organizations attended the programme.
- The institute conducted a half day online training programme on "Evaluation of Chemical Hazards at Chemical Works" on 28th January, 2022. Two participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Work Environmental Hazards in Industries" on 31st January, 2022. Three participants from three organizations attended the programme.
- The institute conducted a half day online training programme on "Occupational Safety and Health in MSMEs" on 31st January, 2022. Four participants from four organizations attended the programme.
- The institute conducted a half day online Training Programme on "Effective Toolbox Talks" on 1st February, 2022. Five participants from five organizations attended the programme.
- The institute conducted a half day online training programme on "Evaluation & Monitoring of Illumination at Workplace" on 2nd February, 2022. Two participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Industrial Gas Cylinder - Hazards and its Prevention" on 2nd

- February, 2022. Five participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Safe Work Procedure at Workplace" on 7th February, 2022. Nine participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Role of Safety Officer in Safety Management System" on 8th February, 2022. Seven participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 8th February, 2022. Thirty four participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Plant Safety Inspection" on 10th February, 2022. Three participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Occupational Safety & Health at Building and other Construction Works" on 10th February, 2022. Two participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Prevention and Control of Hazards in Coal Handling Factories" on 11th February, 2022. Four participants from three organizations attended the programme.
- The institute conducted a half day online training programme on "Internal Safety Audit in Industries" on 15th February, 2022. Thirteen participants from nine organizations attended the programme.
- The institute conducted a half day online training programme on "Fire Prevention & Control Measures in Industries" on 15th

- February, 2022. Eight participants from seven organizations attended the programme.
- The institute conducted a half day online training programme on "Applied Ergonomics" on 17th February, 2022. Three participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 18th February, 2022. One thousand eighty two participants from five organizations attended the programme.
- The institute conducted a half day online training programme on "Prevention and control of Hazards in Construction Industries" on 21st February, 2022. One participant from one organization attended the programme.
- The institute conducted a half day online training programme on "Occupational Safety and Health in Metal Industry" on 21st February, 2022. Six participants from six organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 22nd February, 2022. Three hundred five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 22nd February, 2022. One hundred forty three participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit

Mahotsav) Industrial Medicine division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 24th February, 2022. One hundred fifty three participants from three organizations attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hygiene division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 25th February, 2022. One hundred sixty participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 25th February, 2022. One hundred thirty seven participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Accident Reporting & Investigation" on 28th February, 2022. Twenty participants from eighteen organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 1st March, 2022. One forty seven participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Types of Hazards & Its Preventive Measure" on 4th March, 2022. Thirty participants from thirty organizations attended the programme.
- The institute conducted a half day online training programme on "Safety with Scaffold" on 7th March, 2022. Forty participants from

- sixteen organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Medicine division conducted a half day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 9th March, 2022. Two hundred thirty nine participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Hand and Power Tools" on 10th March, 2022. Twenty one participants from sixteen organizations attended the programme.
- The institute conducted a half day online training programme on "Basic Introduction to Occupational Health Hazards" on 11th March, 2022. Twenty nine one participants from twenty nine organizations attended the programme.
- The institute conducted a half day online training programme on "Electrical Safety at Construction Industry" on 17th March, 2022. Forty participants from twenty eight organizations attended the programme.
- The institute conducted a half day online training programme on "Medical Response to Fire Disaster/Explosions" on 22nd March, 2022. Thirty participants from thirty organizations attended the programme.
- The institute conducted a half day online training programme on "Accidents Prevention by Good Housekeeping" on 23rd March, 2022. Thirty one participants from eight organizations attended the programme.
- The institute conducted a half day online training programme on "Safety in Manual Handling and Storage" on 25th March, 2022. Twenty participants from nineteen organizations attended the programme.
- The institute conducted a half day online training programme on "Warehouse Safety" on 28th March, 2022. Twenty eight participants

- from twelve organizations attended the programme.
- The institute conducted a half day online training programme on "Occupational Safety Health in Thermal Power Plants" on 29th March, 2022. Forty three participants from thirty six organizations attended the programme.
- The institute conducted a half day online training programme on "Safety with Transport Equipment" on 29th March, 2022. Twenty eight participants from twelve organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 20th April, 2022. Fifty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 25th April, 2022. Two hundred two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 25th April, 2022. Seventy eight participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 26th April, 2022. One hundred twenty seven participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 26th April, 2022. One hundred sixty seven participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 7th May, 2022. Twenty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 7th May, 2022. Twenty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Medicine division conducted a half day awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 10th May, 2022. Five hundred six participants from one organization attended the programme.
- The institute conducted three days training programme on "Safety in Scaffolding" from 11th to 13th May, 2022. Seven participants from four organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 19th May, 2022. One hundred and eleven participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit

Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 24th May, 2022. One hundred and forty two participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 24th May, 2022. Ninety two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th May, 2022. One hundred seventy participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Role and Responsibility of Safety Officer" on 31st May, 2022. Twenty seven participants from seventeen organizations attended the programme.
- The institute conducted one day awareness in "Safety, Health and Environment" on 6th June, 2022. Twenty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 7th June, 2022. Thirty eight participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety,"

- Health and Productivity in Industries" on 17th June, 2022. Twenty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day offline awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 17th June, 2022 at M/s. IOC, Howrah. Twenty five participants from one organization attended the programme.
- The institute conducted one day awareness in Safety, Health and Environment from on 23rd June, 2022. Twenty five participants from one organization attended the programme.
- The institute conducted one day awareness in Safety, Health and Environment from on 24th June, 2022. Twenty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 24th June, 2022. Sixty three participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 26th June, 2022 for the Odisha State Safety Officers. Forty five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Hvaiene division conducted a half day online awareness for Industrial Workers campaign "Occupational Safety, Health and Productivity in Industries" on 27th June, 2022. hundred sixty four participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th June, 2022. Forty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th June, 2022. One hundred sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th June, 2022. One hundred sixty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th June, 2022. One hundred sixty participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Accident Reporting Investigation and Analysis" on 30th June, 2022. Twenty participants from fourteen organizations attended the programme.

Regional Labour Institute, Shillong



- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day in-plant awareness campaign for Industrial Workers on 'Occupational Safety, Health and Productivity in Industries' on 10th January, 2022 at M/s Hills Cement Ltd. Forty five participants attended the programme.
- The institute conducted a half day online training programme on "Fall Prevention and Protection at Workplace" on 18th January, 2022. Five participants from four organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on "Occupational Safety and Health Awareness" on 19th January, 2022. Forty two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on "Occupational Safety and Health Awareness" on 25th January, 2022. Thirty nine participants attended the programme.
- The institute conducted a half day online training programme on "Industrial Gas Cylinder - Hazards and its Prevention" on 2nd February, 2022. Five participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Occupational Safety & Health at Building and other Construction Works" on 10th February, 2022. Two

- participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on "Occupational Safety and Health Awareness in MSME Units" on 18th February, 2022. Thirty four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on "Occupational Safety and Health in Construction Site" on 22nd February, 2022. Fifty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on 'Occupational Safety and Health in Construction Site and Occupational Safety and Health during maintenance at workplace' on 24th February, 2022. Forty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day in-plant training programme on 3rd March, 2022 at M/s Unique Industry, Meghalaya. Sixty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day in-plant training programme on 7th March, 2022 at M/s Meghalaya Cement Ltd. Sixty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day in-plant training programme on 7th March, 2022 at M/s. Dalmiya Cement Ltd. Hundred participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day

- in-plant training programme on 8th March, 2022 at M/s. Goldstone Cement Ltd. Fifty four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day in-plant training programme on 8th March, 2022 at M/s. Star Cement Ltd. Thirty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day in-plant training programme on 10th March, 2022 at M/s. Green Valliey Industries Ltd. Fifty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day in-plant training programme on 11th March, 2022 at M/s. Amrit Cement Ltd. Fifty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted an awareness programme on "Use of Personal Protective Equipments" on 13th March, 2022 for. Eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health in Industries" on 15th March, 2022. Twenty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health in Industries" on 18th April, 2022 for M/s Therrmax Instrumentation Limited. Fifty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day

online awareness campaign for Industrial Workers on "Occupational Safety, Health in Industries" on 22nd April, 2022 for M/s. Vasava Engg. Sixty participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health in Industries" on 26th May, 2022 for M/s. Ioanis Industries. Twenty three participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online awareness campaign for Industrial Workers on "Occupational Safety, Health in Industries" on 27th May, 2022 for M/s. Rikhasi Coke. Fifty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on "Occupational Safety and Health awareness for industrial workers" on 27th June, 2022. Forty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on "Occupational Safety and Health awareness for industrial workers" on 28th June, 2022. Fifty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the institute conducted a half day online training programme on "Occupational Safety and Health awareness for industrial workers" on 29th June, 2022. Thirty participants attended the programme.

Regional Labour Institute, Faridabad



- The institute conducted a half day online training programme on "Hazardous & safety Provision: Working at Height" on 3rd January, 2022. One participant from one organization attended the programme.
- The institute conducted a half day online training programme on "Safety & Health Management in Industries" on 3rd January, 2022. One participant from one organization attended the programme.
- The institute conducted a half day online training programme on "Occupational Health & Safety Audit as per IS: 14489- Elements Methodology & Report Writing" on 5th January, 2022. Five participants from five organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted two half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 12th January, 2022. Two hundred twenty eight participants from eight organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 13th January, 2022. Fifty five participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit

Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 15th January 2022. Two hundred thirty eight participants from one organization attended the programme.

- The institute conducted a half day online training programme on "Accident Reporting and Investigation" on 18th January, 2022. Four participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Safe Guarding of Machines" on 19th January, 2022. Nine participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Occupational Safety and Health Management System in Industries" on 21st January, 2022. Five participants from five organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 21st January, 2022. Fifty eight participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Effective Participation for Promotion of Safety, health & Welfare Culture in Industries" on 21st January, 2022. Sixteen participants from four organizations attended the programme.
- The institute conducted a half day online training programme on "Accident reporting and Investigation" on 27th January, 2022. Four participants from four organizations attended the programme
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted two half-day online awareness

- campaigns for Industrial Workers on Occupational Safety, Health and Productivity in Industries on 28th January, 2022. Seventy two participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted three half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 29th January, 2022. Two hundred fifty five participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 3rd February, 2022. One hundred ninety three participants from seven organizations attended the programme.
- The institute conducted a half day online training programme on "Design & implementation of Safety Management System" on 10th February, 2022. Three participants from three organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted two half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 11th February, 2022. One hundred nine participants from two organizations attended the programme.
- The institute conducted a half day online training programme on "Safety Audit" on 11th February, 2022. Thirteen participants from eight organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on

- "Occupational Safety, Health and Productivity in Industries" on 12th February, 2022. Forty four participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 13th February, 2022. Twenty participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Safety Provision under the Factory Act, 1948" on 16th February, 2022. Nine participants from four organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 16th February, 2022. Ninety five participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Accident Reporting and investigation" on 16th February, 2022. Ten participants from nine organizations attended the programme.
- The institute conducted a half day online training programme on "Safety in Material Handling in Industries" on 17th February, 2022. Two participants from one organization attended the programme.
- The institute conducted a half day online training programme on "SHE policy & Safety Provisions under the Factory Act, 1948" on 17th February, 2022. Three participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness

- campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 18th February, 2022. Sixty six participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 19th February, 2022. Fifty eight participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 22nd February, 2022. One hundred sixty four participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 23rd February, 2022. One hundred participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted three half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 10th March, 2022. Two hundred ninety participants from six organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 11th March, 2022. One

- hundred eighty seven participants from nine organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted three half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 12th March, 2022. One hundred thirty five participants from five organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted five half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 13th March, 2022. Three hundred fifty one participants from five organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 22nd March, 2022. Eighty one participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Accident reporting, Investigation and Analysis" on 24th March, 2022. Fourteen participants from eleven organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 25th March, 2022. One hundred eight participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted one half-day online awareness campaign for

- Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 26th March, 2022. Forty one participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 30th March, 2022. One hundred twenty four participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 31st March, 2022. Twenty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 1st April, 2022. Three hundred forty two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted four half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 5th April, 2022. Two hundred forty participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted four half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 6th April, 2022. Two hundred forty participants from two organizations attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 21st April, 2022. One hundred thirty participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 22nd April, 2022. One hundred two participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted one half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 23rd April, 2022. Ninety two participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Enhancing Safety through effective Leadership & Communication" on 28th April, 2022. Thirty eight participants from nine organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted two half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 30th April, 2022. One hundred fifteen participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 7th May, 2022. Fifty eight participants from one organization attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted two half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 13th May, 2022. Three hundred sixty five participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 19th May, 2022. Fourteen participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted two half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 21st May, 2022. Four hundred thirty nine participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 26th May, 2022. Four participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 27th May, 2022. Seventy eight participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division

- conducted a half-day online awareness campaign for Industrial Workers on Occupational Safety, Health and Productivity in Industries" on 28th May, 2022. Twelve participants from one organization attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted two half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 13th June, 2022. Two hundred forty nine participants from two organizations attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Industrial Safety division conducted a half-day online awareness campaign for Industrial Workers on "Occupational Safety, Health and Productivity in Industries" on 16th June, 2022. Two hundred twelve participants from one organization attended the programme.
- The institute conducted a half day online training programme on "Role & Function of Safety Committees" on 30th June, 2022. Twenty participants from four organizations attended the programme.

