

OCCUPATIONAL HEALTH

PART II



Dept. of Community Medicine

OVERVIEW

- Introduction
- Ergonomics
- Measures for Health Promotion of Workers
- Prevention of Occupational Diseases
- Legislations
- Social Security
- Unorganised Sector
- OHS in India
- Challenges



OCCUPATIONAL MEDICINE

According to WHO :

“That branch of Community Medicine, which deals with the study of Health promotion, health protection & maintenance of highest degree of physical, mental & social well-being of workers in all occupations”

HEALTH OF WORKER

Health of the worker is influenced by 3 factors;

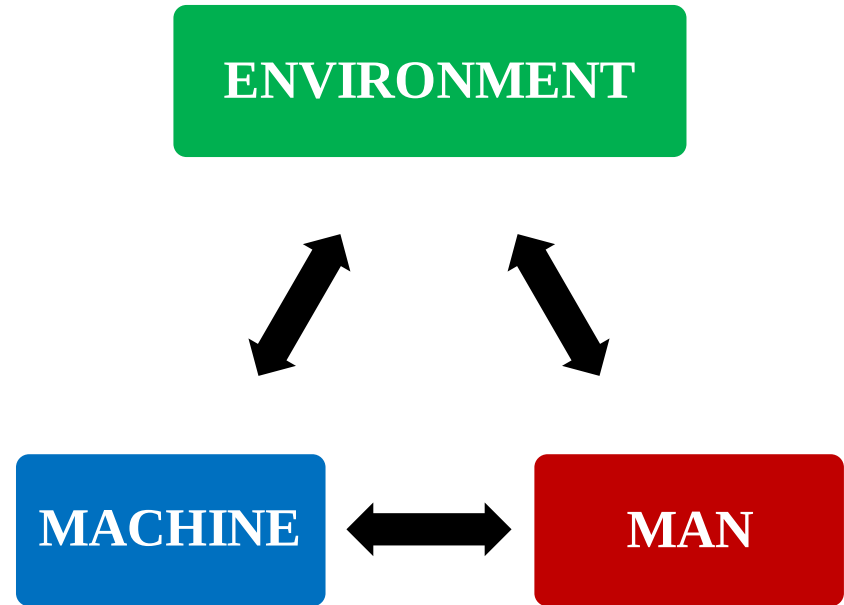
- 1.Occupational (working) environment
- 2.Domestic environment
- 3.Social security & Welfare measures

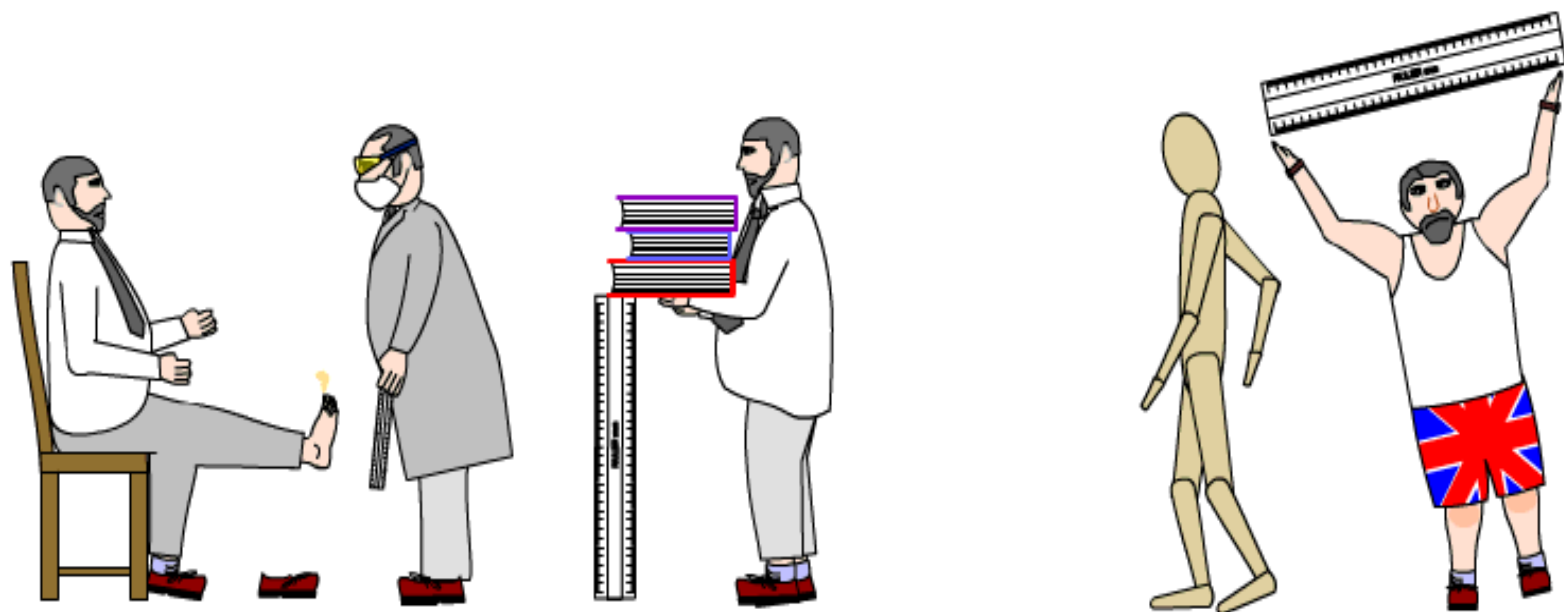
Occupational environment

The sum of external conditions and influences which prevail at the place of work and which have a bearing on the health of the working population

OCCUPATIONAL / WORKING ENVIRONMENT

- Man & Machine
- Man & Environment
- Man & Man





ERGONOMICS

By V.Ryan

What is Ergonomics?

It is the study of humans at work in order to understand the complex relationship among people, machines, job demands and work methods in order to minimize gaps between task demands and human capacities in activities of work and daily living.

[Maxcy-public health]

Ergonomics as the science of “designing the job to fit the worker, instead of forcing the worker to fit the job.

[International Ergonomics Society]

- The term ergonomics is derived from the Greek “*ergon*” = **work** & “*nomos*” = **law**
- Literally means **“the laws of work”**
- Objective :-

To achieve the best mutual adjustment of man and his work, for the improvement of human efficiency and well-being



BASIC ERGONOMIC PRINCIPLE

- To assess the fit between a person and their work, ergonomists consider;
 - ✓ The job being done and the demands on the worker
 - ✓ The equipment used (its size, shape, & how appropriate it is for the task)



CLASSIFICATIONS OF ERGONOMIC INJURIES

Cumulative Trauma Disorders (CTD's)

- Exposure driven
- Injury to soft tissue caused by prolonged exposure to ***multiple ergonomic risk factors***
- Typically develop in small body segments (i.e. fingers, wrists, elbows, and neck)

