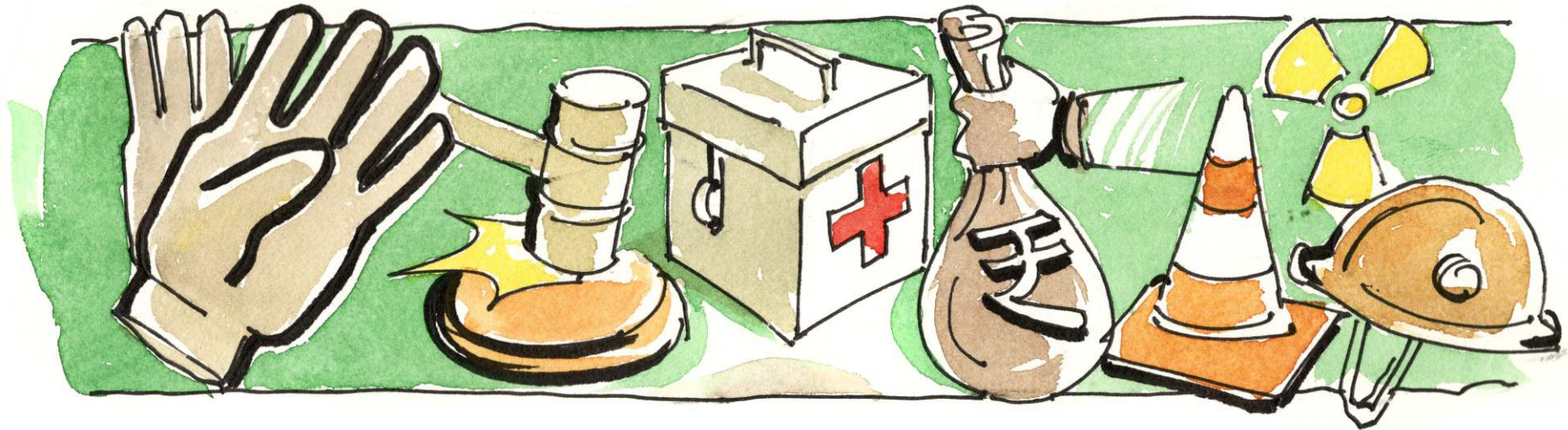


Module 5



SAFE WORK

Centre for Education and Communication (CEC)