Inspectorate Dock Safety, Mumbai

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mumbai conducted a half day awareness campaign for Dock Workers on "Working at heights" on 31st January, 2022. One hundred twenty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mumbai conducted a half day awareness campaign for Dock Workers on "Handing of cargo in ship" on 1st February, 2022. One hundred ten participants attended the programme

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mumbai conducted a half day awareness campaign for Dock Workers on "Handing of cargo in ship" on 1st March, 2022. Twelve participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mumbai conducted a half day awareness campaign for Dock Workers on "Safety in Cargo Handling" on 1st April, 2022. One hundred thirty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mumbai conducted a half day awareness campaign for Dock Workers on "Hazards & Risk in work place" on 31st May, 2022. Ninety four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mumbai conducted a half day awareness campaign for Dock Workers on "Construction safety" on 2nd July, 2022. One hundred twenty two participants attended the programme.

Inspectorate Dock Safety, Jawaharlal Nehru Port, Navi Mumbai

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day online awareness campaign for Industrial Workers on "Hand & Power Tools Safety" on 5th January, 2022. Thirty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day online awareness campaign for Industrial Workers on "Food handler Responsibilities" on 13th January, 2022. Twenty participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day online awareness campaign for Industrial Workers on "Personal Vs Process Safety" on 18th January, 2022. Eighteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day online awareness campaign for Industrial Workers on "Defensive Driving" on 27th January, 2022. Twenty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Road Safety" on 9th February, 2022. Twenty seven participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Manual Handling & Lifting" on 11th February, 2022. Fifty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Line of Fire" on 14th February, 2022. Eighteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Lock Out & Tag Out" on 18th February, 2022. Forty eight participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Hazard, Risk & Control" on 24th February, 2022. Seventy two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Behavior Based Safety" on 8th March, 2022. Twenty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Basic Concept of Industrial Safety Management" on 10th March, 2022. Ninety one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Personal Protective Equipments" on 13th March, 2022. One thirty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Electrical Safety" on 4th May, 2022. Thirty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Defensive Driving" on 12th May, 2022. Thirty participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Heat stress" on 18th May, 2022. Thirty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Electrical Safety" on 24th May, 2022. Fifteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Electrical Safety" on 25th May, 2022. Sixteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Working at Height" on 26th May, 2022. Twenty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Jawaharlal Nehru Port conducted a half day awareness campaign for Industrial Workers on "Safety at Construction site" on 10th June, 2022. Thirty two participants attended the programme.

Inspectorate Dock Safety, Mangalore

 To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the dock workers working in M/s. Hasan Hajee & Co, New Mangalore Port Authority, on 8th February, 2022. Twenty participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. Sri Ganesh Shipping Agency, New Mangalore Port Authority, on 11th February, 2022. Forty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. Mangalore Coal Terminal Pvt. Itd., New Mangalore Port Authority, on 8th March, 2022. Twenty two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. Mangalore Coal Terminal Pvt. Ltd., New Mangalore Port Authority, on 9th March, 2022. Twenty four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. New Mangalore Port Authority, on 10th March, 2022. Ninety eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. Mangalore Coal Terminal Pvt. Ltd. New Mangalore Port Authority, on 10th March, 2022. Fifty seven participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. New

- Mangalore Port Authority, on 11th March, 2022. Eighty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. Mangalore Coal Terminal Pvt. Ltd., New Mangalore Port Authority, on 12th March, 2022. Twenty seven participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. Adani Udupi Power Corporation Ltd., New Mangalore Port Authority, on 14th March, 2022. Twenty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. Mangalore Coal Terminal Pvt. Ltd., New Mangalore Port Authority, on 28th April, 2022. Thirty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Mangalore conducted an awareness campaign for the Dock Workers working in M/s. New Mangalore Port Authority, on 2nd June, 2022. Eighty one participants attended the programme.

Inspectorate Dock Safety, Kolkata

 To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Accident Preventions on 5th January, 2022. One hundred thirty one participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on "Dock Workers (Safety, Health and Welfare) Regulations, 1990" on 24th January, 2022. One hundred thirty four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Safety "Management/Accidents" on 4th February, 2022. Seventy four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on "Dock Workers (Safety, Health and Welfare) Act, 1986 on 21st February, 2022. One hundred forty nine participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Cargo Handling on 7th March, 2022. One Hundred twelve participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on PPE's on 13th March, 2022. One Hundred Forty-nine participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Transport Equipment's on 14th March, 2022. One Hundred Fifty-Seven participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Dock Worker (Safety, Health and Welfare) Regulation, 1990 on 24th March, 2022. Two Hundred Eighteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Basic Dock Safety on 8th April, 2022. Three hundred forty two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Cargo Handling Equipment's on 13th April, 2022. Five hundred sixty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Handling of Dangerous Cargo on 22nd April, 2022. Two hundred twenty two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on "Dock Worker (Safety, Health and Welfare) Act, 1986" on 6th May, 2022. One hundred forty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for "Dock Workers on Safe Driving of Trucks" on 23rd May, 2022. Forty six participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Personal Protective Equipments on 25th May, 2022. Twenty three participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Safety Management on 6th June, 2022. Forty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on Cargo Handling on 14th June, 2022. Ninety nine participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Kolkata conducted a half day awareness campaign for Dock Workers on "Dock Worker (Safety, Health and Welfare) Regulation, 1990" on 28th June, 2022. Five hundred ninety five participants attended the programme.

Inspectorate Dock Safety, Paradip

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Paradip conducted various awareness campaigns for the dock workers working in Paradip Port Trust, on 2nd, 6th, 20th & 30th January, 2022. Sixty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Paradip conducted various awareness campaigns for the Dock Workers working in Paradip Port Trust, on 3rd, 14th, 23rd & 26th February, 2022. One hundred ninety three participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) and Safety Week celebration the Inspectorate Dock Safety, Paradip conducted various awareness campaigns for the Dock Workers working in Paradip Port Trust, on 7th, 9th, 10th, 12-13th & 15-16th March, 2022. Four hundred thirty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Paradip conducted various awareness campaigns for the Dock Workers working in Paradip Port Authority, on 20th & 29th April, 2022. Forty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Paradip conducted various awareness campaigns for the Dock Workers working in Paradip Port Authority, on 20th, 24-25th & 30th May, 2022. One hundred twelve participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Paradip conducted awareness campaign for the Dock Workers working in Paradip Port Authority, on 24th June 2022. Fifteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Paradip conducted awareness campaign for the Dock Workers working in Paradip Port Authority, on 27th July 2022. Twenty participants attended the programme.

Inspectorate Dock Safety, Vishakhapatnam

 To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Basic Safety Training" on 22nd February, 2022 at VGCB (Vaaman) Workshop,

- Visakhapatnam. Forty two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Basic Safety Training" on 22nd February, 2022 at CHD Call Stand of VPT, Visakhapatnam. Two hundred forty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Basic Safety Training" on 23rd February, 2022 at VGCB (Vaaman) Workshop, Visakhapatnam. Eighteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Basic Safety Training" on 24th February, 2022 at VGCB (Vaaman) Workshop, Visakhapatnam. Twenty nine participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Basic Safety Training" on 25th February, 2022 at VGCB (Vaaman) Workshop, Visakhapatnam. Twenty seven participants attended the programme.
- .To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Safety training for Stevedores" on 8th March, 2022 at HRD Training Centre of VPT, Visakhapatnam. Twenty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Safety Training" on 10th March,

- 2022 at CHD Call Stand of VPT, Visakhapatnam. Two hundred fifty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "PPE Awareness Program" on 11th March, 2022 at VGCB (Vaaman) Workshop, Visakhapatnam. Sixty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "PPE Awareness Program" on 13th March, 2022 at Cargo Berths of VPT, Visakhapatnam. Thirty eight participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Safety training for Stevedores" on 18th March, 2022 at HRD Training Centre of VPT, Visakhapatnam. Ten participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Safety Awareness" on 19th April, 2022 at VGCB Cargo Berth, Visakhapatnam. Twenty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Safety training for Stevedores" on 26th April, 2022 at HRD Training Centre of VPT, Visakhapatnam. Seventeen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Safety training for Stevedores"

- on 18th May, 2022 at HRD Training Centre of VPT, Visakhapatnam. Six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "Safety while handling, stacking and storage of heavy materials and hazardous chemicals" on 15th June, 2022 at HRD Training Centre of VPT, Visakhapatnam. Thirteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "PPE Awareness" on 16th June, 2022 at CHD Call Stand of VPT, Visakhapatnam. Two hundred forty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Visakhapatnam conducted an awareness campaign on "PPE Awareness" on 29th June, 2022 at CHD Call Stand of VPT, Visakhapatnam. Eighty three participants attended the programme.

Inspectorate Dock Safety, Chennai

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 6th January, 2022. Twelve participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Port Executives working in Chennai Port Trust on 6th January, 2022. Four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety,

Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 7th January, 2022. Twenty five participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 27th January, 2022. Seven participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 9th February, 2022. Ten participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted safety awareness training programme for the Dock Workers working in Chennai Port Trust on 10th February, 2022. Eighteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted safety awareness training programme for the Dock Workers working in Chennai Port Trust on 11th February, 2022. Twenty Two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted safety awareness training programme for the Dock Workers working in Chennai Port Trust on 15th February, 2022. Ten participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted safety awareness training programme for the Dock Workers working in Chennai Port Trust on 18th February, 2022.

- Nineteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted safety awareness training programme for the Dock Workers working in Chennai Port Trust on 4th March, 2022. One Hundred and Forty Six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted safety awareness training programme for the Dock Workers working in Chennai Port Trust on 8th March, 2022. Nineteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted Personal Protective Equipment (PPE) demonstration programme for the Dock Workers working in Chennai Port Trust on 11th March, 2022. One Hundred and Twenty Four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign on "PPE demonstration programme for the Dock Workers working in Kamarajar Port Limited" on 11th March, 2022. One hundred sixty two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 24th March, 2022. Forty four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port

- Trust on 25th March, 2022. Fifteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 30th March, 2022. Ten participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 31st March, 2022. Thirty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 13th April, 2022. Fifteen participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Bharat Heavy Electricals Limited, on 19th April, 2022. Two hundred participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence ((Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Bharat Heavy Electricals Limited, on 21st April, 2022.One hundred forty seven participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in Chennai Port Trust on 22nd April, 2022. Eighteen participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the stevedores working in Chennai Port Trust on 22nd April, 2022. Forty participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the Dock Workers working in CITPL terminal, Chennai Port Trust on 25th April, 2022. Thirty five participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online safety awareness training programme for Workers working in Bharat Heavy Electricals Limited, on 5th May, 2022. Forty one participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Bharat Heavy Electricals Limited, on 6th May, 2022. Forty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Bharat Heavy Electricals Limited, on 10th May, 2022.One hundred four participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Chettinad Cement Factory, on 10th May, 2022. Thirty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit

Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Chettinad Cement Factory, on 11th May, 2022. Thirty one participants attended the programme.

- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Bharat Heavy Electricals Limited, on 12th May, 2022. One hundred thirty nine participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for Workers working in Ashok Leyland, on 19th May, 2022. Fifty two participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted online awareness campaign for workers working in Bharat Heavy Electricals Limited, on 9thJune, 2022. Sixty six participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the dock workers working in Chennai Port Trust on 23rd June, 2022. Forty three participants attended the programme.
- To commemorate the 75th Anniversary of Indian Independence (Azadi Ka Amrit Mahotsav) the Inspectorate Dock Safety, Chennai conducted an awareness campaign for the dock workers working in Chennai Port Trust on 28thJune, 2022. Forty eight participants attended the programme.

5.0 ABSTRACT OF OSH STUDIES, AUDITS & SURVEYS

Study of Breathing Air Quality of Compressor at Shipping Industriy, in Maharashtra. (Ms. Acharekar, D H. Central Labour Institute)

Study of Breathing Air Quality of Compressor was conducted at Shipping Industriy to measure the concentration level of carbon dioxide, carbon monoxide, oil mist, odour, relative humidity, temperature etc of the compressor air. It was found that all the parameters were well within their limit as per IS 9623-2008 specification. It was suggested that while compressor is in operating condition, nearby area shall be free from dust/smoke.