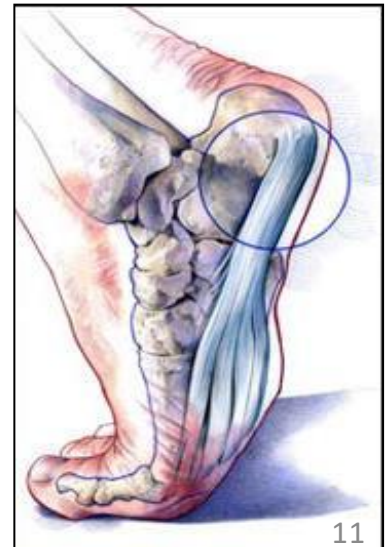
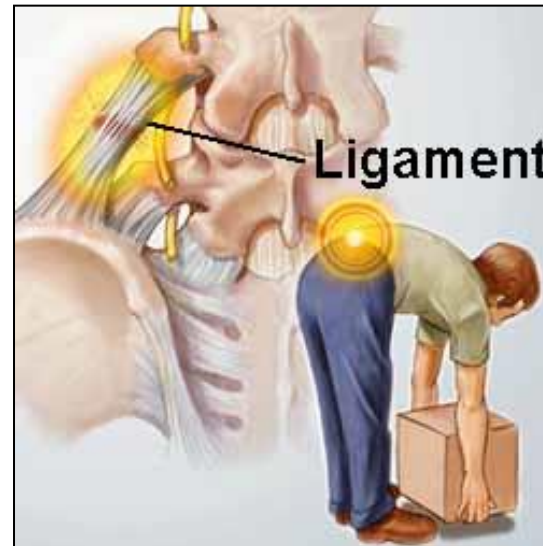
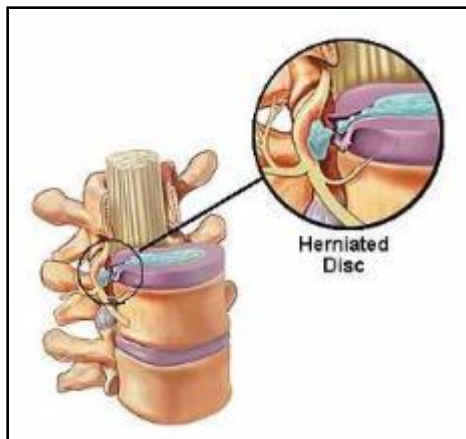
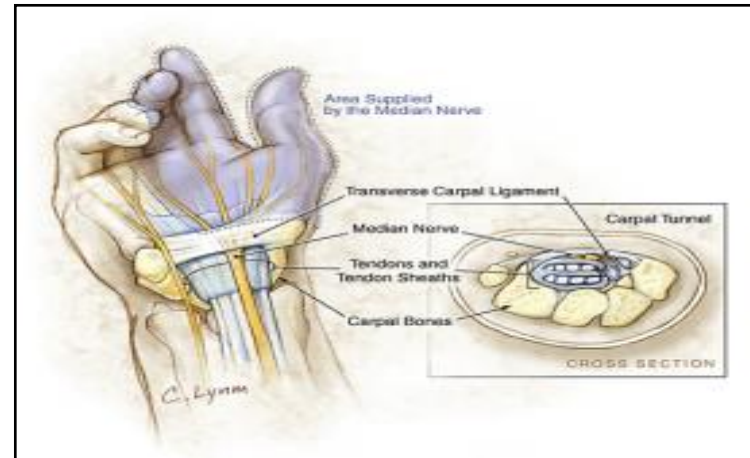
Strains & Sprains

- Instantaneous (event driven)
- Injury to connective tissue caused by ***single forceful event***: lifting heavy objects in awkward position
- Common to large body segments (i.e. back, legs, and shoulders)

RESULTS OF POOR ERGONOMIC DESIGN

Musculoskeletal Disorders

- Neck
- Back
- Arm and hand
- Knee and foot



WORK RELATED MUSCULOSKELETAL DISORDERS (WRMSDs)

- These are MSDs that are *caused* or *made worse* by work methods & environment
- They occur when the physical capabilities of the worker do not match with the physical requirements of the job
- Common MSDs are :
 - ✓ Tendonitis
 - ✓ Epicondylitis (Tennis or Golfer's Elbow)
 - ✓ Bursitis
 - ✓ Carpel Tunnel Syndrome
 - ✓ Back strain

What Causes These Injuries?





There are three primary ergonomic risk factors:

1. High risk repetition
2. Forceful exertions
3. Repetitive / Sustained awkward postures

1. ***HIGH TASK REPETITION :***

- Many work tasks and cycles are repetitive in nature, and are frequently controlled by ***hourly or daily production targets*** and work processes
- A job is considered highly repetitive if the cycle time is ***30 seconds or less.***

2. ***EXCESSIVE FORCE :***

- Many work tasks require high force loads on the human body
- Muscle effort increases in response to high force requirements, increasing associated ***fatigue*** which can lead to MSD

3. ***SUSTAINED AWKWARD POSTURES :***

- Awkward postures place excessive force on joints and overload the muscles and tendons around the effected joint.
- Joints of the body are most efficient when they operate ***closest to the mid-range motion*** of the joint
- Risk of MSD is increased when joints are worked outside of this mid-range repetitively or for sustained periods of time without adequate recovery time.



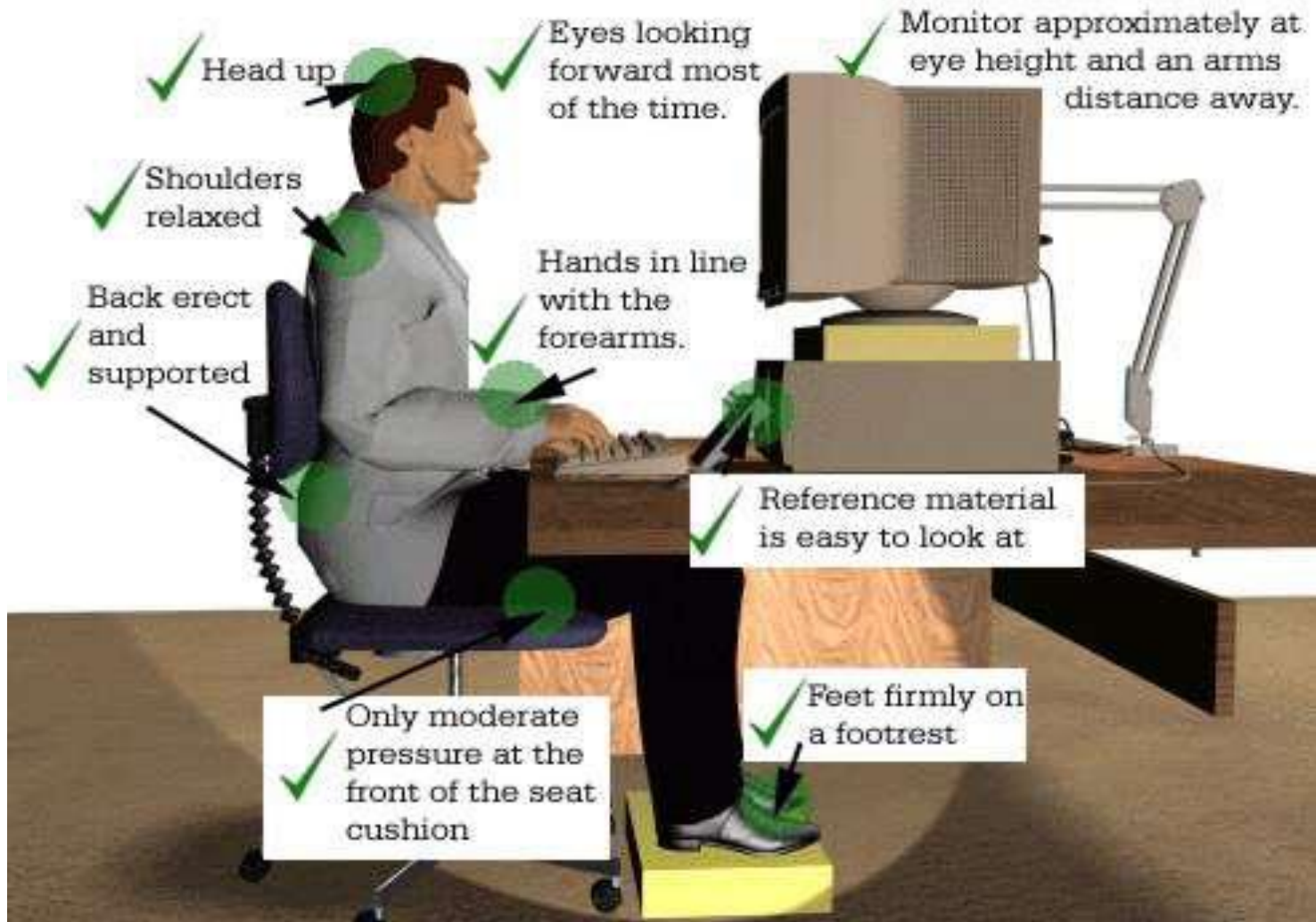
IMPORTANT CHARACTERISTICS OF WRMSDs

- Their pathogenesis involves both mechanical & physiological processes
- Weeks, months & years may be required for them to develop
- Weeks, months & years may be required for recovery, & in extreme cases, ***recovery may never be complete***
- Their symptoms are always non-specific, poorly localized & episodic
- They often go ***unreported***