SAFE WORK

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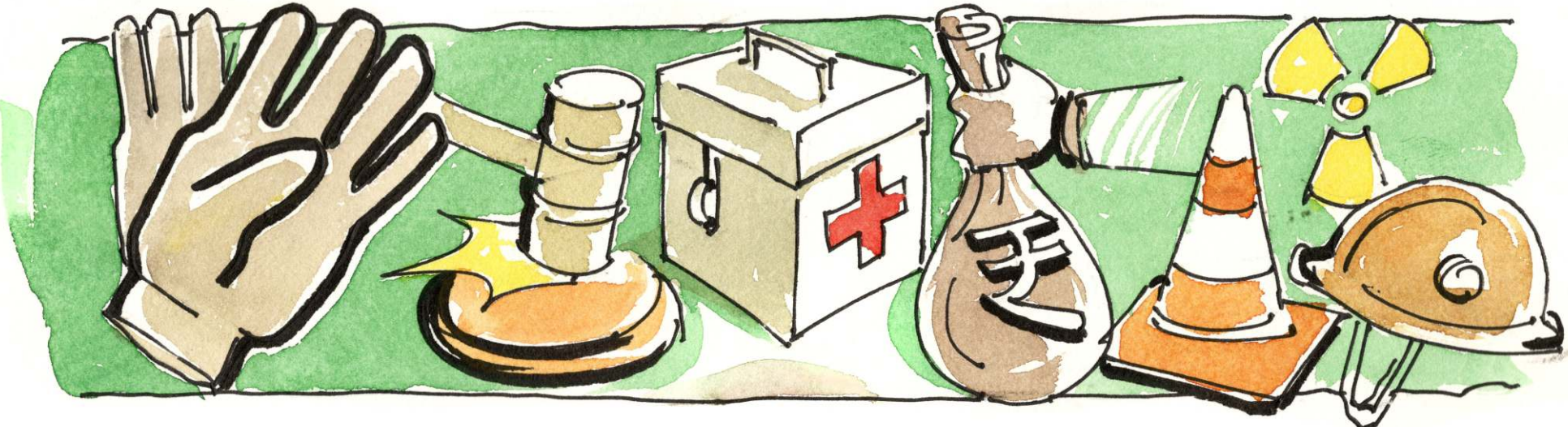
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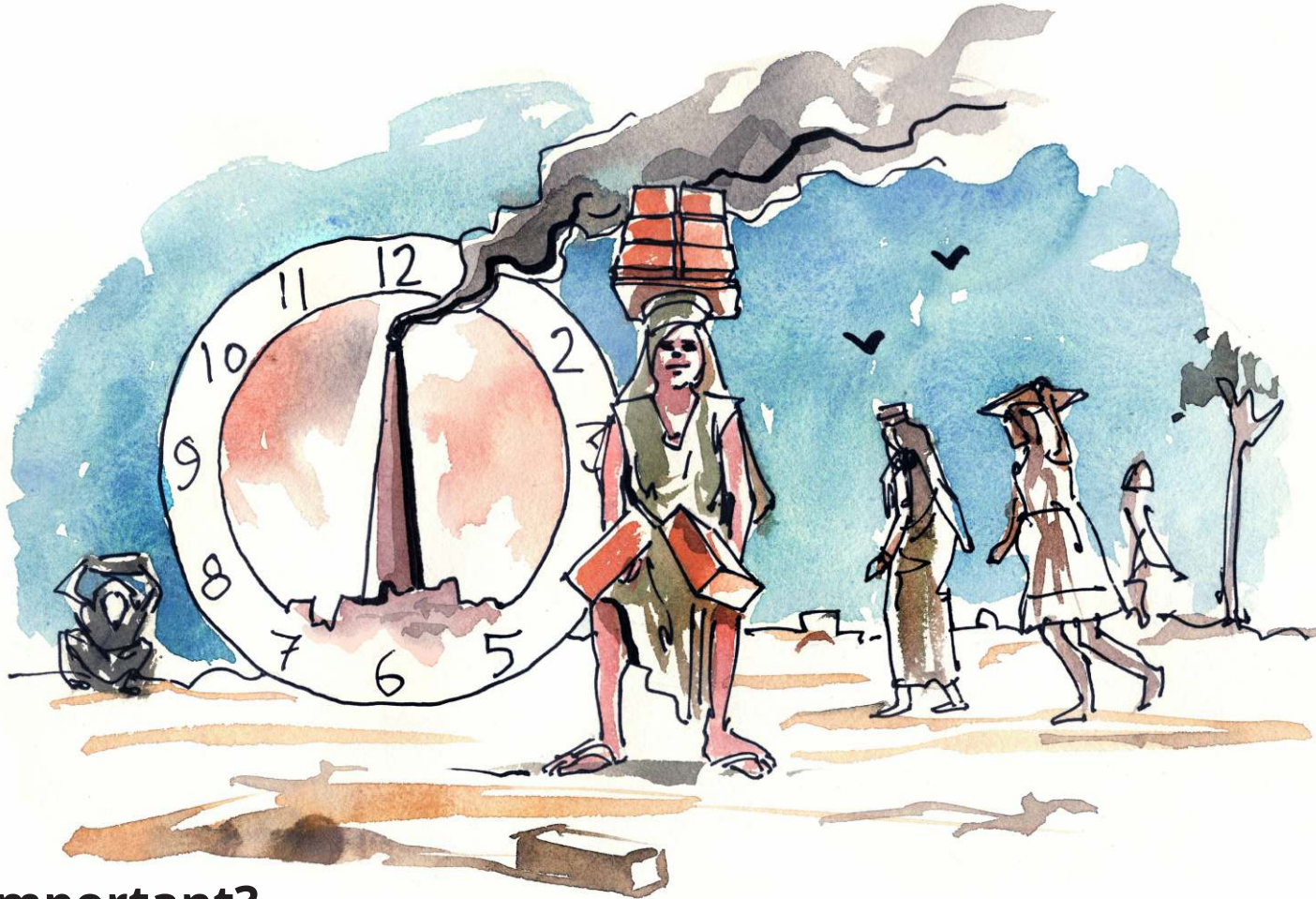
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'Empowering CSOs for Decent Work and Green Bricks in India's Brick Kilns', in partnership with **Prayas** and **Terre des Hommes (TdH)**, funded by **European Union (EU)**

What is Occupational Safety and Health?



What is Occupational Safety and Health?



Why is it important?

Workers at brick kilns spend at least 12 hours at the worksite every day. Therefore it is important their work environment be safe and healthy. The dangers faced by workers at the brick kiln include:

What is Occupational safety and health?

Workers in many industries and professions are subject to threats to their safety from the very work that they do or the place they work from. Brick kilns, granite quarries, chemical factories, textile mills, leather producing units and numerous other industries involve either hard manual work in dangerous conditions or exposure to toxic substances, dust, high temperatures, falling objects that can result in serious injury. Occupational safety and health is a discipline that studies such threats to worker's safety and the measures needed to ensure their well-being.

Occupational safety and health broadly aims at:

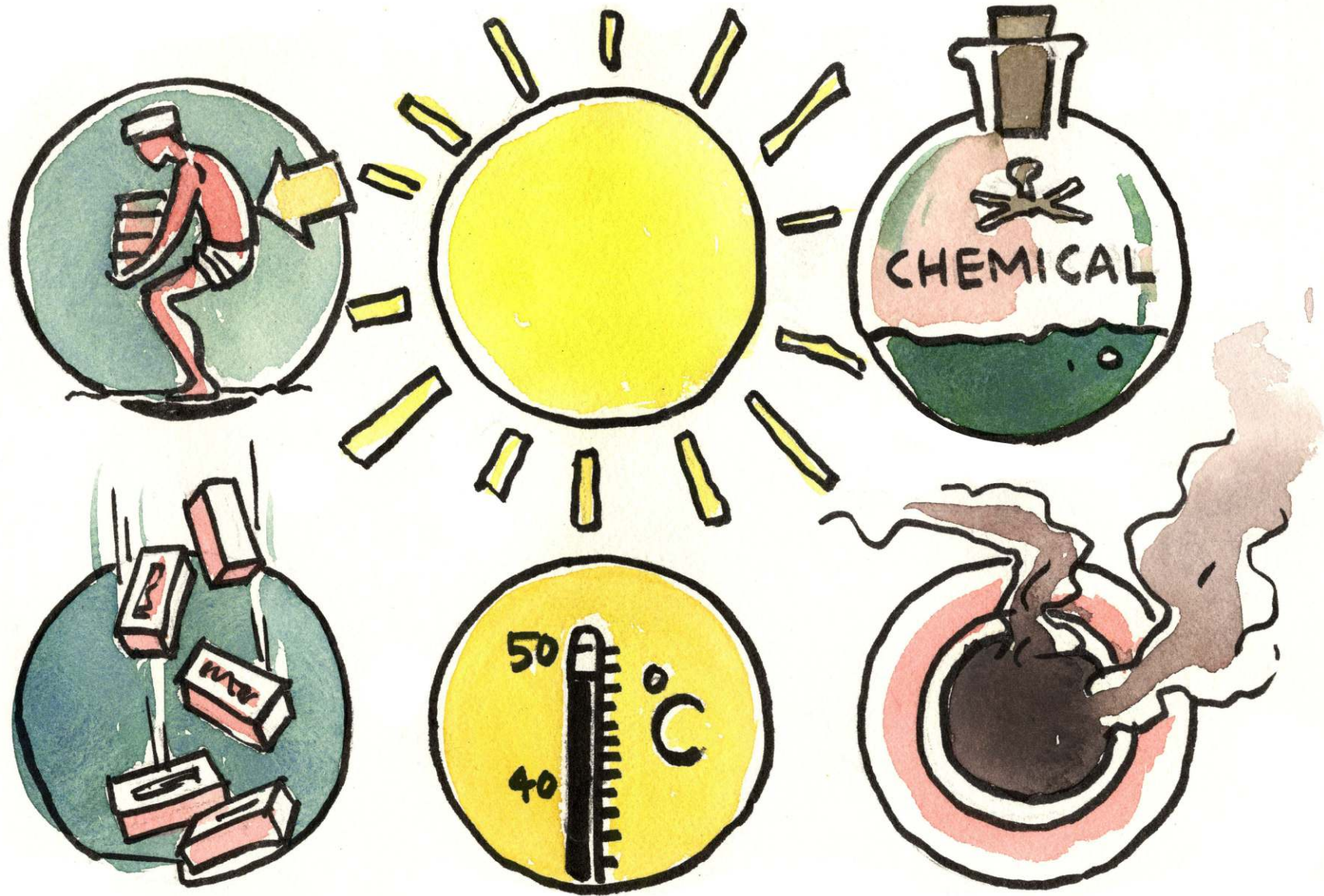
- Promotion and maintenance of physical, mental and social well-being of workers;
- Prevention of adverse effects on health caused by their working conditions;
- Adaptation of work places and conditions to human needs and safety.

What is Occupational safety and health?

“Occupational health issues and occupational safety issues are not the same, but they are complementary to each other. A healthy workplace is by definition also a safe workplace but a safe workplace is not necessarily also a healthy workplace, as the latter requires measures beyond just prevention of accidents. The important point is that issues of both health and safety must be addressed in every workplace”.

Safety Hazards	Health Hazards
Working conditions where harm is immediate and extreme to the worker	Working conditions which will lead to illness
Leads to injury on the body like cuts or bruises	Caused by prolonged exposure to harmful chemicals or other substances. May lead to long term diseases and/or death
Is associated with poorly maintained machinery or dangerous equipments	Cause is difficult to ascertain as there is generally a long gap between exposure and resultant disease

What is Occupational safety and health?