Study of Breathing Air Quality at Potassium superoxide granules based SCSR manufacturing Industry in Gujarat (Ms. Acharekar, D H. Central Labour Institute)

Study of Breathing Air Quality was conducted at Potassium superoxide granules based SCSR manufacturing Industry in Gujarat to measure the concentration level of carbon monoxide. It was found that concentration of carbon monoxide was well within its limit as per IS 9623-2008 specification. No recommendation was suggested to the industry.

Work Zone Monitoring Study at Alluminium Ancillary Manufacturing Industry in Maharashtra (Dr. Bhave R.P., Central Labour Institute, Mumbai.)

The objective of the study was to measure the prevailing levels of airborne concentration of graphite dust and glass fibre dust, at various work stations in the manufacturing areas and to identify the health hazards generated from the workplace. Personal exposure of workers was evaluated to suggest remedial measures to make the working environment congenial and conductive. Suitable control measures were suggested to reduce the risk associated with chemical health hazards. Though values were within the limit of TLV or PLE limit. Several recommendations were made to improve the work environment further.

Safety Audit at a Paper Mill Factory in Odissa (Dr. Chaugule, SM. Rao, GG. Barhate, M. Regional Labour Institute, Kolkata)

The objective of Safety Audit was to critically examine the Safety system in that plant. The main focus has been to recommend and improve the Safety system as applicable by the Safety Statutes, Codes, Standards and Norms. The Audit was aimed to highlight the strength and weakness of the system on both the Management and Technical Aspects of Safety and Health Administration and impress upon the need for improvement on the Safety Standards.

In the plant, reporting of near misses, first aid cases and accidents by the workers has been improved over the years which has resulted into reduction of first aid cases drastically and achieved zero reportable accident. It is advice to strengthen and to display accident data at prominent places. Advised for refresher training and trainers training programmes for top functional heads on Safety and Health are to be conducted periodically. It is also advised, apart from the existing inspection and maintenance system, the plant/equipment wise maintenance program on various sections/department etc. is to be ensured. Though the plant is creating awareness on "5S" standard, still good housekeeping standard is a must in the old plant side. Road Traffic Management System needs improvement for regulation of road traffic.

The Work Permit for different operations needs to be followed strictly as per the system requirement. Periodic mock drills on emergency preparedness by plant are being conducted involving various Govt. authorities and members of District Crisis Group as observers and their suggestions for further improvement in Emergency preparedness are complied. Maintenance of Occupational Health Centre, First Aid Boxes and Welfare facilities like canteen, drinking water, washing areas and toilet are to be given periodic attention for maintaining hygienic conditions.

Work Environment monitoring study at Chemical Industry in Tamil Nadu (Dr. Nitin S. Gedam, Regional Labour Institute, Chennai).

Work environment monitoring (WEM) study was conducted with the objectives to assess the airborne concentrations of certain contaminants like Acetic Acid, Ammonia, Carbon Monoxide, Nitric Acid, Sodium Hydroxide, Sulphur Dioxide, Nickel Oxide and Manganese Dioxide etc. The factory manufactures automotive emission catalytic converters for vehicle exhaust emission control these consist of special combinations of precious metals viz., Platinum, Palladium, Rhodium and others metals like, Nickel, Manganese, etc.

After meticulous survey of work area, more prone to contaminate the work area were selected and sampling for the selected airborne contaminants was performed. Estimation of contaminants level reveals that the studied contaminants concentrations are below the limits as per the limits prescribed in the schedule-II of the Factories Act-1984. Nickel Oxide for which permissible exposure limit is not prescribe in schedule-II of the Factories Act-1984, TLV by ACGIH compared and complies with. Further, to improve health and safety practices in the work area, general recommendations with regard housekeeping, Hazard labelling, certain work specific recommendations and selection of proper PPEs and its effective use, etc has been suggested.

Safety Audit at Steel Plant in Tamilnadu (Nijalingappa, G.P. Ravi, B. J. Gnanasundaram, D. Regional Labour Institute, Chennai).

Safety audit was carried out at a Steel Plant covering the areas such as Steel Melting shop, Hot Rolling mill, Cold Rolling Mill -1, Cold Rolling Mill-2, LPG Installation, Boiler and Compressor House, Furnace Oil Tank, Open Scrap Yard, Re-circulation water pump House, Make up water Receiver, Electrical Substation, DG Sets, Fire Stations, Canteens and other Welfare facilities. The report covers the detailed methodology, Safety organization, Safety and Health Education and Training, Hazard Identification and control system,

Plant Safety Inspections and Emergency Action Plan, Medical Examination of the Plant, Observation, Findings and summary of recommendations. Each of the management and Technical elements were audited. The Safety Committee should meet at least once in 3 months so that the safety issues at hand are discussed immediately and the recommendations of the Safety Committee are implemented at the earliest in a time bound programme and the plant Management should focus more attention to execute the follow up action on the points appearing repeatedly at every meeting of the Safety Committee.

About Statistics Cell, DGFASLI

The Statistical Cell, under Factory Advice Service (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 there under. 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.

OSH Data of registered factories (2011-2020)

Year	No. of Registered Factories	Total Employment	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
20 11	325209	11634070	649	1394	28805	30199	11.98	247.59	259.57	4.29	88.57	92.86
20 12	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%)
20	340226	14042410	1343	1312	26852	28164	9.34	191.22	200.56	3.86	78.92	82.78
13	(-3.81%)	(-5.82%)	(2.52%)	(-0.38%)	(-6.44%)	(-6.17%)	(5.78%)	(-0.65%)	(-0.37%)	(3.56%)	(- 2.74%)	(-2.46%)
20	361994	20034859	1534	1266	25500	26766	6.32	127.28	133.60	3.50	70.44	73.94
14	(6.4%)	(42.67%)	(14.22%)	(-3.51%)	(-5.04%)	(-4.96%)	(-32.37%)	(-33.44%)	(-33.39%)	(-9.31%)	(-10.75%)	(-10.68%)
20	348429	16374546	1091	1107	20257	21364	6.76	123.71	130.47	3.18	58.14	61.32
15	(-3.75%)	(-18.27%)	(-28.88%)	(-12.56%)	(- 20.56%)	(-20.18%)	(6.99%)	(-2.8%)	(-2.34%)	(-9.16%)	(-17.47%)	(-17.07%)
20	360949	17376854	700	1189	5367	6556	6.84	30.89	37.73	3.29	14.87	18.16
16	(3.59%)	(6.12%)	(-35.84%)	(7.41%)	(-73.51%)	(-69.31%)	(1.21%)	(-75.03%)	(-71.08%)	(3.68%)	(-74.42%)	(-70.38%)
20	339931	16409493	1382	1084	4866	5950	6.61	29.65	36.26	3.19	14.31	17.50
17	(-5.82%)	(-5.57%)	(97.43%)	(- 8.83%)	(-9.33%)	(-9.24%)	(-3.46%)	(-3.99%)	(-3.89%)	(-3.19%)	(-3.73%)	(-3.63%)
20	364268	18724733	1124	1154	4528	5682	6.16	24.18	30.34	3.17	12.43	15.60
18	(7.16%)	(14.11%)	(-18.67%)	(6.46%)	(-6.95%)	(-4.50%)	(-6.81)	(-9.49)	(-16.33)	(-0.63)	(-13.13)	(-10.86)
20	355478	18552909	1371	1127	3927	5054	6.07	21.17	27.24	3.17	11.05	14.22
19	(-2.41%)	(-0.92%)	(21.98%)	(-2.34%)	(-13.27%)	(-11.05%)	(-1.46%)	(-12.45%)	(-10.22%)	(0.00%)	(-11.10%)	(-8.85%)
20	363442	20298387	634	1050	2832	3882	5.17	13.95	19.12	2.89	7.79	10.68
20	(2.24%)	(9.41%)	(-53.76%)	(-6.83)	(- 27.88%)	(-23.19%)	(-14.83%)	(-34.10%)	(-29.81%)	(- 8.83%)	(- 29.50)	(-24.89%)

Source: Data collected by DGFASLI through correspondence with Chief Inspector of Factories (CIF) and Directorate of Industrial Safety and Health (DISH) of States/UTs. The table doesn't include data pertaining to West Bengal for the year 2017, 2019 and 2020 as it is not provided to this Directorate.

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

The above table shows Occupational Safety and Health data of last 10 years (2011-2020) of factories registered under Factories Act, 1948.

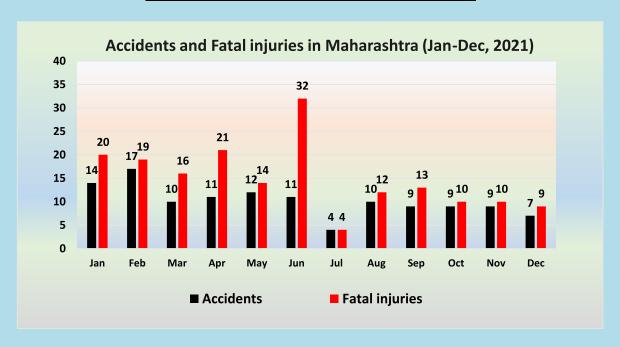
The following observations can be made from the data:

- 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 2011-2020, the no. of registered factories in India increased by 11.76% from 3,25,209 to 3,63,442 while the total no. of workers employed registered an increase of 74.47% from 1,16,34,070 to 2,02,98,387.
- Both the fatal and non-fatal injuries registered a decline as compared to the base year 2011. 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 24.68% in the no. of fatal injuries in the registered factories since 2011 to 2020 i.e. fatal injuries in registered factories decreased from 1394 to 1050. During the corresponding period, the non-fatal injuries in the registered factories decreased by 90.17% from 28,805 to 2,832.
- It can be observed from the table that the decline in the no. of total injuries during the year 2016 is steeper visà-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 the State didn't report data of the year 2017, 2019 and 2020.
- 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 2011. 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 2011 and each year the incidence rate is lower than the previous year.
- The no. of fatal injuries per lakh workers reduced from 11.98 to 5.17 during the last 10 years; while during the corresponding period, the no. of non-fatal injuries per lakh workers reduced from 247.59 to 13.95. During the same period, total injuries (both fatal and non-fatal) per lakh workers reduced from 259.57 to 19.12.
- The no. of fatal, non-fatal and total injuries per thousand registered factories, showing a declining trend during the period 2011-2020, reduced from 4.29 to 2.89, 88.57 to 7.79 and 92.86 to 10.68 respectively.

<u>Trend Analysis: Accidents and Fatalities (fatal injuries) reported in the factories</u>
<u>registered under the Factories Act, 1948 in Maharashtra (Jan-Dec, 2021)</u>

Month	No. of accidents	No. of injuries (fatalities)
Jan-2021	14	20
Feb-2021	17	19
Mar-2021	10	16
Apr-2021	11	21
May-2021	12	14
Jun-2021	11	32
Jul-2021	4	4
Aug-2021	10	12
Sep-2021	9	13
Oct-2021	9	10
Nov-2021	9	10
Dec-2021	7	9
Total	123	180



The above table shows the no. of fatal accidents and injuries (fatalities) reported in the factories registered under the Factories Act, 1948 in Maharashtra during Jan-Dec, 2021.

It can be observed that the largest number of cases i.e. 17 accidents were reported in the month of February while largest numbers of fatalities i.e. 32 were reported in June.

It can be observed that the no. of accidents and fatal injuries occurred in the first half of the year is 75 and 122 respectively while the corresponding number for the second half of the year is 48 and 58 respectively. Thus, the accidents and fatal injuries significantly dropped in the second half of the year from July to December.

OSH Statistics in Docks

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 within the port premises. These statutes are in line with the ILO Convention No. 152 on Occupational Safety and Health (Dock Work).

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 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 Dock Safety at all the major ports viz. Mumbai, Kolkata, Chennai, Kandla, Mormugao, New Manglore, Cochin, Tuticorin, Visakahapatnam, 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 Inspectorate Dock Safety, Chennai.

The main function of Inspectorates is to ensure the compliance with the provisions under the statutes. The statutory responsibilities of Inspectors include inspection of ships, tankers, loose-gears, container-handling equipment, docks container-yard and terminal, prosecution of employers, attending to complaints, providing advisory services. The Inspectorate also prosecutes the agency responsible for serious violation of provision of the Act and Regulations framed there-under.

Activities carried out from January, 2022 to June, 2022						
Activity	Total					
Total number of Ship Inspected	271					
Total number of Gear Inspected	422					
Total number of Dock/Shed/Yard/ Warehouse/Go-down/storage yard, etc. Inspected	540					
Total number of other visits carried out	479					
Total number of Hazardous Installations Inspected	2					
Total number of reportable Fatal Accidents as per dock safety statutes	11					
Total number of reportable Non-Fatal Accidents as per dock safety statutes	02					
Total number of reportable Accidents as per dock safety statutes	13					

Accident Case Studies - Port Sector

Case Study no. 1

Truck Driver was working at Container Freight Station (CFS) premises. There was raining at the site. So in order to protect the general cargo loaded on the truck from dampening, he was covering cargo with tarpaulin sheet. While doing so the driver fell down from height of 3 mtrs. He sustained serious head injury. He was given first-aid & rushed to the hospital immediately. Later on he succumbed to injury during treatment.