PREVENTION OF MSDs

- Work in neutral postures
- **Break up** the repetitive components of a job
- Use the appropriate tool for the job and maintain tools in good working order
- Minimize static unsupported postures and pressure points
- **Job Rotation** - Workers can rotate between workstations and tasks
- By **rest or stretch breaks** to provide an opportunity for increased circulation & time needed for recovery

RULES OF ERGONOMICS



BENEFITS OF ERGONOMICS

- ↓ Fatigue & discomfort
- ↓ Injury risk
- ↓ lost work days
- ↑ Job satisfaction
- ↑ Comfort & morale
- ↑ Efficiency
- ↑ Quality of work
- ↑ Productivity



MEASURES FOR HEALTH PROMOTION OF WORKERS

- Nutrition
- Communicable disease control
- Environmental sanitation
- Mental health
- Measures for women and children
- Health education
- Family planning





TACKLING ANAEMIA

Garment workers to undergo hold tests

Nearly 3 lakh workers from 270 factories to be covered

65,000 workers screened

PREVIOUS YEAR



Over 60% found to be anaemic

14.4 lakh iron tablets given to workers

Pune Chikki and iron tablets for garment workers

State Labour Department to launch intensive anaemia screening and treatment programme for nearly 3 lakh women garment workers

AFSHAN YASMEEN
BENGALURU

Come March 4, nearly three lakh women garment workers in the city will be given a *chikki* (sweet made of groundnut and jaggery) and a de-worming tablet after a fingerprick test for anaemia at their workplace.

With a study finding over 60 per cent of garment workers in Bengaluru to be anaemic, the State Labour Department is set to start an intensive anaemia screening and treatment programme for them.

The department, which has set up six teams comprising medical officers to visit garment factories in the city and screen and recommend treatment for workers, has collaborated with the Asian Research and Training Institute for Skill Transfer (ARTIST) to tackle the issue of anaemia at



A study says often even basic needs cannot be taken for granted by the garment factory workforce. - FILE PHOTO

was found that more than 60 per cent of the 65,000 women workers screened were anaemic.

Following the survey, we distributed 14.4 lakh iron tablets through Employees State Insurance (ESI) hospitals. The workers were made to take the tablets in the presence of safety officers in their factories after lunch," he explained.

However, the issue was not followed up after that. The current screening programme is in continuation of last year's survey, Mr. Ramamurthy said, adding that the plan is to extend the programme across the State.

Surendra V.H.H., Joint Director of Factories (Medical), Department of

Factories, Boilers, Industrial Safety and Health, said that in the first phase, all three lakh women workers of around 270 garment factories in Bengaluru Urban would undergo the fingerprick test at the workplace.

Hema Divakar, who heads ARTIST and also represents Federation of Obstetric and Gynaecological Societies of India at the International Federation of Gynaecology and Obstetrics, said the long-term plan is to create an anaemia-free healthy female working population. The programme that will go on for 100 days from March 4, will involve screening of workers for anaemia by teams at their

workplace. ARTIST will provide the fingerprick test equipment, 'Hemocue' that can be carried to the work point of each worker.

A Pune-based pharma manufacturer from whom ARTIST is procuring over 2.5 lakh testing strips has also agreed to transport an equal amount of *chikki* for this programme. "*Chikki* distribution is symbolic of iron supplement that anaemic women are supposed to take," she said.

"We are also preparing a 30-second animation video on anaemia and its causes, which will be sent to the workers on their mobile phones," she said, adding that the programme will be reviewed after six months.

- Over **60%** of the garment workers (65,000 screened) in Bangalore are found to be **anaemic**
- The State Labour department has started an intensive anaemia screening & treatment programme for the **3 lakh** women workers in **270** garment factories in Bengaluru Urban

TESTING TIMES

for women

the micro level.

P.B. Ramamurthy, Additional Chief Secretary, Labour Department, told *The Hindu* that garment workers, who are poorly paid, hardly get to eat nutritious food. "During a random survey last year, it

Bengaluru traffic policemen are gasping for breath

Detection of high levels of lead in blood sets off alarm bells

AFSHAN YASMEEN

BENGALURU: India's bustling metros are a nightmare for motorists and traffic policemen who manage traffic. They are often at the receiving end for failures, but they are also the ones who are most exposed to serious health hazards from not just pollution and respiratory ailments, but alarmingly high levels of lead content in their blood.

A recent study, which could very well reflect the trend in other cities too, has found that one in three traffic policemen (of the 1,735 screened) in Bengaluru have a blood lead level of above 10 micrograms per decilitre.

According to the U.S. Centers for Disease Control and Prevention, the recommended limit for adults is below 10 micrograms per decilitre. This is the second such study done in Bengaluru to detect the blood lead levels in cops.

The first study done in 2000, prior to the introduction of unleaded gasoline in the country, had re-



Vehicular pollution has been identified as one of the main reasons for the presence of lead in Bengaluru's atmosphere. — FILE PHOTO: BHAGYA PRAKASH K.

vealed something even more alarming: that 37 per cent of the 1,800 policemen screened had lead levels above 20.

Identifying vehicular pollution as one of the main reasons for the presence of lead in the city's atmosphere, the Karnataka State Pollution Control Board in association with the National Referral Centre for Lead Poisoning in India (NRCLPI) conducted a two-phase study to find out the effect of environmental lead pollution on blood lead levels in traffic policemen.

Among the 940 traffic

policemen screened in Phase I, 34 per cent had blood lead level above 10 micrograms per decilitre and in Phase II, 27 per cent of the 795 traffic policemen screened had blood lead level above 10.

While 2.45 per cent and 1.35 per cent of the traffic policemen respectively in Phase I and Phase II had elevated blood lead levels (over 20 micrograms per decilitre), nearly two per cent had levels above the safety limit (30 micrograms per decilitre).

Blood samples were collected and screened from 1,735 traffic cops

aged between 21 years and 59 years, posted in different areas of Bengaluru City who have been controlling traffic from 6 months to 35 years eight hours a day.