Range of hazards

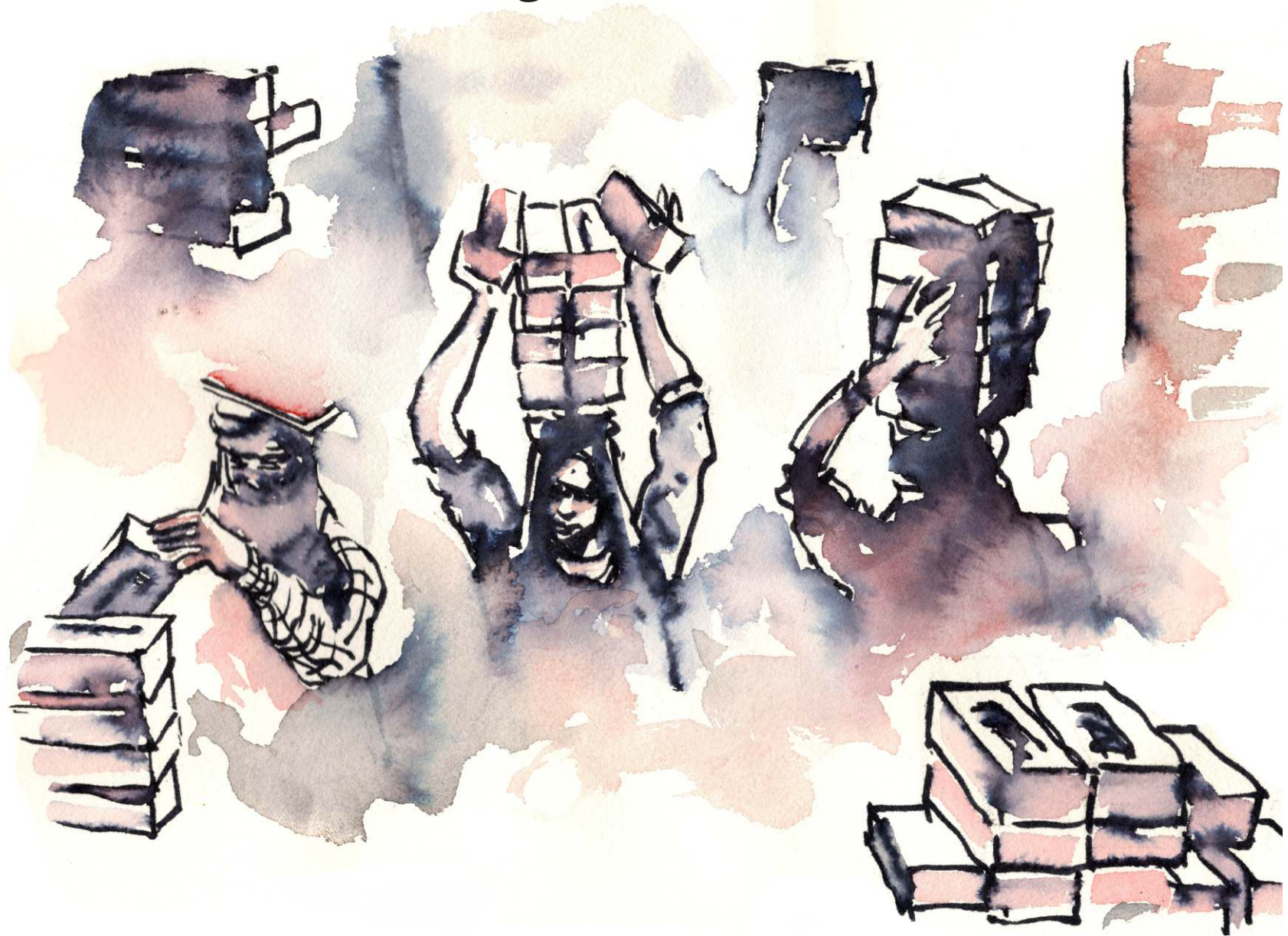


Range of hazards

Hazards present at brick kilns site may include:

- **chemical hazards**, arising from liquids, solids, dust, fumes, vapours and gases;
- **physical hazards**, such as noise, vibration, unsatisfactory lighting and extreme temperatures;
- **biological hazards**, such as bacteria, viruses, infectious waste and infestations;
- **psychological hazards** resulting from stress and strain;
- **design hazards** associated with the non-application of ergonomic principles, for example badly designed machinery, mechanical devices and tools used by workers, improper seating and workstation design
- **physiological hazards**, including disorganized workplace layout, leading to poor use of ladders, hazardous pathways, and inadequate or damaged equipment.

Range of hazards



Range of hazards

Health problems associated with working at brick kilns

- Permanent back injuries, strains, sprains and muscular damage to upper and lower extremities.
- Allergies;
- Lung diseases, from irritation due to particulate matter in the air.
- Chemical burns caused by burnt lime or other alkaline raw materials
- Decreased pulmonary function, pneumoconiosis - including silicosis, tuberculosis.
- Physiological strain, heat stress or thermal burns caused by high temperature in the work environment;
- Heavy metal poisoning due to metal particulates or fumes of lead, cadmium, chromium, arsenic, copper, nickel, cobalt, manganese or tin;

Range of hazards

- Reproductive problems;
- Stress-related disorders, due to debt-based labour at brick kilns.

Consequences of work related diseases and accidents

Work related diseases or accidents can have serious direct consequences for workers. They may include:

- loss of income;
- possible loss of a job;
- pain and suffering of the injury or illness;
- healthcare costs.
- temporary or permanent disability

Range of hazards



Range of hazards

Issues of concern

The main areas of concern of Occupational Safety and Health at brick kilns in India include:

- coal used in the kilns
- use of banned materials like, plastic, tyre etc. as fuel
- outdated brick kiln technology
- setting up of illegal kilns
- long hours on the job leading to greater risk of high-level exposure to hazards
- infrequent job rotations and ergonomic concerns
- minimal personal protective equipment and education
- Inappropriate living conditions at the workplace such as, low ceiling houses without ventilation etc.
- Children of workers staying at the kilns are equally at risk.

Range of hazards



Range of hazards

“Brick workers, especially moulders are exposed to the sun for long hours. They are exposed to high concentration of dust while manual breaking of coal. There is also a risk of exposure to gas /dust from ash spread on the kiln and open fires during manual coal feeding. The workers have to walk on hot surfaces while monitoring and regulating the fire”

What can be done to mitigate the risks at kilns

To promote safe work at brick kilns employers, workers and unions should be committed to health and safety and ensure that:

- workplace hazards are controlled at the sites;
- records of any exposure are maintained for many years;
- both workers and employers are informed about health and safety risks in the workplace;

Range of hazards



WELLNESS AT WORK

Range of hazards

“Effective workplace health and safety programmes can help to save the lives of workers by reducing hazards and their consequences. Health and safety programmes also have positive effects on both worker morale and productivity. Effective programmes can also save employers a great deal of money”

Impact Of Hazardous Occupations On Women



Impact Of Hazardous Occupations On Women

The impact of occupational hazards on women and children is much harder than on men. In addition to working in the brick kilns typically women also do other unpaid work at home, like cooking, cleaning and bearing and taking care of children.

The extended work hours puts tremendous pressure on women's bodies and minds. Because of uncomfortable positions at workplaces and that too for long hours, women develop muscular-skeletal disorders. Women and children in the kilns, who work in excess of 10 hours per day, transporting heavy loads of bricks repetitively, are especially at risk of developing these chronic physiological disorders.

Impact Of Hazardous Occupations On Women

Many female workers are required to transport the bricks by hand. Transportation of red bricks is done by head load. Generally 9 to 12 bricks are carried at a time as head load, which causes health problems.