Remedial measures -

- 1. Provide PPEs like helmet, safety shoes, safety belt, etc. & ensured its use while working.
- 2. Provide adjustable working platform along with suitable assistance.
- 3. Provide proper shed/parking place to protect the cargo from weather.
- 4. Provide strict supervision during cargo loading operation to ensure uniform & stable loading and covering with tarpaulin sheet.
- 5. Provided information about hazards associated with such type of work & instructed suitably well in advance.
- 6. Ensure physical fitness by carrying on periodical medical examination.
- 7. Impart periodical training programme on OSH.





Case Study no. 2

Steel heavy plates bundle was being discharged from the hatch of the ship with the help of ship's crane. While slinging bundle suddenly the polyester webbing sling used for the lifting of the steel plates was snapped and fell down from a height of approximately 30 cm. One of the workers engaged for the cargo discharging, was trying to position a wooden piece just below the uplifted bundle of plates in order to increase the gap for fixing the plate lifting clamps. He could not pull back his right hand. His index finger of the right hand got jammed in between wooden piece & steel plates and cut separated. He was provided first aid & rushed to the hospital for medical treatment.

Remedial measures-

- 1. Ensure the physical condition, SWL capacity, test & examination of sling and it is free from patent defect before taking into use.
- 2. Ensure the physical condition, SWL capacity, test, examination of attached loose gears and ensure it is free from patent defect before taking into use.
- 3. Provide effective supervision to ensure,

- a. tested & suitable loose gears, slings, etc. are used in proper way to slung the cargo.
- b. workers engaged in handling operations are at safe distance (away from danger zone).
- c. that the cargo is lifted/handled as per SOPs.
- 4. Provide tailor made training to all workers.
- 5. Provided information to all worker engaged about hazards associated with such type of work & instructed suitably well in advance.
- 6. Ensure physical fitness by carrying on periodical medical examination.
- 7. Impart periodical training programme on OSH.
- 8. Provide PPEs like helmet, safety shoes, hand gloves, etc. to workers & ensured its use by them while working.





Case Study no. 3

A ship was discharging wheat bags with the help of ship's cranes & nylone net on the wharf since 6 days. Discharging was interrupted by the rain so on-duty crew members of the ship started closing hatch cover. The work was stopped & the cranes came to stand still. On-duty signalman started searching shelter to protect himself from rain. Since gangway ladder was nearby, he preferred to get down from the ship by using gangway ladder & take shelter in the adjacent shed. While doing so he accidently slipped from wooden plank tied at the end of the gangway ladder and fell down into the seawater. He died due to drowning.

Remedial measures -

- 8. No wooden plank or any such supporting part shall be attached with Gangway.
- 9. Gangway provided on the ship shall comply with all provisions of the Regulations. i.e. width, non-skid type steps, railings, distance between railings, supporting chain/rope and safety net underneath.
- 10. Gangway must rest properly on the wharf.
- 11. Ensure that no water accumulated on the wharf.
- 12. Surface of the wharf shall be non-slippery & obstructions free.
- 13. Mass awareness shall be made amongst workers for slow & safe walking under such situations.
- 14. Provide effective supervision & strict monitoring.
- 15. Provide PPEs like safety shoes, rain coat, etc. & ensured its use while working.
- 16. Ensure physical fitness by carrying on periodical medical examination.
- 17. Impart periodical training programme on OSH.





Case Study no. 4

A Payloader (say no. 1) was engaged in the hatch of the ship for collecting bulk coal from under the hatch coaming area and accumulating at the square of the hatch for its easy collection by grab & discharges the same out on the wharf with the help of ship's crane. Another Payloader (say no.2) was engaged on the wharf to collect discharged coal & load it on the dumper for its further transportation. After the lunch time operator of the Payloader (no.1) was found missing from the hatch. After searching for a long time when operator did not reported on site, services of other operator have been utilized to operate Payloader (no.1) to handle the cargo in the ship's hatch. In the night time while collecting coal dumped on the wharf, operator of the Payloader (no.2) found dead body of the operator of the Payloader (no.1) in the heap of the cargo. As per postmortem report cause of his death is 'suffocation'.

Remedial measures -

- 1. Do not allow any worker to work alone or take rest in danger zone inside the hatch.
- 2. SOPs shall be made to discharge such type of cargo & ensure its strict follow up by workers.
- 3. Provide effective supervision & strict monitoring.
- 4. Provide PPEs like reflective jackets, helmet, safety shoes, dust mask, etc. & ensured its use while working. If possible provide tracker to locate individual worker handling bulk cargo in the hatch.
- 5. Provide information to workers about hazards associated with handling of such type of cargo & instruct suitably well in advance.
- 6. Ensure physical fitness by carrying on periodical medical examination.
- 7. Impart periodical training programme on OSH.





Accident Case Studies – Manufacturing Sector

Case Study No.1:- Collapse of Wall at sugar salt factory at Industrial area, Morbi, Gujarat

A section of a wall around 15 to 20 feet high of the factory collapsed on 18.05.2022 in the Sagar Salt factory situated in the Halvad industrial estate of the Gujarat Industrial Development Corporation (GIDC). The workers died after bags of salt stacked along the wall fell on them, and they got trapped. In this accident 12 workers died and 2 injured. The district administration deployed earthmovers to help remove salt bags, hard rock salt and wall debris. The cause of the wall collapse could not be ascertained and is being investigated

Case Study No.2:- Fire Incident at Factory at Mundka

At least 27 people were killed and 12 injured as a massive blaze ripped through a four-storey building in outer Delhi's Mundka on 13.05.2022. The fire started from the first floor that houses the office of a CCTV cameras and router manufacturing and assembling unit named M/s.Cofe Impex Pvt. Ltd. Smoke from the fire spread to the entire building and some people jumped off through the windows to save themselves, while some others used ropes to climb down, a few of them got injured in the process. The Mundka building, ravaged by a blaze that killed 27 people, did not have a no-objection certificate from the fire department while its single entry and exit point could be the reason for the high number of deaths. Unavailability of firefighting systems, no alternative escape route and rapid spread of fire due to presence of highly combustible materials led to higher casualties in the tragedy. Legal action has been initiated against both the Directors of M/s. Cofe Impex Pvt. Ltd., i.e. Sh Harish Kumar Goyal (occupier) and Sh.Varun Goyal (Manager) under the provisions of the Factories Act, 1948 and Rules made thereunder for the violations.

Case Study No.3:- Fatal accident occurred during excavation work at the site of NeST Hi-Tek Park Privitate Limited – Kinfra Special Economic Zone, HMT Colony P.O. Kalamassery, ernakulam

An Accident had occurred while carrying out an excavation work for construction of a building. There were 25 workers working in the construction site during the day of the accident. The excavation work was commenced on 14.03.2022. The excavation work was done by using an earth excavator (JCB JS-140). On 18.03.2022, the workers started their work at around 07.00 hrs. After taking lunch, the workers restarted the work around 14:15 Hrs. There were six workers inside the excavation area at that time. They were doing the work of levelling the ground of the excavated area for preparing concrete work for construction of building. At around 14:30 Hrs. Mud slide (cave-in) occurred from one of the sides of the excavated area. Five workers were covered under the mud and one worker was partially covered with mud. On information from the site the fire and rescue team reached the site and rescued two workers. The remaining four workers were brought dead. All the workers are from West Bengal.

Cause of the accident

The place where the accident occurred is a filled land. So, the strength of the soil is inadequate. The sides of the excavated area were not slopped. No shorting/timbering was done. Sheathing was not placed against the sides of the excavated area. Since the depth of the excavation was 6.4 m and safety precautions were not followed for avoiding Cave-in. Once of the sides of the excavated area collapsed resulting in the accident.

The Inspector of Factories & Boilers noticed the following violations of the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and its allied rules.

 Failed to provide adequate piling and bracing against the bank or side of the excavated area for protecting the building worker engaged in excavation from the hazard of falling or sliding material and thereby violated Rule 124(2) of the Building and other Construction Workers (Regulation of Employment and Conditions of Service)

- Kerala Rules, 1998 prescribed under Section 40(2)(q) of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.
- 2. The employer negligently or willfully omitted the Safety precautions that are to be followed in excavation work and endangered the life and safety of building worker and thereby violated Rule 237 of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Kerala Rules, 1998 prescribed under Section 40 of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.
- 3. Failed to send the notice of commencement of building or other construction work to the Inspector and thereby violated Section 46(1) of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.

The Inspector of Factories & Boilers, Gr.I, Ernakulam issued a show cause notice to the employer/contractor of the building construction site to show cause if any in writing why he should not be prosecuted for violating the provisions of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996

Case Study No. 4

Accident with ash handling system of ESP.

Fitter and One worker were assigned for the purposes of maintenance of Electrostatic precipitators (ESP) ash handling system. The Ash handling system requires necessary adjustment for smooth operation. After adjustment work, the system was started as a trial run to confirm its smooth functioning. During trial period, the fitter approached to observe the set timer of the dome valve machine, suddenly he lost balance of himself and his left hand caught hold of the machine, in which his little finger got struck by the striking arm. Due to that, the worker loss his little finger.



ESH System for handling Ash

Remedial Measures:

- At every workplace, the worker and his supervisor should have knowledge about the hazards.
- The worker should have trained to use proper tools and equipments.
- Safe guard should be provided to all rotating/ moving belt/ moving parts of machine during any running condition.
- Proper communication should be used with supervisor and other coworkers to call in emergency.
- To avoid such incidents, emergency power off/ stop switches should be provided and workers should be aware about such facility.
- Proper initial and periodical OSH training should be provided to all working persons in industry with identification of hazards involved in workplace.
- Safety posters/banners should be provided in working area.
- Safe operating procedures must be strictly followed for carrying out any non-regular job.
- Proper PPEs. Tools and equipments should be provided to workers.

- Sufficient Illumination should be provided at workplace.
- Work permit system should be follow for any maintenance work.

Case Study No. 5

Accident by Plastic Cutting Machine.

Two casual workers were engaged for maintenance work of plastic waste cutting machine. This machine was used for cutting plastic waste product in small pieces before putting in kiln of cement plant. The machine was located at the fabricated platform, which was approximately two meter heighted from the ground level. During the maintenance work, these workers started trial run of the machine and during the running of machine, one worker was tried to tightening of bolt of cutting blade. Suddenly his balance was loss and his right leg got struck into the machine, which causes series injuries to the worker.



Remedial Measures:

- The worker and his supervisor should have knowledge about the hazards.
- Work permit system should be follow for any maintenance work.
- Supervisor should be engaged with non- routine work.
- Safety posters/banners should be provided in working area.
- Proper method of climbing like ladder should be used to avoid such accident at working at height.
- · Flooring should be kept clean to avoid slip and fall.
- Use of proper PPEs should be made mandatory while working.
- Lock out-Tag out method may be used for such maintenance work to control all time of energy supply.

Celebration of ICONIC WEEK- 7th March – 13th March 2022



One of the awareness campain conducted by DGFASLI under Azadi Ka Amrit Mahotsav (AKAM)

Azadi Ka Amrit Mahotsav (AKAM) is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of it's people, culture and achievements.

Under the AKAM, the Ministry of Labour and Employment decided to celebrate the ICONIC WEEK from 7th March to 13th March 2022 and planned multiple initiatives to uphold the spirit of progressive India.

DGFASLI organised a series of events both at the National as well as at Regional levels for creating awareness on Occupational Safety and Health (OSH) among employees as a measure towards prevention of accidents, injuries and diseases.

EVENTS AT NATIONAL LEVEL

- A National Seminar on "Occupational Health and Diseases" was organized in Delhi on 7th March, 2022. The seminar was attended by a total of 560 delegates.
- Presentation Ceremony for Vishwakarma Rashtriya Puraskar (VRP) & National Safety Awards (NSA) for the performance year 2018 was organized on 8th March, 2022 in Delhi. The Vishwakarma Rashtriya Puraskar and the National Safety Awards for the performance year 2018 were presented by Shri Bhupender Yadav, Hon'ble Minister of Labour & Employment and Environment, Forest & Climate Change, Government of India in the presence of Shri Rameswar Teli, Hon'ble Minister of State for Labour & Employment and Petroleum and Natural Gas. Shri. Sunil Barthwal, Secretary (Labour & Employment) delivered the keynote address.. A total of 700 people attended the programme. There were 96 and 98 Awards under VRP and NSA respectively.
- A National Seminar on "Fire Safety in Factories, Construction and Docks" was held on 9th March, 2022 in Mumbai. The seminar was attended by 243 participants. Eminent Speakers from the Industries and Academic Institutions shared the knowledge and experiences.
- The Conference of Chief Inspector of Factories was held on 10th March, 2022 in Mumbai. The conference was chaired by the Director General, DGFASLI. The Conference was attended by 28 delegates from 20 Sates/UTs.
- National Conference on "Occupational Safety and Health in Construction Industry" and release of Booklet and Manual on Construction Safety was organized on 11th March, 2022. The National Conference was attended by 480 delegates from across the countries from different organisations and Technical Institutes. A Booklet on Construction Safety for workers and A Manual on Construction Safety for Supervisors was released on the occasion.
- National Workshop on "Occupational Safety and Health in Dock work" was organized on 12th March, 2022.
 The National Conference was attended by 440 delegates from across the countries, Stevedore organisations from various ports and participants from different Technical Institutes.
- PPE awareness campaign for workers and supervisors" in various construction sites was organized on 13th March, 2022. Special emphasis has been laid for creating awareness on OSH for workers working in the construction sector and also demonstrating to them the importance of effective use of personal protective equipment and its maintenance. These events were organised at the construction sites all over the country. More than 2100 workers were trained.