Residual effects

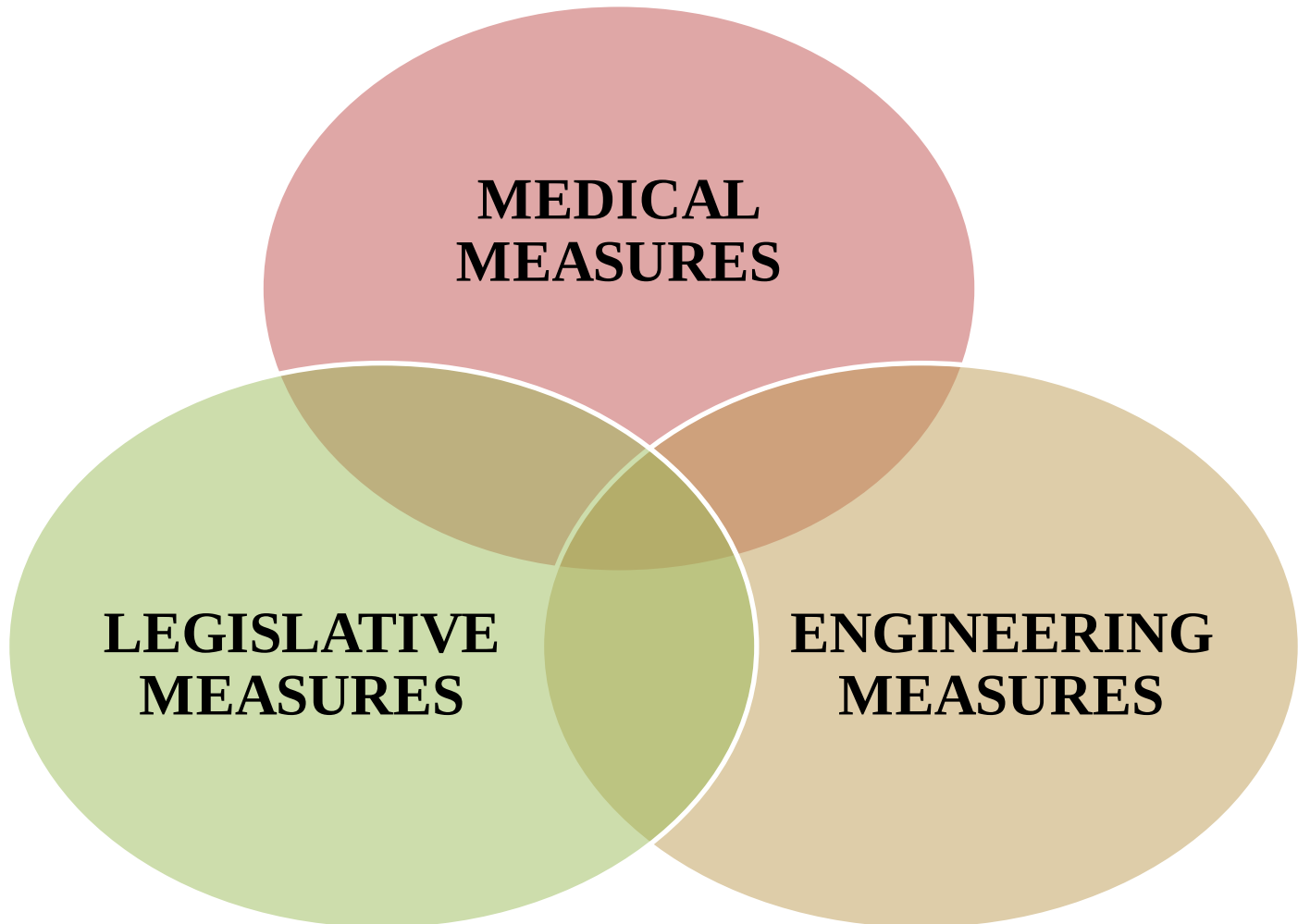
Thuppil Venkatesh, Principal Advisor of Quality Council of India (QCI) and NRCLPI, said the present data clearly indicated that the traffic policemen screened are not just exposed to lead from ambient air in the post-unleaded period (since March 2000).

The residual effects of lead from other sources such as dust, traditional medicines, battery and paint peeling among others seem to be the alternate sources and cause for elevated BLL in most of the cases, he said.

Most lead emissions in the past have been from motor vehicles burning gasoline and containing the antiknock additive, tetraethyl lead, (C2 H5) 4 Pb. Lead is emitted primarily in the form of inorganic particulates, Dr. Venkatesh explained.

- **1 in 3** traffic policemen (of 1735 screened) in Bangalore city have **Blood Lead levels above 10 micrograms/dl**
- **3.8%** of them had levels above **20 micrograms/dl**

PREVENTION OF OCCUPATIONAL DISEASES



PREVENTION OF OCCUPATIONAL DISEASE

MEDICAL MEASURES

- ❖ Pre-placement examination
- ❖ Periodical examination
- ❖ Medical and health care services
- ❖ Notification
- ❖ Supervision of working environment
- ❖ Maintenance and analysis of records
- ❖ Health education and counseling



PREVENTION OF OCCUPATIONAL DISEASE

ENGINEERING MEASURES

- ❖ Design of building
- ❖ Good housekeeping
- ❖ General ventilation
- ❖ Mechanization
- ❖ Substitution



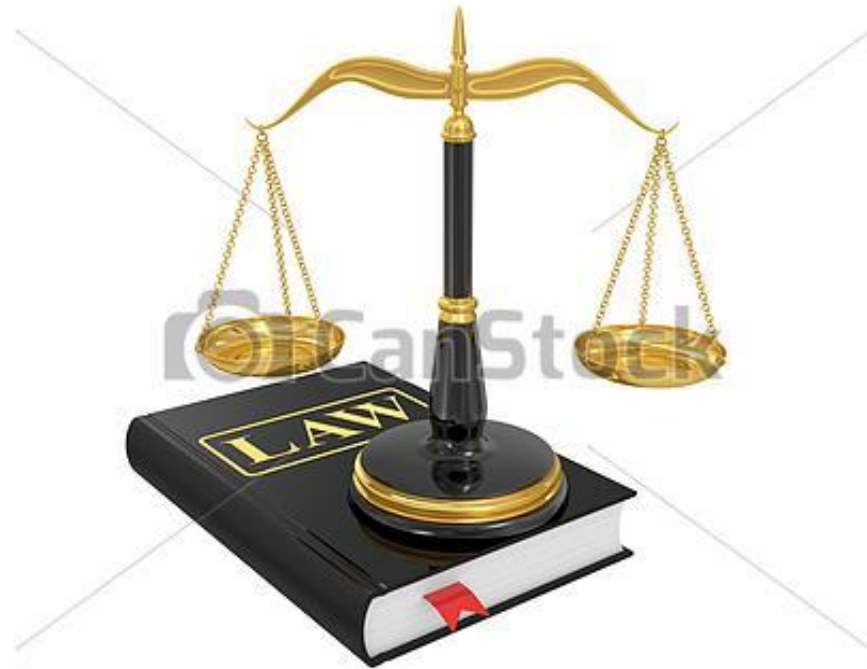
PREVENTION OF OCCUPATIONAL DISEASE

ENGINEERING MEASURES

- ❖ Enclosure
- ❖ Isolation
- ❖ Local exhaust ventilation
- ❖ Protection device
- ❖ Environmental monitoring



LEGISLATIONS



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LEGISLATIONS FOR HEALTH, WELFARE AND SAFETY OF WORKERS

- The Factories Act,1948
- The Mines Act,1952
- The Employees State Insurance (ESI) Act,1948
- The Workmen's Compensation Act,1923
- The Trade Union Act,1926
- The Minimum Wages Act,1948
- The Dangerous Machine (Regulation)Act,1983
- The Plantation labor Act,1951
- The Bonded Labor System(Abolition)Act,1970
- The Contract Labor Act,1970

Factories Act





- It is one of the noble & comprehensive labour legislation which is in force in our country
- It covers significant issues relating to the persons employed in factories;
 - Secures - Safety, health & welfare
 - Regulates - Working hours
 - Ensures - Annual leave with wages
 - Provides - Protection from hazardous processes
Protection to women workforce
Prohibition of employment of children



- The original Act was passed in **1881**
- The Act has been revised & amended several times; latest – **2005**
- Major amendment was in 1987 – following the Bhopal Gas Tragedy in Dec. 1984
- The Act has;
 - ✓ **11 Chapters**
 - ✓ **120 Sections**
 - ✓ **3 Schedules**

CHAPTER I : SCOPE & DEFINITIONS



- **SCOPE** : The Act extends to the whole of India except

Jammu & Kashmir

- **DEFINITIONS** :