Exposure to hazardous substances or hazardous work conditions can affect a woman's reproductive health before or after conception takes place. For instance, turning soft bricks is a job which is done by women workers where they are required to squat and turn the bricks. This constant squatting work can not only give them back ache but also lead to reproductive health problems. Occupational hazards can also seriously affect a developing embryo or foetus and can have adverse effects on the development of a baby or child.

Impact Of Hazardous Occupations On Women

Three important areas of concern for many women workers

Issues of security,

Adequate provisions should exist to guarantee the safety and security of women workers, especially for women working at night, alone, or in isolated places and not having adequate access to toilets and bathing space.

Right to maternity leave

There are maternity leave provisions, which allow an adequate maternity leave period and guarantee the worker's right to return to her job at the same level of seniority and pay. Trade unions should ensure that employers comply with existing maternity leave legislation [Maternity Benefit Act].

Impact Of Hazardous Occupations On Women

Maximum weight of load to be transported manually

A woman worker's health and safety can be jeopardized if she is required to move manually loads that are beyond her physical capacity. Adequate policies exist which need to be implemented which limit the maximum weight of a load a woman is required to move manually.

To safeguard women against the dangers of lifting heavy weights, the Factories Act authorises the appropriate state governments to fix the maximum load that may be lifted by women. Rules framed by all the state governments (except Uttar Pradesh) have fixed the following maximum weights for women employed in factories.

Adult females: 30 kgs

Adolescent females: 25 kgs

Female children : 13 kgs

Impact Of Hazardous Occupations On Children



Impact Of Hazardous Occupations On Children

Occupational Hazards & Children

Child workers are at a greater risk than adult workers of suffering from work-related problems. Occupational hazards and work conditions may have permanent effects on the development of children who work.

Physical Consequences

- Long and strenuous hours of activity affect physical health & strength, impair vision and hearing
- Cause bronchial, musculoskeletal problems, cancer etc.
- Cause permanent disabilities due to exposure to dangerous materials or substances
- Denies right to childhood and freedom.

Impact Of Hazardous Occupations On Children

Cognitive Consequences

Decreased school attendance or dropping out leads to lesser education and skill development

Psychological and Social Hazards

Leadsto isolation, depression, mental disorders etc.

Children in hazardous occupations can be used for anti-social practices

BE ALERT!

Workers often do not realize that many of their problems are related to their work. This is particularly true when an occupational disease is in the early stages.

Impact Of Hazardous Occupations On Children



Impact Of Hazardous Occupations On Children

What makes it difficult to identify are the time period over which the effects of such occupational diseases manifest themselves. The fact that it may take years to show symptoms does not really help in identifying the underlying causes. Other reasons such as changing jobs or personal behaviour - such as smoking tobacco or drinking alcohol - further increase the difficulty of linking workplace exposure to a disease outcome.

It is important that workers try to:

- recognize early signs/symptoms of any potential occupational diseases before they become permanent conditions;
- assess their work environment;
- insist that management make changes before hazardous conditions can develop.

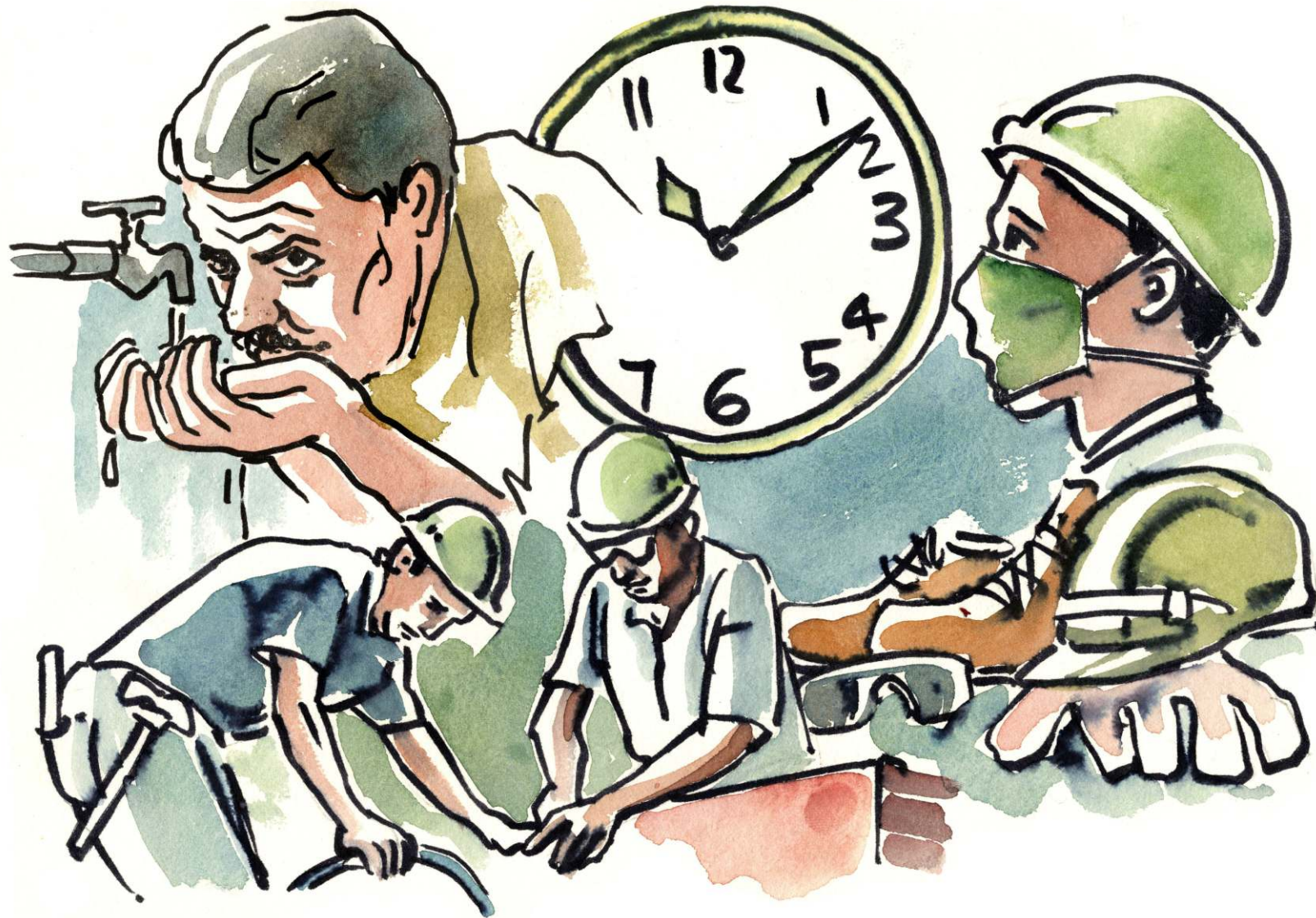
Impact Of Hazardous Occupations On Children