EVENTS AT REGIONAL LEVEL

7th March, 2022

- RLI Shillong conducted Awareness Campaign on Safety and Health in the Northern Region benefitting 90 workers.
- Regional Institute Kolkata conducted programme in Federation of Association of Cottage & Small Industries Kolkata benefitting 255 workers.

8th March, 2022

- Regional Institute Shillong conducted a series of programmes in factories benefitting 54 workers.
- Regional Institute Kolkata conducted programme in Federation of Small & Medium Industries Kolkata benefitting 155 workers.

9th March, 2022

- Regional Institute Kanpur conducted programmes in factories benefitting 75 workers.
- Regional Institute Kolkata conducted programme in Federation of Indian Chamber of Commerce Kolkata benefitting 285 workers.

10th March, 2022

- Regional Institute Faridabad conducted a series of programmes in factories benefitting 153.
- Regional Institute Kanpur conducted programmes in factories benefitting 150 workers.
- Regional Institute Shillong conducted a programme in factories benefitting 56 workers.
- Regional Institute Kolkata conducted programmes in Foundry Cluster Development Association Kolkata benefitting 155 workers.

11th March, 2022

- Regional Institute Faridabad conducted a series of programmes in factories benefitting 187 workers
- The Diploma Certificate Awarding Function For the 39th batch students of RLI, Chennai.
- A PPE demonstration at Chennai Port Trust was carried out by Inspectorate.
- Dock Safety, Chennai. 124 workers were benefitted.
- Regional Institute Shillong conducted a programme in factory benefitting 51 workers.
- Regional Institute Kolkata conducted programmes in CREDAI member Industries Kolkata benefitting 170 workers

12th March, 2022

- A PPE demonstration at Ennore Port was carried out by Inspectorate Dock Safety, Chennai. 162 workers were benefitted
- Regional Institute Faridabad conducted a series of programmes in factories benefitting 130 workers.
- Regional Institute Kanpur conducted online programme in factories benefitting 150 workers.
- Regional Institute Kolkata conducted programmes in Bengal Chamber of Commerce & Industry members Kolkata benefitting 155 workers.

Expert Committee for the purpose of framing standards/rules under the Occupational Safety, Health and Working Conditions Code, 2020

The Occupational Safety, Health and Working Conditions Code, 2020 is a code to consolidate and amend the laws regulating the Occupational Safety, Health and Working Conditions of the persons employed in an establishment. The Code replaces 13 old central labour laws. This Code is one among the four codes for reforming the labour laws in the country.

Further, the Government of India has constituted four Expert Committees for the purpose of framing standards on provisions relating to Safety, Health and Welfare as under Section 18, 23 and 24 of the Occupational Safety, Health

and Working Conditions Code, 2020 pertaining to Factories, Dock Works, Building & Other Construction Works and Fire Safety.

The following two Expert Committees are headed by Director General, DGFASLI:

- i. Expert Committee for the purpose of framing standards/rules on provisions relating to Safety, Health and Welfare for workplaces relating to Factories, and
- ii. Expert Committee for the purpose of framing standards/rules on Occupational Safety and Health for workplaces relating to Dock Work.

Expert committee has finalized framing of standards/rules on provisions relating to Safety, Health and Welfare for workplaces relating to Factories and the same was submitted to Ministry on 28.02.2022

National Study on Major Accident Hazards Control System in Factories

National study on 'Major Accident Hazards Control System in Factories' is being conducted by the DGFASLI for the first time in India as per approved terms of reference. Details of Major Accident Hazard factories are being collected from respective Chief Inspector of Factories (CIF)/Directorate of Industrial Safety and Health (DISH) of all States/ UT's of the country. So far, details of MAH factories from 25 States/ U.T.'s have been received. The Objectives of said National study are given below:

- To understand, collect and analyse data pertaining to Major Accident Hazards Control System in Factories.
- To ensure legal compliance with respect to major components of Major Accident Hazards Control System in Factories.
- · To conduct gap analysis and to suggest measures for removing gaps and ensuring compliance.
- · To ensure best practices of safety and health at workplace in MAH factories.

International Yoga Day Celebration at Central Labour Institute, Mumbai.

International Yoga Day was celebrated at Central Labour Institute, Mumbai on 21.06.2022. Around 155 participants took part in the programme. The participants include employees from industries, CPWD workers, casual labours and out sourced employees. Further employees of DGFASLI, CLI, CPWD, CGHS, PAO and family members of employees also took part in the celebration.

Around 13 delegates from Brahma Kumari Sanstan of Mumbai branch have participated in Yoga Day celebration. Renowned speakers viz. Sh. E.V. Swaminathan and Meditation expert Mala Didi of Brahma Kumari Sanstan were invited for the benfit of the participants. They enlightened the participants on breathing exercise, positive thinking, motivation and stress management. Further the participants were provided with T- shirts and Caps bearing International Day of Yoga Stickers.



Seated with other delegates 3rd from right to left: Dr R. K Elangovan, Director General, DGFASLI in the YOGA Day celebration.



HEAT STRESS

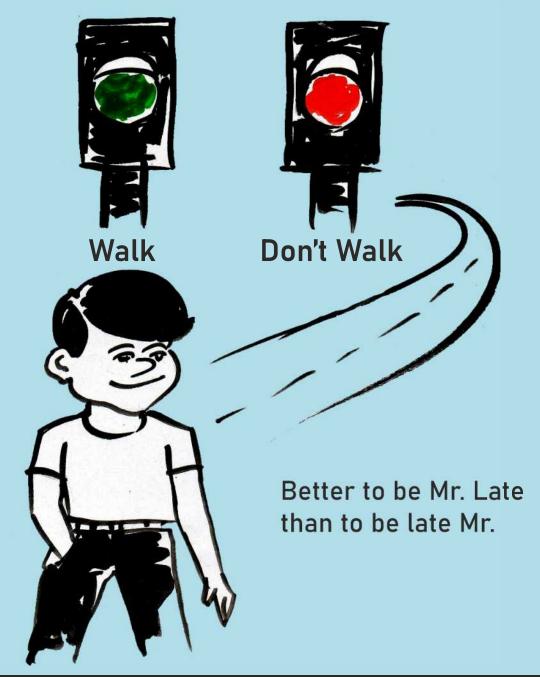






Never Cross Red Signal









Stay Alert - Do not get hurt Accident hurt - Safety does not

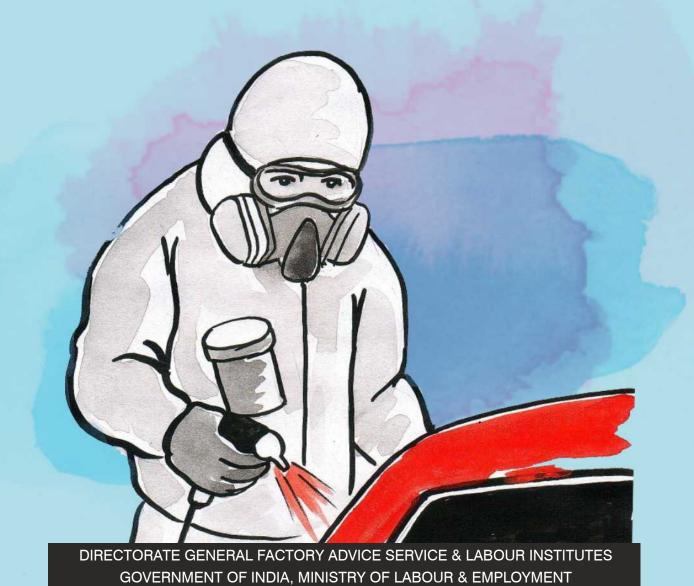




Your Health is the Greatest Wealth



Wear Personal Protective Equipment







"No Loose Clothing while Operating Rotary Machinery"







"Train The Workers to Handle Chemical Drum Carefully"



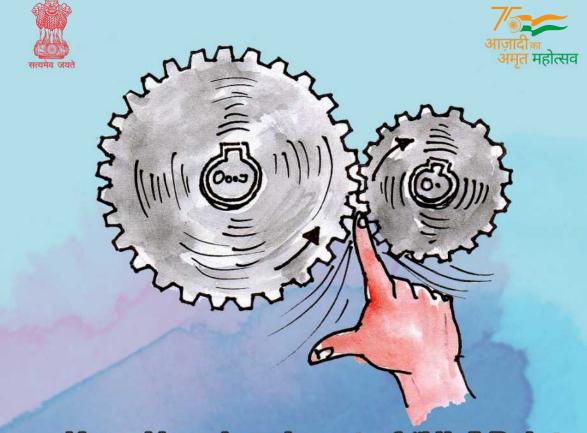


"Always Wear PPE's

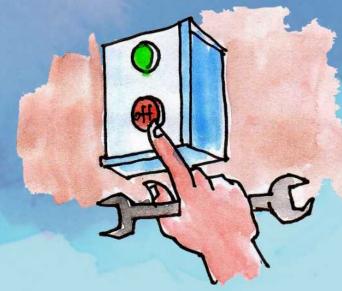


while HANDLING CHEMICALS"





Keep Your hands out of "Nip" Points







EXCAVATION SAFETY

Slope, Shore and Shield trench walls to prevent collapses.



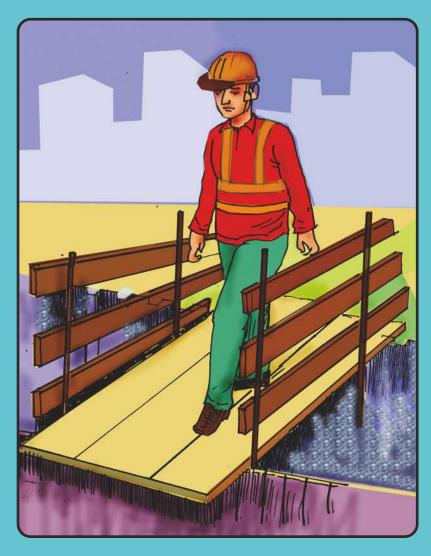




EXCAVATION SAFETY

Proper access avoids falling into an excavation.

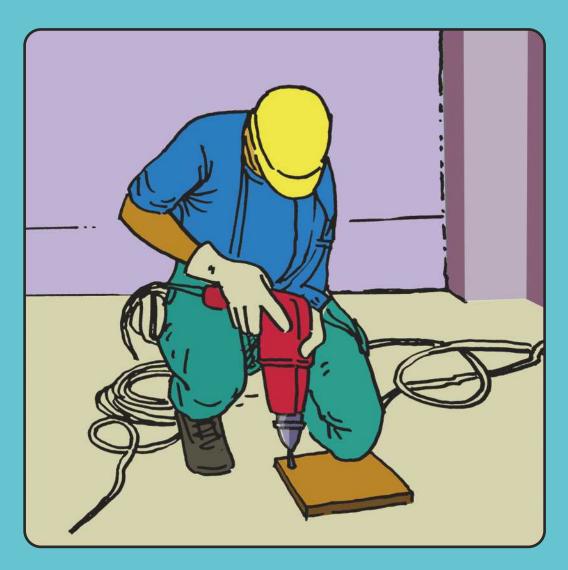
Watch your steps while walking on planks.







Protect yourself from hand tool hazards







SAFETY IN WORKING AT HEIGHT

Never shift scaffolding while man on board.

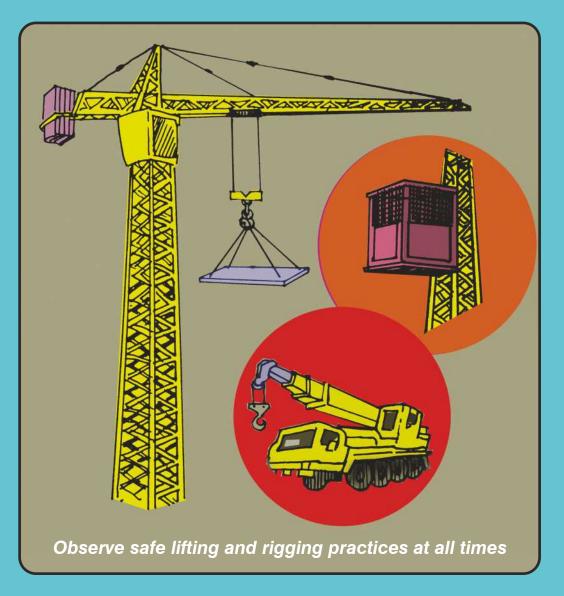
Keep all clear while shifting/ moving scaffolding.