CHILD

- Not completed 15th year

ADOLESCENT

- Completed 15th year but not 18th year

ADULT

- An individual who has completed 18th year

POWER

- Means an energy transmitted mechanically & is not generated by human agency

CHAPTER I : SCOPE & DEFINITIONS

FACTORY

- An establishment employing **10 or more** persons where power is used & **20 or more** persons where is not used
- Includes both seasonal & perennial factories

WORKER

- A person employed directly or through any agency, whether for wages or not, in any manufacturing process, or in any kind of work incidental to or connected with the manufacturing process

OCCUPIER

- Introduced in **1987 Amendment Act**
- The person who has control over the affairs of the factory

CHAPTER II : THE INSPECTING STAFF



INSPECTORS :

- The State Govt. may appoint Chief Inspector & Additional Inspectors of factories
- District Magistrate – Inspector for his district

POWERS :

- An Inspector can enter any factory, within his local limits & make an examination of premises, machineries or records

CHAPTER II : THE INSPECTING STAFF



CERTIFYING SURGEONS :

- The State Govt. may appoint qualified medical practitioners to be certifying surgeons, for;
 - ✓ The examination & certification of young persons under this Act
 - ✓ The examination of persons engaged in factories in dangerous occupations or processes
 - ✓ Supervising the factories where cases of illness or injury to workers have occurred due to manufacturing process

CHAPTER III : HEALTH



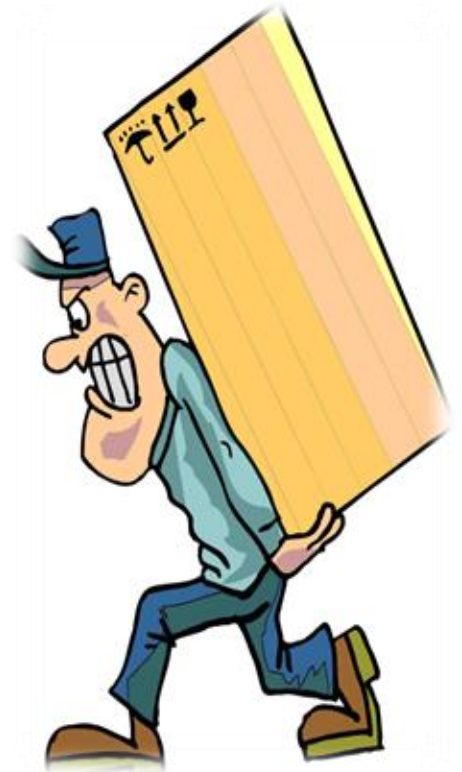
- Section 11 : Cleanliness
- Section 12: Disposal of refuse
- Section 13: Ventilation and Temperature
- Section 14: Dust and Fumes
- Section 15: Artificial humidification
- Section 16: Over-crowding
- Section 17: Lighting
- Section 18: Drinking water
- Section 19: Latrines and urinals
- Section 20: Spittoons



CHAPTER IV : SAFETY

**FACTORIES
ACT
1948**

- Casing / fencing of the machinery
- The Act provides that no worker shall be required to lift or carry loads which are likely to cause him injury
- The 1976 Amendment provides for the appointment of **“Safety Officers”** in every factory wherein **1000 or more** workers are employed



CHAPTER V : WELFARE MEASURES

**FACTORIES
ACT
1948**

- Facilities for washing, drying & storing the cloths
- Facilities for rest & recreation
- Canteen - > 250 workers
- Creches - > 30 women workers
- First aid appliances – 1 box for every 150 workers
- Welfare Officer – 500 or more workers are employed



CHAPTER VI : WORKING HOURS

**FACTORIES
ACT
1948**

- **Weekly hours** – Not more than **48 hrs** in a week
Not more than **60 hrs** including over-time
- **Weekly holiday** – 1 day / week; preferably Sunday
- **Daily hours** – Not more than **9 hrs**, with half hr rest after 5 hrs of continuous rest
- **Women** – No women shall be allowed to work between
7pm to 6am



CHAPTER VII : EMPLOYMENT & YOUNG PERSONS



- No child, who has **not completed his 14th yr**, shall be allowed to work in any factory
- Adolescents – duly certified by the “***Certifying Surgeons***” regarding their physical fitness
- Adolescent employee – work only between 6 am to 7 pm



CHAPTER VIII: ANNUAL LEAVE WITH WAGES



- Every worker is entitled to leave with wages, after 12 months of continuous service
- At the rate of **1 day for every 20 days of work**
- Leave can be accumulated upto 30 days



CHAPTER IX: SPECIAL PROVISIONS



Section 88 :

- Certain accidents, including death or serious injuries , should be notified by the manager to District Magistrate & Police

Section 89 :

- Acts gives a schedule of notifiable diseases
- Notified to Chief Inspector & Certifying Surgeon by the manager
- The 1976 Amendment Act includes *Byssinosis, Asbestosis, Occupational Dermatitis & Noise Induced Hearing Loss* to the list of other notifiable diseases

CHAPTER X: PENALTIES & PROCEDURES



- In case of violation of any rules or order, the Occupier & Manager of the factory - is punishable with *2 yrs imprisonment / fine upto 1 lakh or both*
- Any accident causing **death** – minimum Rs. 25,000
- Any accident causing **serious injury** – Rs. 5000

CHAPTER XI: SUPPLEMENTAL

**FACTORIES
ACT
1948**

Display of notices :

- Abstracts of this Act & rules, name & address of the Inspector & Certifying Surgeon
- In English & local language understood by majority of workers



CHAPTER XI: SUPPLEMENTAL

**FACTORIES
ACT
1948**

Right of workers :

- Right to obtain from the occupier, information relating to workers' health & safety at work
- Represent to the Inspector directly or through his representative in the matter of inadequate provision for protection of his health or safety in the factory

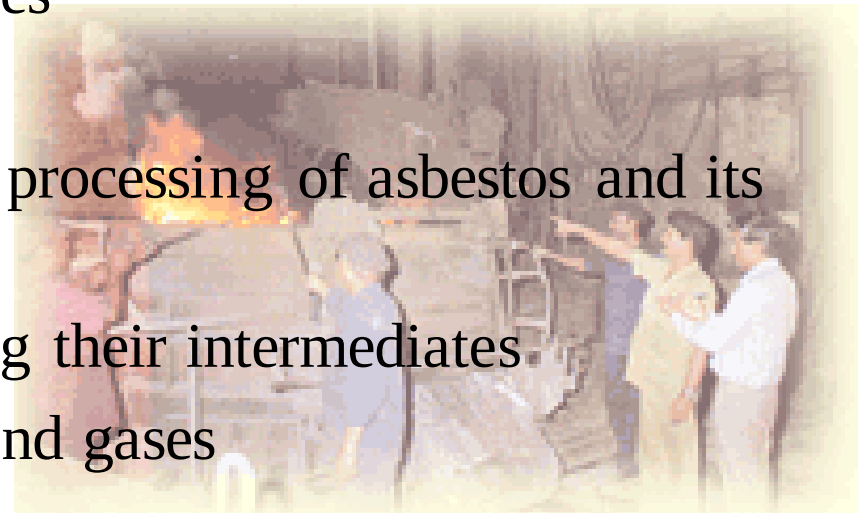


FIRST SCHEDULE

List of factories involving hazardous processes (29)



- Coal industries
- Fertiliser Industries
- Cement Industries
- Petroleum Industries
- Drugs and Pharmaceutical Industries
- Rubber (Synthetic) Industries
- Glass and Ceramics
- Manufacture, handling and processing of asbestos and its products
- Dyes and Dyestuff including their intermediates
- Highly flammable liquids and gases