Measures to mitigate effects of hazards



Impact Of Hazardous Occupations On Children

How to reduce workplace hazards



Impact Of Hazardous Occupations On Children

The administrative controls needed for worker safety in the brick kilns include:

- Adjusting working hours, job rotations, adjusting workstations, providing Personal Protective Equipment (PPE) for workers and installing proper hygiene and water facilities to reduce cumulative exposure to toxicants,
- Controlling dust, including through spraying down dusty areas, and respiratory protection through mandatory dust mask usage.
- Proper hand, face, footwear and eye PPE in the firing sections to reduce burns and visual impairment from heat of the firing section and gases and vapours emitted.

Factories Act, 1948



Factories Act, 1948

India's Factories Act 1948 stipulates several measures aimed at ensuring safety of workers in the workplace. Some of these include:

- Maintenance of sufficient supply of wholesome drinking water, sufficient latrine and urinal facilities and adequate and suitable facilities for washing.
- First-aid boxes equipped with the prescribed contents are also to be provided in every factory.
- A notice containing abstract of the Factories Act and the rules made there under, in English and local language should be displayed prominently.
- Name and address of Factories Inspector and the certifying surgeon should also be displayed on notice board.
- Notice of any accident causing disablement of more than 48 hours, dangerous occurrences and any worker contracting occupational disease should be informed to Factories Inspector.

Factories Act, 1948

The Act requires the employers to provide instructions, training and supervision regarding safety and health at the workplace for his employees. This is in line with the principles laid down by the International Labour Organisation.