Safety while using various types of Lifting Appliances and Loose

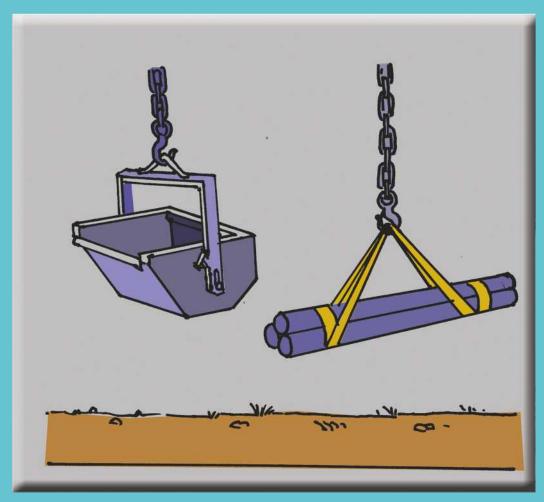






Follow safe lifting and rigging practices.

Ensure the use of suitable loose gears slings for material handling and safety latch before lifting load







Falling from ladder can kill. Don't overreach

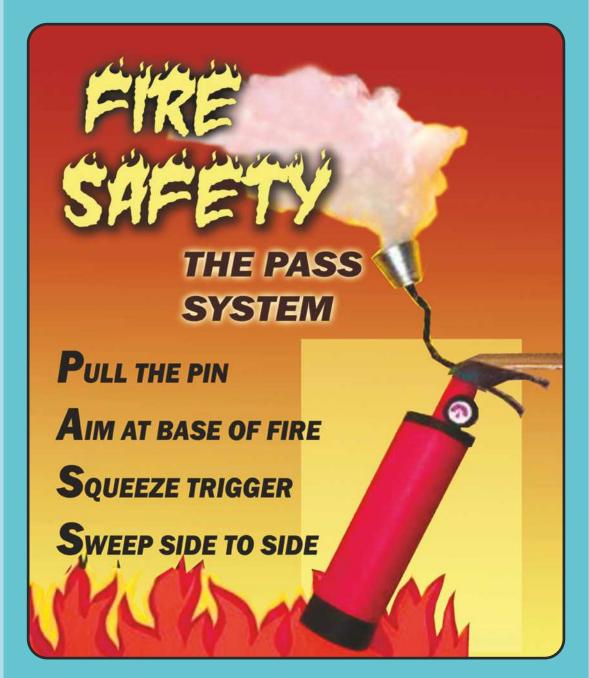
Always maintain 3 points of contact on the ladder.

Avoids shortcuts while working at height.









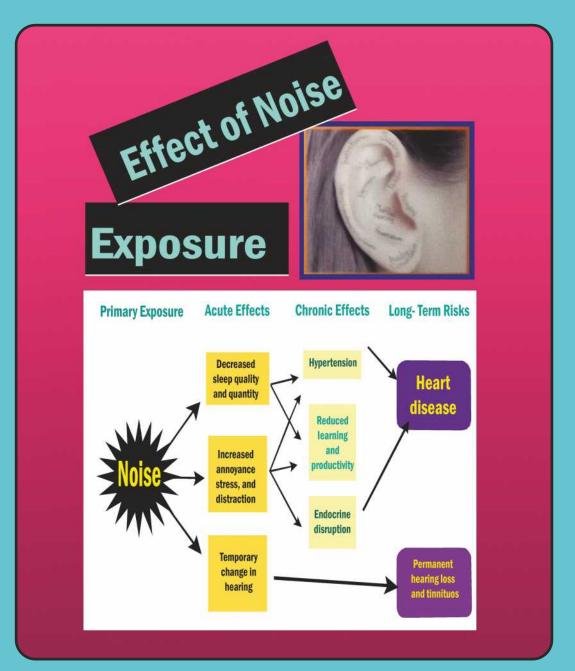






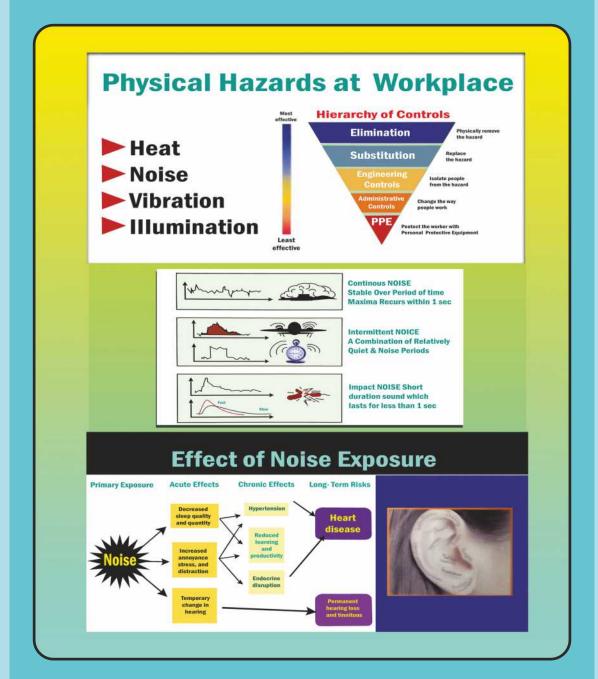












12.0 TRAINING PROGRAMMES ON OSH

Online Training Programme conducted by DGFASLI Organization

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
1.	Hazards and Safety Provisions Working at Height	RLI, Faridabad	Industrial Safety Division	3rd January, 2022 (10.00 – 13.00 hrs.)	Half day online	1	1
2.	Safety and Health Management In Industries	RLI, Faridabad	Industrial Safety Division	3rd January, 2022 (14.30 – 17.30 hrs.)	Half day online	1	1
3.	Role And Responsibility of Safety Officer	RLI, Kolkata	Industrial Safety Division	4th January, 2022 (14.30 – 17.30 hrs.)	Half day online	3	2
4.	Occupational Health and Safety Audit	RLI, Faridabad	Industrial Safety Division	5th January, 2022 (10.00 – 13.00 hrs.)	Half day online	5	5
5.	Transport Equipment Hazard and Its Prevention in Industries and Major Ports	RLI, Chennai	Industrial Safety Division	6th January, 2022 (10.00 – 13.00 hrs.)	Half day online	9	2
6.	PPE - Foot and Leg Protection	CLI, Mumbai	NRTL Division	6th January, 2022 (10.00 – 13.00 hrs.)	Half day online	4	4
7.	Importance of Management Information System In She	RLI, Kolkata	Industrial Safety Division	6th January, 2022 (14.30 – 17.30 hrs.)	Half day online	1	1
8.	Safe Handling of Chlorine Gas	RLI, Kolkata	Industrial Hygiene Division	7th January, 2022 (14.30 – 17.30 hrs.)	Half day online	2	2
9.	Management of Chemical Hazards In Industry	CLI, Mumbai	NRTL Division	12th January, 2022 (10.00 – 13.00 hrs.)	Half day online	7	3
10	Ergonomics In Designing of Workstation	CLI, Mumbai	Industrial Hygiene Division	13th January, 2022 (10.00 – 13.00 hrs.)	Half day online	2	2
11.	Occupational Injury and Illness Classification System	RLI, Kanpur	Industrial Medicine Division	13th January, 2022 (14.30 – 17.30 hrs.)	Half day online	5	5
12.	Personal Protective Equipment	RLI, Kolkata	Industrial Hygiene Division	17th January, 2022 (14.30 – 17.30 hrs.)	Half day online	2	2
13.	Fall Prevention and Protection at Workplace	RLI, Shillong	Industrial Safety Division	18th January, 2022 (10.00 – 13.00 hrs.)	Half day online	5	4

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
14.	Accident Causation and Analysis	RLI, Chennai	Industrial Safety Division	18th January, 2022 (14.30 – 17.30 hrs.)	Half day online	4	3
15	Accident Reporting and Investigation	RLI, Faridabad	Industrial Safety Division	18th January, 2022 (10.00 – 13.00 hrs.)	Half day online	4	4
16.	Monitoring and Control Of Physical Hazards	CLI, Mumbai	Industrial Safety Division	18th January, 2022 (14.30 – 17.30 hrs.)	Half day online	1	1
17.	OHS Policy	RLI, Kolkata	Industrial Hygiene Division	19th January, 2022 (10.00 – 13.00 hrs.)	Half day online	2	2
18.	Safeguarding of Machines	RLI, Faridabad	Industrial Safety Division	19th January, 2022 (14.30 – 17.30 hrs.)	Half day online	9	2
19.	Occupational Health and Safety Management System	RLI, Kanpur	Industrial Medicine Division	19th January, 2022 (10.00 – 13.00 hrs.)	Half day online	6	6
20.	Accident Prevention and Loss Control Programme	CLI, Mumbai	Industrial Safety Division	19th January, 2022 (14.30 – 17.30 hrs.)	Half day online	1	1
21.	Work Environment Monitoring in Industries	CLI, Mumbai	Industrial Hygiene Division	20th January, 2022 (14.30 – 17.30 hrs.)	Half day online	2	2
22.	Injury Prevention during Manual Handling	RLI, Kolkata	Industrial Hygiene Division	20th January, 2022 (14.30 – 17.30 hrs.)	Half day online	14	3
23.	Safety Inspection at Work Site	RLI, Chennai	Industrial Safety Division	20th January, 2022 (10.00 – 13.00 hrs.)	Half day online	3	3
24.	Occupational Safety and Health Management System in Industries	RLI, Faridabad	Industrial Safety Division	21st January, 2022 (10.00 – 13.00 hrs.)	Half day online	5	5
25.	Effective Participation for Promotion of Safety, Health and Welfare Culture in Industries	RLI, Faridabad	Industrial Safety Division	21st January, 2022 (14.30 – 17.30 hrs.)	Half day online	16	4
26.	Importance of Safety Audit in Industries	RLI, Kolkata	Industrial Hygiene Division	21st January, 2022 (10.00 – 13.00 hrs.)	Half day online	24	4
27.	Safety Audit	RLI, Kanpur	Industrial Safety	21st January, 2022 (14.30 – 17.30 hrs.)	Half day online	7	7

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
			Division				
28.	Occupational Hazards and their Control at Workplace	CLI, Mumbai	Industrial Safety Division	21st January, 2022 (10.00 – 13.00 hrs.)	Half day online	2	2
29.	Safety in Work at Height	RLI, Kolkata	Industrial Safety Division	24th January, 2022 (10.00 – 13.00 hrs.)	Half day online	7	6
30.	Measures for Prevention and Control of Major Accidents in Factories	CLI, Mumbai	Industrial Safety Division	24th January, 2022 (14.30 – 17.30 hrs.)	Half day online	5	5
31.	Work Permit System	RLI, Chennai	Industrial Safety Division	25th January, 2022 (14.30 – 17.30 hrs.)	Half day online	5	5
32.	Major Accident Hazards Control in Factories	CLI, Mumbai	Major Accident Hazard Control Division	25th January, 2022 (14.30 – 17.30 hrs.)	Half day online	24	6
33.	Safety Measures in Pressure Plant and Vessels	FAS Division	FAS Division	25th January, 2022 (14.30 – 17.30 hrs.)	Half day online	2	2
34.	Safety In Working with Machinery	RLI, Kanpur	Industrial Safety Division	25th January, 2022 (14.30 – 17.30 hrs.)	Half day online	3	3
35.	Accident Reporting and Investigation	RLI, Faridabad	Industrial Safety Division	27th January, 2022 (10.00 - 13.00 Hrs.)	Half day online	4	4
36.	Understanding Industrial Dust Exposure at Workplaces	RLI, Chennai	Industrial Hygiene Division	27th January, 2022 (10.00 – 13.00 hrs.)	Half day online	4	4
37.	OH for Paramedics	RLI, Chennai	Industrial Medicine Division	27th January, 2022 (14.30 – 17.30 hrs.)	Half day online	6	6
38.	Safety in Mechanical Handling and Storing of Materials	CLI, Mumbai	Industrial Safety Division	27th January, 2022 (10.00 - 13.00 hrs)	Half day online	1	1
39.	Evaluation of Chemical Hazards at Chemical Works	RLI, Kolkata	Industrial Hygiene Division	28th January, 2022 (10.00 – 13.00 hrs.)	Half day online	2	2
40.	System Reliability and Safety Analysis at Industries	RLI, Chennai	Industrial Safety Division	28th January, 2022 (14.30 – 17.30 hrs.)	Half day online	3	3