SECOND SCHEDULE



Permissible levels of certain chemical substances in work environment

- Chlorine – 1ppm
- Ammonia- 25ppm
- Carbon disulphide -Skin- 10ppm
- Carbon Monoxide- 50 ppm
- Carbon Tetrachloride Skin – 5ppm
- Chlorine- 1ppm

THIRD SCHEDULE

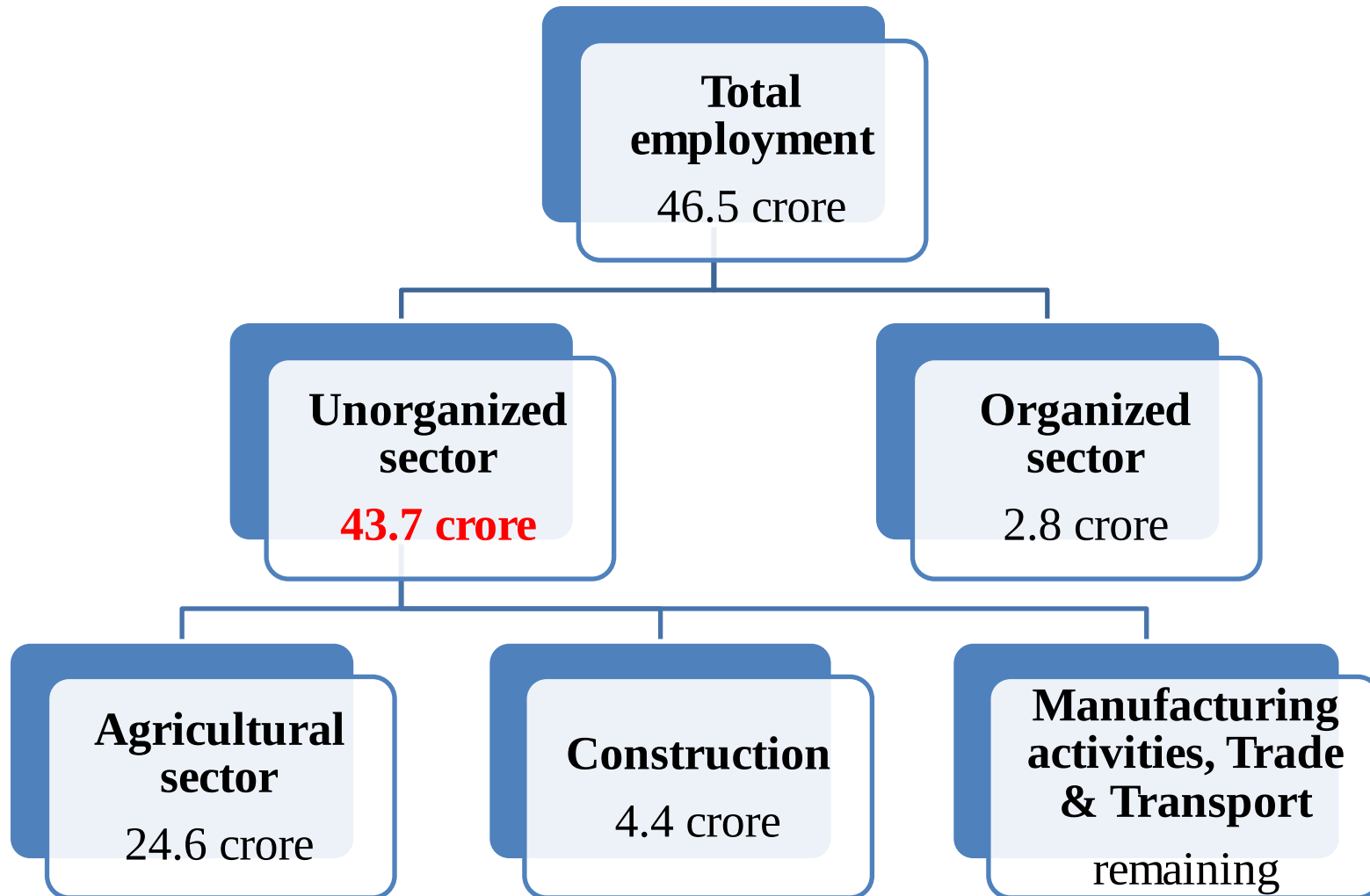
List of notifiable diseases (29 categories)



- Lead poisoning
- Mercury poisoning
- Arsenic poisoning
- Phosphorous poisoning
- Silicosis
- Byssinosis
- Asbestosis
- Noise induced hearing loss
- Carbon monoxide
- Coal miners' pneumoconiosis
- Occupational cancer
- Radio or radioactive substances

UNORGANISED SECTOR

National Sample Survey Organization (2011-12)



The Unorganized Workers Social Security Act 2008

- In **2009** – rules were framed
- National Social Security Board was constituted
- Chairmanship of Union Minister of Labour & Employment & 34 nominated members

Unorganized worker :

A home based worker, self-employed worker or a wage worker in the unorganized sector & includes a worker in the organized sector who is not covered by any of the Acts mentioned in Schedule II

RASHTRIYA SWASTHYA BIMA YAJANA (RSBY)

- A health insurance scheme for **BPL families** in the unorganized sector
- **Smart card based cashless** health insurance
- Cover of **Rs. 30,000** per family (of 5 persons) per annum



RASHTRIYA SWASTHYA BIMA YAJANA (RSBY)

- Coverage of all pre-existing diseases
- Coverage of hospitalization expenses, including maternity benefit
- Payment of transportation cost of Rs. 100 per visit
- 2014 – 28 states/UTs ; **3.85 crore** smart cards
- Funding – Central Govt. (75%) & State Govt. (25%)



AAM AADMI BIMA YOJANA

- Launched in **2007**
- To provide **death & disability** cover to **the rural landless households** between **18-59 yrs**
- Head of the family or one earning member in the family will be insured
- Benefits:
 - Rs. 30,000 – natural death
 - Rs. 75,000 – death due to accident / total permanent disability
 - Rs. 37,500 – partial permanent disability



- As of 2014 – **4.54 crore** people have been covered
- Funding - Central : State (50 : 50)

INDIRA GANDHI NATIONAL OLD AGE PENSION SCHEME

- All citizens **> 60 yrs** & living below the poverty line
- **Rs. 200 per month**
- Persons **> 80 yrs** – **Rs. 500 per month**

THE BUILDING & OTHER CONSTRUCTION WORKERS (
Regulation of employment & conditions of service) ACT, 1996
THE BUILDING & OTHER CONSTRUCTION WORKERS'
WELFARE CESS, ACT, 1996

- Legislations for **construction workers**
- Constitute major part of unorganized sector next to agricultural workers



THE INTER-STATE MIGRANT WORKMEN (REGULATION OF EMPLOYMENT & CONDITIONS OF SERVICE) ACT, 1979

- To protect the rights & safeguard the interests of **migrant workers**
- Applies to every establishment & contractor who employ
5 or more inter-state migrant workers

CHILDREN AND WORK

Article 21A : Right to Education

Free & compulsory education to all children of
age 6 – 14 yrs

Article 24 : Prohibition of employment of children

No child below the age of 14 yrs shall be
employed in work in any factory or mine or
engaged in any other hazardous employment

CHILD LABOUR (PROHIBITION & REGULATION)

ACT, 1986



- There are **18 occupations & 65 processes** – employment of children is prohibited
- **The National Child Labour Policy (1987)**
 - ✓ A legislative action plan
 - ✓ Focusses on general development programmes for the benefit of the families of children
 - ✓ Project based action plan in areas of high concentration of child labour

NATIONAL CHILD LABOUR PROJECT SCHEME

(NCLPs)

- GOI initiated in **1988**
- To rehabilitate working children in child labour endemic districts of the country
- As on date - **270** districts in India (**Karnataka – 17**)
- Children are withdrawn from the work & put in special training centers
- Then mainstreamed to regular education system gradually