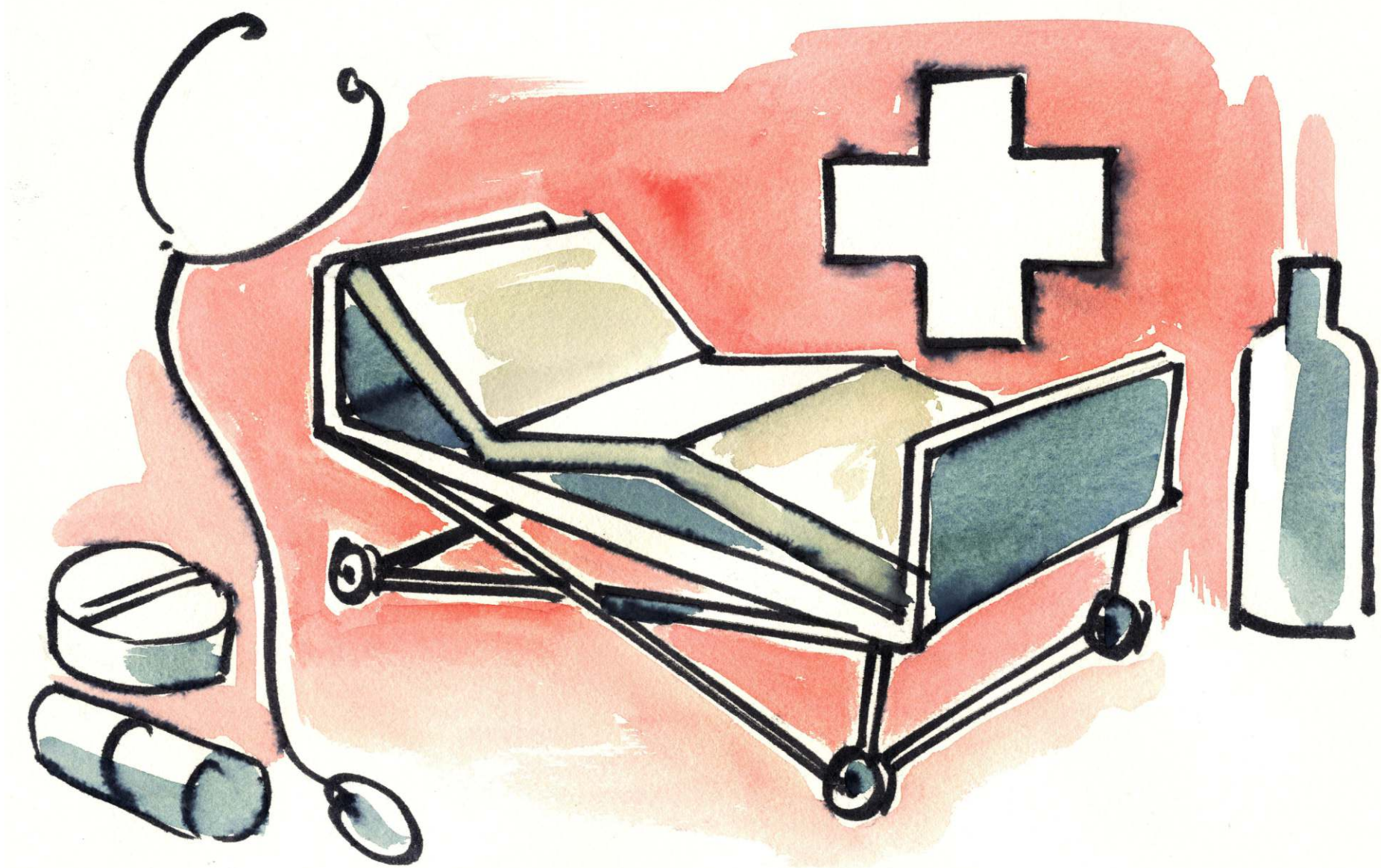
Inspection of Factory Premises

The Factories Act 1948 provides for a comprehensive labour inspection system. But, implementation varies across India as this labour inspection system is managed by the particular state in which the factory or workplace is located.

The Act gives inspectors the power to enter in workplace premises; examine; inquire or interview anyone; ask for or take copy of any prescribed register, record or other document; and take measures and photographs.

The labour inspector is also authorized to dismantle or subject it to any process or test and take possession of any such article or substance that seems to cause danger to health and safety, and detain it for so long as is necessary for such examination.

Factories Act, 1948



Inter-State Migrant Workmen Rules

These rules necessitate that the contractor must ensure:

- Adequate first aid facilities for the outdoor treatment of migrant workers free of cost for any ailment which they may suffer during the course of their employment.
- Arrangements for doctor visits as well as the cost of the medicines prescribed by such doctors.
- If any migrant worker or any of his/her family members are in need of hospitalization, arrangement for the same need to be made.

Other Important Workplace Laws

The Building And Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996

The BOCW Act mandatorily requires registration of establishments and provides for regulation of working hours, welfare measures, suitable protective gear for workers, suitable working conditions and overtime wages for workers.

The employer shall provide, free of charges and within the worksite or as near to it as may be possible, temporary living accommodation to all building workers with provisions of drinking water, latrines and urinals.

Other Important Workplace Laws

Building and other Construction Workers Welfare Cess Act, 1996 (Welfare Cess Act)

Under this Act the employer shall be responsible for payment of wages to each worker on or before the prescribed date. There is a provision for levy and collection of cess for the welfare of workers at a rate not exceeding two percent- but not less than one percent of the cost of construction incurred by an employer.

Given the prevalence of unorganised workers in brick kilns it is particularly important that States regularly inspect establishments to ensure compliance with occupational standards and safety regulations that are specified in great detail in the Rules framed under the Act. Further, cess funds could help treat and rehabilitate workers who have been injured at site, as is being done in some State schemes. Cess funds can also be utilised to improve access to health for construction workers.

Other Important Workplace Laws

Workmen Compensation Act, 1923



Other Important Workplace Laws

The Workmen's Compensation Act is the first piece of legislation dealing with social security. It provides compensation for workers who are injured in the course of duty.

The meaning of compensation in this Act is limited to that provided for employment injuries sustained during the course of work. It is also limited to specifically monetary compensation, not including salary, travel allowance, and any other form of remuneration given to workers.

This Act provides compensation to workers in case of occupational accidents or disease, thereby promoting occupational safety and health.

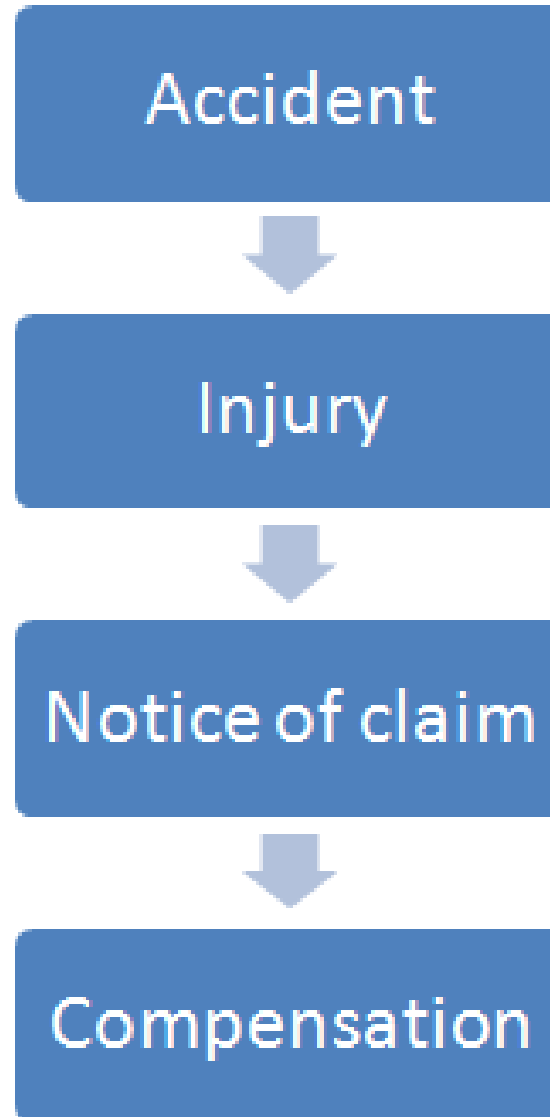
Other Important Workplace Laws

When is the employer liable to pay compensation?