SI.No.	Name of	Institute	Division	Date	Duration /Mode	No.	No. of Organizati
	Programme				/iwode	of Participa nts	on
41.	Safety In Handling of Hazardous Chemicals	RLI, Chennai	Industrial Safety Division	28th January, 2022 (10.00 – 13.00 hrs.)	Half day online	3	3
42.	Onsite Emergency Planning in Industries	CLI, Mumbai	Major Accident Hazard Control Division	28th January, 2022 (10.00 - 13.00 hrs)	Half day online	9	5
43.	Accident and Dangerous Occurrences Under The Factories Act, 1948	FAS Division	FAS Division	28th January, 2022 (10.00 - 13.00 hrs)	Half day online	3	2
44.	Excavation Safety at Construction Site	RLI, Chennai	Industrial Safety Division	28th January, 2022 (14.30 – 17.30 hrs.)	Half day online	2	2
45.	Evaluation of Chemical Hazards at Chemical Works	RLI, Kolkata	Industrial Safety Division	31st January, 2022 (10.00 – 13.00 hrs.)	Half day online	3	2
46.	Safe Use of Lifting Appliances and Loose Gears at Construction Sites	RLI, Chennai	Industrial Safety Division	31st January, 2022 (14.30 – 17.30 hrs.)	Half day online	6	5
47.	Occupational Safety and Health	RLI, Kolkata	Industrial Safety Division	31st January, 2022 (10.00 – 13.00 hrs.)	Half day online	4	4
48.	Evaluation of Workplace Chemical Hazards	RLI, Kolkata	Industrial Hygiene Division	31st January, 2022 (10.00 – 13.00 hrs.)	Half day online	3	3
49.	Effective Toolbox Talks	RLI, Kolkata	Industrial Safety Division	1st February, 2022 (14.30 – 17.30 hrs.)	Half day online	5	4
50.	Offsite Chemical Emergency Planning	CLI, Mumbai	Major Accident Hazard Control Division	1st February, 2022 (10.00 – 13.00 hrs.)	Half day online	6	2
51.	Evaluation and Monitoring of Illumination at Workplace	RLI, Kolkata	Industrial Hygiene Division	2nd February, 2022 (10.00 – 13.00 hrs.)	Half day online	2	2
52.	Industrial Gas Cylinder - Hazards and its Prevention	RLI, Shillong	Industrial Safety Division	2nd February, 2022 (14.30 – 17.30 hrs.)	Half day online	5	4
53.	Hazard Identification and	CLI, Mumbai	Industrial Safety	4th February, 2022 (14.30 – 17.30 hrs.)	Half day online	4	4

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
	Risk Assessment in Industries		Division				
54.	Personal Protection Equipment - Fall Protection	CLI, Mumbai	NRTL Division	4th February, 2022 (14.30 – 17.30 hrs.)	Half day online	7	7
55.	Basic Crane and Rigging Safety	RLI, Chennai	Industrial Safety Division	7th February, 2022 (10.00 – 13.00 hrs.)	Half day online	9	9
56.	Safe Work Procedure at Workplace	RLI, Kolkata	Industrial Safety Division	7th February, 2022 (10.00 – 13.00 hrs.)	Half day online	9	4
57.	Health Surveillance Occupational Diseases at the Workplace	CLI, Mumbai	Industrial Medicine Division	7th February, 2022 (14.30 – 17.30 hrs.)	Half day online	2	2
58.	Assessment of Work Environment Chemical Exposure	CLI, Mumbai	NRTL Division	8th February, 2022 (10.00 – 13.00 hrs.)	Half day online	4	4
59.	Role of Safety Officer in Safety Management System	RLI, Kolkata	Industrial Safety Division	8th February, 2022 (14.30 – 17.30 hrs.)	Half day online	7	3
60.	Statutory Provision related to Welfare under The Factories Act, 1948	FAS Division	FAS Division	9th February, 2022 (10.30 – 13.30 hrs.)	Half day online	9	9
61.	Safety Leadership in Industries	RLI, Chennai	Industrial Safety Division	9h February, 2022 (10.00 – 13.00 hrs.)	Half day online	9	4
62.	PSM AUDIT	RLI, Chennai	Industrial Safety Division	10th February, 2022 (10.00 – 13.00 hrs.)	Half day online	8	7
63.	Design and Implementation of Safety Management System	RLI, Faridabad	Industrial Safety Division	10th February, 2022 (10.00 – 13.00 hrs.)	Half day online	3	3
64.	Plant Safety Inspection	RLI, Kolkata	Industrial Safety Division	10th February, 2022 (10.00 – 13.00 hrs.)	Half day online	3	2
65.	Occupational Safety and Health at Building And Other Construction Works	RLI, Shillong	Industrial Safety Division	10th February, 2022 (14.30 – 17.30 hrs.)	Half day online	2	2
66.	Hazard Identification and Risk Assessment At Construction Site	RLI, Chennai	Industrial Safety Division	10th February, 2022 (14.30 – 17.30 hrs.)	Half day online	3	3

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
67.	Prevention and Control of Hazards in Coal Handling Factories	RLI, Kolkata	Industrial Safety Division	11th February, 2022 (10.00 – 13.00 hrs.)	Half day online	4	2
68.	Management of Physical and Chemical Hazards in Industries	CLI, Mumbai	Industrial Hygiene Division	11th February, 2022 (10.00 – 13.00 hrs.)	Half day online	5	5
69.	Occupational Safety, Health and Working Conditions in Industries	RLI, Kanpur	Industrial Safety Division	11th February, 2022 (14.30 – 17.30 hrs.)	Half day online	3	2
70.	Safety Audit	RLI, Faridabad	Industrial Safety Division	11th February, 2022 (14.30 – 17.30 hrs.)	Half day online	13	12
71.	Internal Safety Audit in Industries	RLI, Kolkata	Industrial Safety Division	15th February, 2022 (10.00 – 13.00 hrs.)	Half day online	13	11
72.	Fire Prevention and Control Measures in Industries	RLI, Kolkata	Industrial Safety Division	15th February, 2022 (14.30 – 17.30 hrs.)	Half day online	8	5
73.	Prevention of Eye Injury and Illness at Workplace	RLI, Kanpur	Industrial Hygiene Division	15th February, 2022 (14.30 – 17.30 hrs.)	Half day online	6	6
74.	Safety with Wire Ropes	RLI, Chennai	Industrial Safety Division	16th February, 2022 (10.00 -13.00 hrs.)	Half day online	2	1
75.	Safety Provisions under the Factories Act, 1948	RLI, Faridabad	Industrial Safety Division	16th February, 2022 (10.00 – 13.00 hrs.)	Half day online	9	7
76.	Accident Reporting, Investigation and Analysis	RLI, Faridabad	Industrial Safety Division	16th February, 2022 (14.30 – 17.30 hrs.)	Half day online	10	6
77.	Mechanical Hazards and their Prevention and Control Measures	CLI, Mumbai	Industrial Safety Division	16th February, 2022 (14.30 – 17.30 hrs.)	Half day online	3	2
78.	Applied Ergonomics	RLI, Kolkata	Industrial Safety Division	17th February, 2022 (10.00 – 13.00 hrs.)	Half day online	3	2
79.	Occupational Health Practices for Nurses and Medical	RLI, Kanpur	Industrial Medicine Division	17th February, 2022 (10.00 – 13.00 hrs.)	Half day online	31	20

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
	Assistants Working in Health Centre						
80.	Safety in Material Handling	RLI, Faridabad	Industrial Safety Division	17th February, 2022 (10.00 – 13.00 hrs.)	Half day online	2	2
81.	SHE Policy and Safety Provisions under the Factories Act, 1948	RLI, Faridabad	Industrial Safety Division	17th February, 2022 (14.30 – 17.30 hrs.)	Half day online	3	2
82.	Management of Heat Stress and Ventilation in Industries	CLI, Mumbai	Industrial Hygiene Division	18th February, 2022 (10.00 – 13.00 hrs.)	Half day online	3	3
83.	Occupational Safety and Health Audit in Industries	CLI, Mumbai	Industrial Safety Division	18th February, 2022 (14.30 – 17.30 hrs.)	Half day online	9	7
84.	Occupational Safety and Health in Metal Industry	RLI, Kolkata	Industrial Safety Division	21st February, 2022 (10.00 – 13.00 hrs.)	Half day online	6	6
85.	Prevention and Control of Hazards in Construction Industries	RLI, Kolkata	Industrial Safety Division	21st February, 2022 (10.00 – 13.00 hrs.)	Half day online	1	1
86.	Management of Hazardous Substances	CLI, Mumbai	Major Accident Hazard Control Division	22nd February, 2022 (10.00 - 13.00 hrs)	Half day online	28	6
87.	Electrical Safety	CLI, Mumbai	Industrial Safety Division	23rd February, 2022 (14.30 – 17.30 hrs.)	Half day online	20	4
88.	Safety in Material Handling	RLI, Kanpur	Industrial Safety Division	25th February, 2022 (10.00 – 13.00 hrs.)	Half day online	37	3
89.	Injuries Prevention and Loss Control at Work Places	RLI, Kanpur	Industrial Safety Division	25th February, 2022 (14.30 – 17.30 hrs.)	Half day online	23	1
90.	Accident Reporting and Investigation	RLI, Kolkata	Industrial Hygiene Division	28th February, 2022 (10.00 – 13.00 hrs.)	Half day online	20	13
91.	Hazards and its Preventive Measures	RLI, Kolkata	Industrial Hygiene Division	4th March, 2022 (14.30 – 17.30 hr.)	Half day online	30	21
92.	Safety with Scaffold	RLI, Kolkata	Industrial Safety Division	7th March, 2022 (14.30 17.30 hrs.)	Half day online	40	15

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
93.	OHS with Confined Space	CLI, Mumbai	NRTL Division	10th March, 2022 (10.00 – 13.00 hrs.)	Half day online	23	7
94.	Safe with Hand and Power Tools	RLI, Kolkata	Industrial Safety Division	10th March, 2022 (10.00 – 13.00 hrs.)	Half day online	21	9
95.	Occupational Health Hazards	RLI, Kolkata	Industrial Safety Division	11th March, 2022 (10.00 – 13.00 hrs.)	Half day online	29	22
96.	Electrical Safety at Construction Industry	RLI, Kolkata	Industrial Safety Division	17th March, 2022 (10.00 – 13.00 hrs.)	Half day online	40	23
97.	Medical Response to Fire Disasters Explosions	RLI, Kolkata	Industrial Safety Division	22nd March, 2022 (10.00 – 13.00 hrs.)	Half day online	30	22
98.	Disaster Management in Chemical Industries	CLI, Mumbai	Major Accident Hazard Control Division	22nd March, 2022 (10.00 – 13.00 hrs.)	Half day online	24	13
99.	Safe Work Procedure at Workplace	RLI, Kolkata	Industrial Safety Division	23rd March, 2022 (10.00 – 13.00 hrs.)	Half day online	32	13
100.	Accident Reporting, Investigation and Analysis	RLI, Faridabad	Industrial Safety Division	24th March, 2022 (10.00 – 13.00 hrs.)	Half day online	14	12
101.	Basic Occupational Health Services in Industries And Ports	RLI, Kanpur	Industrial Medicine Division	24th March, 2022 (10.00 – 13.00 hrs.)	Half day online	21	
102.	Chemical Industry	CLI, Mumbai	Major Accident Hazard Control Division	25th March, 2022 (10.00 – 13.00 hrs.)	Half day online	24	9
103.	Safety in Manual Handling and Storage	RLI, Kolkata	Industrial Safety Division	25th March, 2022 (14.30 – 17.30 hrs.)	Half day online	20	17
104.	Ware House Safety	RLI, Kolkata	Industrial Safety Division	28th March, 2022 (10.00 – 13.00 hrs.)	Half day online	28	12
105.	Occupational Safety Health in Thermal Power Plants	RLI, Kolkata	Industrial Safety Division	29th March, 2022 (10.00 – 13.00 hrs.)	Half day online	43	18
106.		RLI, Kolkata	Industrial Safety Division	29th March, 2022 (14.30 – 17.30 hrs.)	Half day online	28	14
107.	Role and Responsibilities of Health	RLI, Kanpur	Industrial Medicine Division	30th March, 2022 (10.00 – 13.00 hrs.)	Half day online	24	20