- At present **5167** NCLP training centers across the country
- It is a **central sector scheme**
- District level – Collector / District Magistrate oversees the implementation of the project
- The child Labour (Prohibition & Regulation) **Amendment Bill** was introduced **in 2012**



SOCIAL SECURITY

International Labour Organization :

The security that society furnishes through appropriate organization against certain risks to which its members are exposed

“A programme provided by society against those contingencies of modern life like sickness, unemployment, old age, dependency, industrial accidents & invalidism against which the individual cannot be expected to protect himself & his family by his own ability or foresight”

The principal security laws enacted for the organised sector in India are :

- **The Employees' State Insurance Act, 1948 (ESIC)**
- The Employees' Provident Funds & Miscellaneous Provisions Act, 1952 (EPFO)
- The Workmen's Compensation Act, 1923
- The Maternity Benefit Act, 1961
- The Payment of Gratuity Act, 1972





**THE
EMPLOYEE'S
STATE
INSURANCE
ACT, 1948**

THE EMPLOYEES STATE INSURANCE ACT, 1948



“An Act to provide for certain benefits to employees in case of sickness, maternity and injury during employment and to make provision for certain other matters in relation thereto”.

- Originally called as **“Workmen’s State Insurance Bill” 1946**
- Came into force on **19th April 1948**
- Amended in 1975, 1984, 1987 & 2010



APPLICABILITY :

- The ESI Act of **1948** – covered all non-seasonal factories employing 10 or more persons (excluding mines, railways & defence establishments)
- The provisions of the ESI (Amendment) Act of **1975** were extended to;
 - ✓ Shops, hotels, restaurants
 - ✓ Cinemas, theatres
 - ✓ Road-motor transport undertakings, and
 - ✓ Newspaper establishment

employing 20 or more persons



- The scheme has been extended to **private medical & educational institutions** employing 20 or more persons in some states
- The Act is applicable to all states – except **Manipur, Sikkim, Arunachal Pradesh & Mizoram**; UTs – Delhi & Chandigarh
- The existing wage limit for coverage under the Act is **Rs. 15,000 per month** (w.e.f. 1.05.2010)



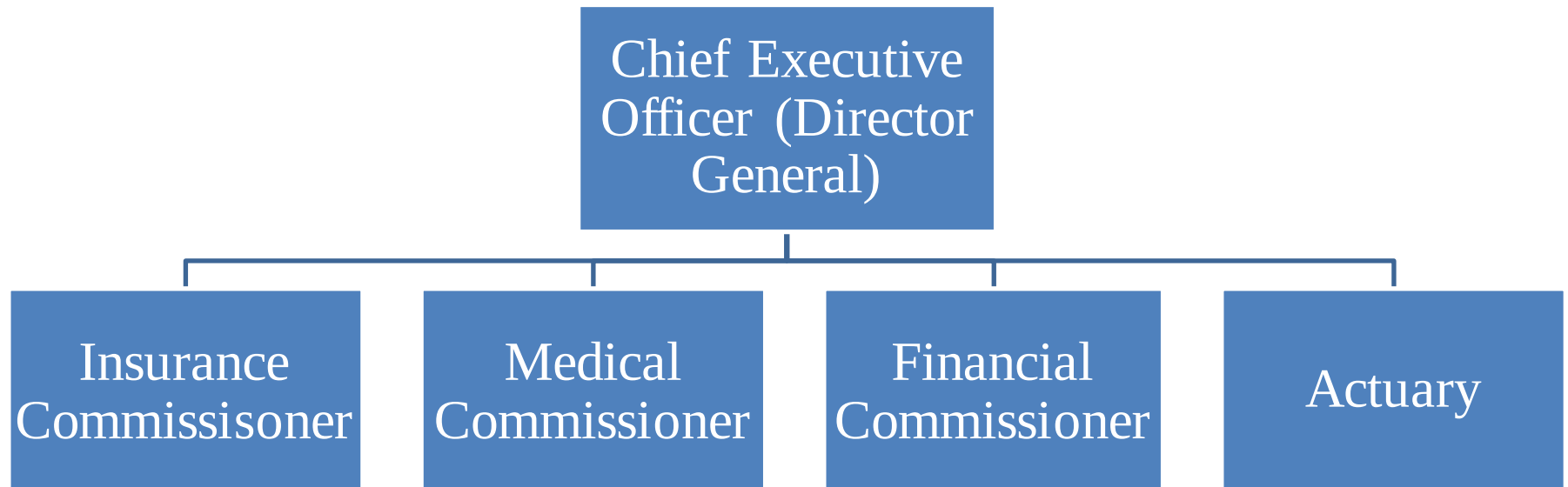
ADMINISTRATION :

- **Autonomous body – ESI Corporation**
- Chairman - Union Minister for Labour
- Vice-Chairman - The Secretary to Govt. of India, Ministry of Labour
- Consists of members representing Central & State Govts, employers & employees organisations, medical profession & parliament



Standing Committee :

- Constituted from the members of the corporation,
- Acts as an executive body for administration of the scheme





Medical Benefit Council :

- Headed by Director General of Health Services, GOI
- Assisted by the Medical Commissioner in all matters relating to medical relief

Headquarters

- New Delhi
- **62** Regional, Sub-regional & Divisional offices

Cash benefit

- 812 Branch / Pay offices
- 406 Inspection offices

Medical benefits

- **151** ESI hospitals
- **1418** ESI dispensaries
- 1017 Panel clinics
- 42 ESI annexes

FINANCE



**Employee's ESI
Contribution
(1.75% of the
Gross Salary)**



**Employer's
ESI
Contribution
(4.75% of the
Gross Salary)**

**Total ESI
Contribution
(6.5% of the
Gross Salary)**

❖ **Employees earning upto Rs. 100/ day are exempted**



- The share of expenditure on medical care is :

State Govt. - **1 / 8th**

ESI Corporation - **7 / 8th**

Contribution period	Cash Benefit period
1 st April to 30 th Sept.	1 st Jan of following year to 30 th June
1 st Oct. to 31 st March of the following year	1 st July to 31 st December



- The amount of contribution is to be deposited with the authorized bank **within 21 days** of the last day of calendar month, in which the contributions fall due

Period of delay in payment of contribution	Rate of damages on the amount due
Upto 2 months	5%
2 months to 4 months	10%
4 months to 6 months	15%
> 6months	25%



BENEFITS TO EMPLOYEES

1. MEDICAL BENEFIT :

- Consists of full & reasonable medical care including hospitalization
- **Free of cost** to the insured person & his family members from the day he enters insurable employment
- There is no ceiling on expenditure on treatment

Old Age Medical Care :

- Retired & disabled insured persons & their spouses
- Annual premium of **Rs. 120**



Services :

- Out-patient care
- Supply of drugs
- Specialist services
- Pathological & Radiological investigations
- Antenatal, Natal & Postnatal services
- Family Planning services
- Emergency services
- In-patient treatment





2. SICKNESS BENEFIT :

	CONTRIBUTORY CONDITION	DURATION	RATE
SICKNESS BENEFIT	Payment of contribution for 78 days in corresponding contribution period	Upto 91 days in 2 consecutive benefit periods	70% of the average daily wages
ENHANCED SICKNESS BENEFIT	Payment of contribution for 78 days in corresponding contribution period	Tubectomy – 14 days Vasectomy – 7 days	100% of the average daily wages



2. SICKNESS BENEFIT :

	CONTRIBUTORY CONDITION	DURATION	RATE
EXTENDED SICKNESS BENEFIT	For 34 specified long term diseases continuous insurable employment for 2 years with minimum 156 days contribution in 4 consecutive contribution periods	124 days during a period of 2 years Extended upto 2 years on medical advice	80% of the average daily wages