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa	No. of Organizati on
	Professionals in Industrial Emergency Preparedness					nts	
108.	Safety Audit	RLI, Chennai	Industrial Safety Division	30th March, 2022 (10.00 – 13.00 hrs.)	Half day online	42	30
109.	Safety in Confined Spaces	RLI, Kolkata	Industrial Safety Division	30th March, 2022 (14.30 – 17.30 hrs.)	Half day online	23	11
110.	Offsite Chemical Emergency Planning	CLI Mumbai	Major Accident Hazard Control Division	19th April, 2022 (10.00 - 13.00 hrs)	Half day online	24	11
111.	Major Accident Hazards Control in Factories	CLI Mumbai	Major Accident Hazard Control Division	22nd April, 2022 (10.00 – 13.00 hrs.)	Half day online	21	8
112.	Role of Effective participation in improving Safety & Health at workplace	CLI Mumbai	Staff Training/ Productivity Division	26 th -28 th , April,2022	Offline	24	2
113.	Enhancing Safety through effective leadership and communication	RLI Faridabad	Industrial Safety Division	28th April, 2022 (10.00 – 13.00 hrs.)	Half day online	38	6
114.	Occupational Safety & Health issues of casual workers working in construction and domestic sectors	DGFASLI	DG office	1 st May, 2022	Full day	100	
115.	Safety in scaffolding	RLI Kolkata		11 th -13 May,2022	Offline	7	4
116.	Slings and Hoisting Safety in Industries and Ports	RLI Chennai	Industrial Safety Division	18th May, 2022 (14.30 – 17.30 hrs.)	Half day online	26	6
117.	Prevention of Occupational Lung Diseases and ILO Radiography System	RLI Kanpur	Industrial Medicine Division	23rd May, 2022 (10.00 – 13.00 hrs.)	Half day online	20	18
118.	Effective participation Skills in SHE	CLI Mumbai	Staff Training/ Productivity Division	25 th -27 th May,2022	Offline	41	2
119.	Management of Hazardous	CLI Mumbai	Major Accident	27th May, 2022 (10.00 – 13.00 hrs.)	Half day online	26	6

SI.No.	Name of Programme	Institute	Division	Date	Duration /Mode	No. of Participa nts	No. of Organizati on
	Substances		Hazard Control Division				
120.	Hazard Identification, Risk Assessment and Control Measures	RLI Kolkata	Industrial Safety Division	31st May, 2022 (10.00 – 13.00 hrs.)	Half day online	27	20
121.	Fork Lift Safety	RLI Chennai	Industrial Safety Division	31st May, 2022 (10.00 – 13.00 hrs.)	Half day online	22	18
122.	Safety with hand and Portable power tools at work places	RLI Chennai	Industrial Safety Division	6th June, 2022 (10.00 – 13.00 hrs.)	Half day online	20	14
123.	Ergonomics and Safe Manual Material Handling	RLI Chennai	Industrial Safety Division	14th June, 2022 (10.00 – 13.00 hrs.)	Half day online	23	13
124.	Major Accident Hazards Control in Factories	CLI Mumbai	Major Accident Hazard Control Division	15 th -17 June,2022	Offline	19	17
125.	Industrial Safety Management to reduce injuries & accidents at workplace	CLI Mumbai	Staff Training/ Productivity Division	21th -23 rd June,2022	Offline	10	6
126.	Management of work environmental hazards in Industries	CLI Mumbai	Industrial Hygiene Division	27th June, 2022 (10.00 – 13.00 hrs.)	Half day online	19	8
127.	Emergency Preparedness in Chemical Industries	CLI Mumbai	Major Accident Hazard Control Division	30th June, 2022 (10.00 – 13.00 hrs.)	Half day online	24	13
128.	Technique of Accident Investigation and Report writing for Manufacturing	RLI Chennai	Industrial Safety Division	30th June, 2022 (10.00 – 13.00 hrs.)	Half day online	61	6
129.	Role and Functions of Safety Committee	RLI Faridabad	Industrial Safety Division	30th June, 2022 (10.00 – 13.00 hrs.)	Half day online	20	6
130.	Accident Reporting Investigation and Analysis	RLI Kolkata	Industrial Safety Division	30th June, 2022 (14.30 – 17.30 hrs.)	Half day online	20	9

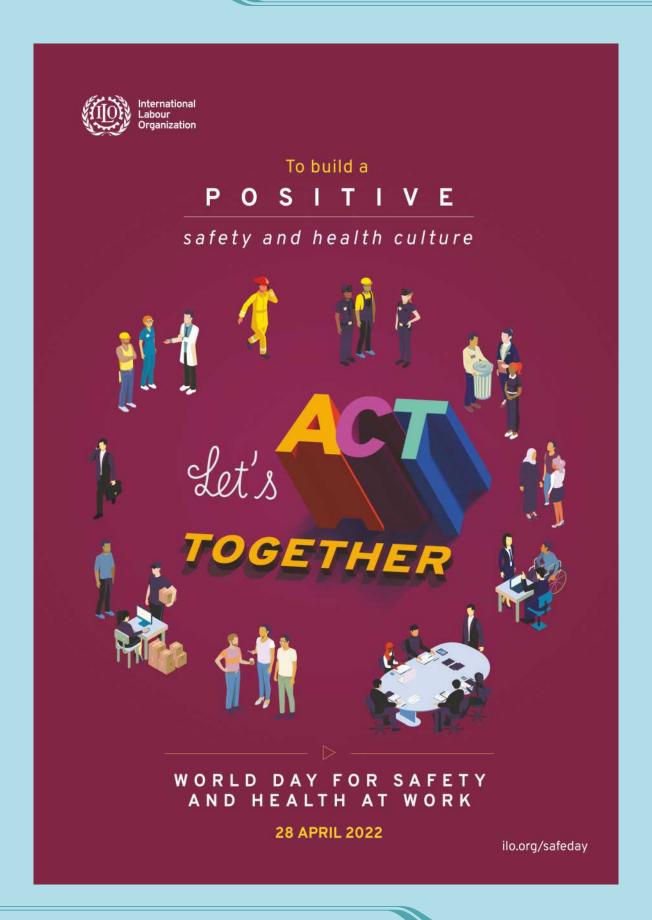
For any queries or information, please write to cli-training@dgfasli.nic.in

Forthcoming International Events on OSH (July- December, 2022)

S.No.	Name	Date	Place	Sponsored Organisation	Contact Detail
1.		28th -29th July, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
2.	Guide to Managing Occupational Safety and Health	29th Jul, 2022	Digital Mode		https://osha.europa. eu/en/oshevents
3.	Exploring the impact of remote working on OSH management	30th-31st July, 2022	Kardjal y, Bulgari a	Confederation of Employers and Industrialists in Bulgaria	https://osha.europa. eu/en/oshevents
4.		8th -9th Aug, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
5.	ICIES 2022- International Conference on Industrial Ergonomics and Safety	8th-9th Aug, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
6.	ICISSA 2022- International Conference on Industrial Safety Systems and Automation	8th-9th Aug, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
7.	ICDISSGR 2022- International Conference on Developing Industrial Safety Systems and General Requirements	16th-17th Aug, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
8.	Safety+ An Integrated Safety & Health Management Symposium	23rd -25th Aug, 2022	Walter E Washin gton Conve ntion Center, Washin gton	The Voluntary Protection Program Participants' Association	https://www.vpppa. org

S.No.	Name	Date	Place	Sponsored Organisation	Contact Detail
9.	OS+H Asia 2022	14th -16th Sep, 2022	Suntec -1 Raffles Blvd, Singap ore	Messe Duesseldorf Asia Pte Ltd, Singapore	https://www.2exhibit ions.com/trade- fair/osh-asia
10.	Central Oregon Occupational Safety & Health Conference	19th -20th Sep, 2022	Bend, Oregon	COSHA & OSHA- Oregon	https://osha.oregon. gov
11.	World Summit on Occupational Health and Public Safety	19th -20th Sep, 2022	Dublin, Ireland	Conference Series LLC Ltd, London	https://occupational health.conferences eries.com/
12.	ICISRM 2022- International Conference on Industrial Safety and Risk Management	22nd-23rd Sep, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
13.	ICISRMIE 2022- International Conference on Industrial Safety, Risk Management and Industrial Engineering	22nd -23rd Sep, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
14.	11th International Conference – Working on Safety 2022	25th-28th Sep, 2022	Olhao, Portug al	Workingonsafety.n et	https://wos2022.net /
15.	20th International Conference on Environmental Toxicology and Ecological Risk Assessment	17th-18th Oct, 2022	Webin ar	Conference Series LLC Ltd, London	https://www.confere nceseries.com
16.	Southern Oregon Occupational Safety & Health Conference	18th -20th Oct, 2022	Digital Mode	ASSP	https://www.soassp. org/conference
17.	7th EUROSHNET Conference: Artificial intelligence meets safety and health at work	20th Oct, 2022	Paris, France	European Occupational Safety and Health Network (EUROSHNET)	https://www.eurosh net.eu/conference- 2022
18.	ICCPSIH 2022- International Conference on Chemical Process Safety and Industrial Hygiene	10th-11th Nov, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
19.	ICOES 2022- International Conference on Occupational Ergonomics and	14th-15th Nov, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org

S.No.	Name	Date	Place	Sponsored Organisation	Contact Detail
	Safety				
20.	Healthy Workplaces Summit 2022	14th-15th Nov, 2022	Bilbao, Spain	EU-OSHA	https://osha.europa. eu/en/oshevents
21.	ICISISS 2022- International Conference on Industrial security and Industrial Safety Systems	18th -19th Nov, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org
22.	Western Pulp, Paper and Forest Products Safety & Health Conference	29th Nov – 2nd Dec, 2022	Portlan d, Oregon	Department of Consumer and Business Services Oregon(DCBS)	https://osha.oreg on.gov
23.	ICIPASFS 2022- International Conference on Industrial Process Automation Systems and Functional safety	9th-10th Dec, 2022	Digital Mode	World Academy of Science, Engineering and Technology (Waset)	https://waset.org



LIST OF OFFICES OF INSPECTORATE DOCK SAFETY (IDS)

SI. No.	Inspectorate Dock Safety office address	Office Tel. / Fax No. and email ID
1.	Chief Inspectorate Dock Safety, Mumbai N.S. Mankikar Marg, Sion, Mumbai - 400022	Office Tel.: 022-24060609 022-24074358 Email : docks@dgfasli.nic.in
2.	Inspectorate Dock Safety, Mumbai MbPT OSC Bldg., 3 rd Floor, Opp GPO, P. D'Mello Road, Mumbai- 400038	Office Tel.: 022 – 22692180 66565511/58 Fax: 022-22613391 Email : idsmumbai@dgfasli.nic.in
3.	Inspectorate Dock Safety, Kandla Near Bunder Gate, Kandla Port, New Kandla, Post Box No.18,Dist Kutch, Pin – 370210, Gujarat.	Office Tel.: 02836 - 270249 Fax: 02836 - 270249 Email: idskandla@dgfasli.nic.in
4.	Inspectorate Dock Safety, Mormugao Civil Maintenance Office Building Mormugao Port Trust, Headland Sada, Mormugao, Goa- 403804.	Office Tel.: 0832-2520752 Fax: 0832 – 2520752 Email : idsmormugao@dgfasli.nic.in
5.	Inspectorate Dock Safety, Kolkata Nizam Palace, 1 st floor, 2 nd M.S.O. Bldg. 234/4 A.J.C. Bose Road, Kolkata-700020.	Office Tel.: 033-2830718/22830719 Fax: 033-22830718 Email : idskolkata@dgfasli.nic.in
6.	Inspectorate Dock Safety, Paradip Badapadia, Post Box NO.126 Paradip – 754142, Orissa.	Office Tel.: 06722-222413 Fax: 06722- 222413 Email: idsparadip@dgfasli.nic.in
7.	Inspectorate Dock Safety, Visakhapatnam Ex. D.L.B. Bldg., 5 th Floor, Visakhapatnam Port Area, Visakhapatnam-530 035.	Office Tel.: 0891-2563857 Fax no.: 0891-2563857 Email: idsvizag@dgfasli.nic.in
8.	Inspectorate Dock Safety, Chennai 3 rd Floor, Anchor Gate Bldg., Rajaji Salai, Chennai – 600 001.	Office Tel.: 044- 25220888, 25246419 Fax: 044-25220888 Email : idschennai@dgfasli.nic.in
9	Inspectorate Dock Safety, Tuticorin Tuticorin Port Trust, Admin. Office Bldg. Harbour Estate, Tuticorin – 628004.	Office Tel.:0461-2352372 Fax: 0461- 2352372 Email: idstuticorin@dgfasli.nic.in
10.	Inspectorate Dock Safety, Kochi C.D.L.B. Dispensary Bldg., G.V.Ayyar Road, Willington Island, Cochin – 682 003.	Office Tel.: 0484-2666532 Fax: 0484-2666532 Email : ids.cochin@dgfasli.nic.in
11.	Inspectorate Dock Safety, New Mangalore New Mangalore Port, Panambur, New Mangalore – 575010.	Office Tel.: 0824-2407781 Fax: 0824- 2407781 E-mail : idsmangalore@dgfasli.nic.in
12.	Inspectorate Dock Safety, Navi Mumbai Jawaharlal Nehru Port, P.O.C. Canteen Bldg., Ground Floor, Sheva, Navi Mumbai – 400 707.	Office Tel.: 022-24060552 Fax: 022-22623391 Email: idsjnpt@dgfasli.nic.in

LOCATION MAP OF DGFASLI



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Regional Labour Institute, Sarvodaya Nagar, Kanpur 208005 Tel No.: 91-512-2218691/92 Fax: 0512-2215112 E-mail: rli_kanpur@dgfasli.nic.in



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