3. MATERNITY BENEFITS:

CONTRIBUTORY CONDITION	DURATION	RATE
Payment of contribution of 70 days in 2 preceding contribution periods	Confinement – 12 weeks Miscarriage – 6 weeks Extendable upto 1 month on medical advice incase of sickness arising out of pregnancy/confinement/miscarriage	100% of the average daily wages

❖ An insured women or wife of an insured person can get **Rs.5000** per confinement if she does not avail medical facility from ESI hospital (only upto 2 confinements)



4. DISABLEMENT BENEFIT :

	CONTRIBUTORY CONDITION	DURATION	RATE
TEMPORARY DISABLEMENT BENEFIT	From day 1 of insurable employment for disablement due to employment injury	As long as temporary disablement lasts	90% of the average daily wages
PERMANENT DISABLEMENT BENEFIT	From day 1 of insurable employment for disablement due to employment injury	For whole life	Total - 90% of the average daily wages Partial – proportionate to the loss of earning capacity



5. DEPENDENTS BENEFIT :

CONTRIBUTORY CONDITION	DURATION	RATE
From day 1 of insurable employment in case of death due to employment injury	Wife – lifelong Dependent children – till 25 yrs (daughter – till her marriage)	90% of the average daily wages sharable in fixed proportion among all dependents

6. FUNERAL EXPENSES :

- Cash payment upto **Rs. 10,000** payable on the death of an insured person



7. UNEMPLOYMENT ALLOWANCE :

RAJIV GANDHI SHRAMIK KALYAN YAJANA (RGSKY)

In case of involuntary loss of employment due to closure of factory or permanent invalidity due to non employment injury

CONTRIBUTORY CONDITION	DURATION	RATE
Should have contributed under the scheme for minimum 3 yrs. prior to loss of employment	Maximum 12 months during lifetime	50% of the average daily wages

BENEFITS TO EMPLOYERS



- Exemption from Workmen's Compensation Act, 1923
- Exemption from Maternity Benefit Act, 1961
- Exemption from payment of medical allowances to employees & their dependents
- Rebate under the Income Tax Act on contribution deposited in the ESI account
- Healthy workforce

EMPLOYEES' PROVIDENT FUNDS & MISCELLANEOUS PROVISIONS ACT, 1952

The 3 schemes in operation are :

- Employees' Provident Funds Scheme, 1952
- Employees Deposit Linked Insurance Scheme, 1976
- Employees' Pension Scheme, 1995

Coverage:

- Applicable to **187** specified industries / classes of establishment, as is specified in **Schedule I** of the Act or any activity notified by the Central Govt. in the Official Gazette & employing **20 or more** persons

Employees' Provident Fund Scheme, 1952

- As of 2014 - **7.95 lakh** establishments & factories ; **1178.13 lakh** membership
- With effect from **1.09.2014**, an employee on joining the employment in a covered establishment & getting wages upto **Rs. 15,000** is required to become a member of the fund



Employees' Pension Scheme, 1995

- The Govt has notified a minimum pension of **Rs. 1000** / month to pensioners under EPS, *since 2014*
- **Criteria :**

Members on attaining the age of **58 yrs** & having rendered **10 yrs** contributory service
- **Benefits :**
 - ✓ Monthly member pension
 - ✓ Disablement pension
 - ✓ Widow / Widower pension



THE WORKMENS' COMPENSATION ACT, 1923

Renamed as “ **EMPLOYEES COMPENSATION ACT, 1923**”

- The Act provides for payment of compensation to the employees & their dependents in case of injury & accidents (including certain occupational diseases) arising out of & in the course of employment & resulting in disablement or death

- **Administration:**

State Govt - through Commissioners for specific areas

The Act was Amended in 2009

Benefits :

Death

- Amount equal to **50%** of the monthly wages of the diseased workman multiplied by relevant factor (OR) an amount of **Rs. 1,20,000**, whichever is more

Permanent Total Disablement

- **60%** of monthly wages multiplied by relevant factor (OR) an amount of **Rs. 1,40,000**, whichever is more

THE MATERNITY BENEFIT ACT, 1961

- Regulates the employment of women in establishments employing **10 or more persons** except the employees under the ESI Act, 1948
- Extends to whole of India, except **Sikkim**
- The Act has been amended in **2008**
- Penalty : *Fine* (Rs.2000 to Rs.5000)
Imprisonment - 3 months (upto 1 yr)





Maternity benefits to be provided on completion of **80 working days**



The services of women **cannot be terminated** during the period of her absence on account of pregnancy except for gross misconduct



Maximum period for which a woman can get maternity benefit is **12 weeks**



Since **2011**, a medical bonus of **Rs. 3500** is being provided, if no prenatal confinement & postnatal care is provided free of cost

OSH IN INDIA

- In India, occupational health is not integrated with primary health care
- OSH till date remains under the mandate of the **Ministry of Labour** & not under the Ministry of health
- Currently there is **no** government agency or department which deals exclusively with occupational safety & health matters
- Enforcement is carried out through the Directorate of Industrial Safety & Health at state levels with **Factory Inspectors & Safety Officers**

OSH IN INDIA

- The **Directorate General, Factory Advice Service and Labour Institutes (DGFASLI)** is an attached office of the Ministry of Labour & Employment
- It serves as a technical arm to assist the Ministry in formulating national policies on occupational safety & health in factories and docks.
- Only in 4 sectors - Mining, Factories, Ports & Construction
- **No** agency covers safety & health for workers in unorganised sectors



OCCUPATIONAL HEALTH INSTITUTES IN INDIA

- **Central Labour Institute (CLI), Mumbai - 1966**
- Regional Labour Institutes - Kolkata & Bangalore
- **National Institute of Occupational Health (NIOH), Ahmedabad - 1970**
- Regional Labour Institutes - Kolkata, Chennai, Kanpur & Haryana
- Industrial Toxicology Research Centre (ITRC), Lucknow

INDIAN ASSOCIATION OF OCCUPATIONAL HEALTH (IAOH)

- India's leading NGO in occupational and environmental health
- Started in **1948**
- Has **24 branches** & over **2800 members** across the country
- Affiliated to **International Commission on Occupational Health (ICOH)**
- Partnership status by **WHO** – strengthening Occupational Health in the Asian region



KEY ACTIVITIES OF IAOH

- Consultative status with *Ministry of Labour, GOI*
- Proactively influencing national policies in OEH through appropriate linkages
- It publishes “The Indian Journal of Occupational and Environmental Medicine” (IJOEM)
- Conducts annual national conferences on occupational health
- 66th national conference was held in Bangalore, Feb 18-20 ,2016

ELEMENTS OF OSH FRAMEWORK

- 1) **“The National Policy on Safety, Health and Environment at Workplace”** was declared on **20th February 2009**
(the Ministry of Labour & Employment is in the process of implementation of the National Policy)
- 2) National System for OSH
- 3) National Programme on OSH

CURRENT SCENARIO IN INDIA

- Lack of implementation of Occupational health safety law - only 10% covered
- Lack of occupational health disease data
- Occupational health teaching in universities is rudimentary
- Shortage of occupational health professionals
- Inadequate resources for occupational health

CHALLENGES

- 1) How to address the concerns of unorganised sector
- 2) How to address workplace changes
- 3) How to shift from management of accidents to their prevention and prediction
- 4) How to optimize with limited inspection resources
- 5) How to strengthen the occupational disease notification system



WORLD DAY FOR SAFETY AND HEALTH AT WORK

- Since 2003, the ILO celebrates it on the **28th April** to promote the prevention of occupational accidents and diseases globally.
- In **2015**, the theme was *”Join in building a culture of prevention on Occupational Safety and Health”*
- **2016** theme : **“Workplace Stress: A Collective Challenge”**



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THANK YOU