As per Section 3 of the Act, the employer is liable to pay compensation if the worker is injured:

- 1) while engaged in work, and;
- 2) in the course of his employment (i.e. during work hours),and;
- 3) resulting in disablement of the worker.

Procedure followed under the Workmen Compensation Act, 1923



Procedure followed under the Workmen Compensation Act, 1923

The definition of '**disablement**' is very important in this Act, as it determines the extent of compensation that can be claimed by the worker injured in the course of his employment. Under the Act, there are four types of eventualities, which can be compensated, namely:

1. Death

2. Permanent Total Disablement: disablement that incapacitates a worker from all kinds of work.

3. Permanent partial disablement: disablement that reduces the capacity to work in any employment similar to that the worker was performing at the time of the accident.

4. Temporary disablement: This may be total or partial disablement, which is of temporary nature, which reduces the earning capacity of the worker in any similar employment for the period of disablement.

Procedure followed under the Workmen Compensation Act, 1923



Procedure followed under the Workmen Compensation Act, 1923

Is the employer liable to pay compensation in case a worker gets inflicted by an 'Occupational Disease'?

An “occupational disease” while in service, is one that inflicts workers in that particular occupation in which s/he was employed in and resulting from exposure to a hazardous working atmosphere, particular to that employment. If a worker contracts such a disease then the employer is liable to pay compensation, provided that the worker was employed by him for a continuous period of six months.

An occupational disease that is contracted in the course of employment will fall within the meaning of an 'accident' for the purposes of this Act. In the case of such a disease being contracted, the employer will be liable to pay compensation to the affected worker. The occupational diseases for which compensation is payable are specified in a list attached to the Act- specifically, Part A of Schedule III.

Procedure followed under the Workmen Compensation Act, 1923

Some examples of occupational Diseases:

- Skin diseases caused by physical, chemical or biological agents.
- Bronchopulmonary disease caused by flax, hemp and sisal dust (Byssinosis).
- Occupational asthma caused by recognized sensitizing agents inherent to the workprocess.

Procedure followed under the Workmen Compensation Act, 1923



Procedure followed under the Workmen Compensation Act, 1923

Legal Remedy in case of dispute

In cases where the employer does not pay compensation after notice has been issued and after the lapse of 30 days from the date of the accident, or where the employee and employer fail to arrive at an agreement, an application can be made to the labour officer by the worker. The proceedings before the Labour officer are quasi-judicial in nature.

In case of workers' injuries, the government has the responsibility of disposing workers claims, in a speedy way. No technical procedure is followed in workmen compensation cases. However, as the employer has to be heard, and the matter may need to be investigated, there is some minimum procedure followed. A Labour Commissioner is appointed to discharge this responsibility.

Procedure followed under the Workmen Compensation Act, 1923



Procedure followed under the Workmen Compensation Act, 1923

A strategy that could be very effective, depending on the circumstances is to check whether a criminal complaint has been registered and at what stage it is. Normally when the worker is taken to a government hospital after the accident for treatment, the hospital authorities have a legal duty to make a report to the police. For example, the employer may be criminally liable for not making adequate provisions for the safety of the workers engaged in work at his premises and thus guilty of criminal negligence. There are two benefits of this approach; if the employer's guilt is proven in the criminal proceedings, this helps tremendously in proving his/her liability in the case before the labour officer deciding the workmen's compensation case. Secondly, it puts pressure on the employer to settle the matter.

Procedure followed under the Workmen Compensation Act, 1923

Application for Compensation

An application can be made to the labour commissioner as well under section 22 of the Act.

The commissioner shall not be liable to entertain an application for compensation unless it is given in the prescribed format i.e. it must be made with the following details being furnished:

- (a) a statement in ordinary language with regards to the circumstances under which the application is being forwarded and the relief or order which the applicant claims
- (b) in case the claim for compensation is made against the employer, the application should mention the date when the notice of such accident was made to the employer, and if there was any delay in doing so, the reason for the delay;
- (c) The name and address of the parties.

Procedure followed under the Workmen Compensation Act, 1923

State Agencies Involved In Health And Safety

The Ministry of Labour and Employment along with ministries specialized for certain industrial sectors - for example the Ministry of Power, Ministry of Mines - are responsible for formulating and administering laws and regulations related to labour and employment.

Need Of Workers At Brick Kilns

1. Single most important requirement is that the employers should recognise occupational hazards at the kiln sites and conduct training among workers to maximise efficiency and reduce accidents.
2. Workers should demand basic necessities such as toilets, bathroom and clean drinking water. Proper eating and resting place for living is also part of basic facilities which the employer should provide. This is a legal requirement as well.
3. Heat is a significant hazard at kiln workplace. Employers should ensure that proper resting periods and place is provided to workers so that they can be protected from the sun.
4. They should also ensure that, so far as is reasonably practicable, the workplaces, machinery, equipment and processes under their control are safe and without risk to health.

Need Of Workers At Brick Kilns

5. Workers should demand, where necessary, basic adequate protective clothing and protective equipment to prevent risk of accidents or of adverse effects on health.
6. Employers should provide for first aid boxes at kilns. Also, employers can arrange for visit of doctors to the kilns once a month for regular check up of the workers.
7. Government should conduct health and safety programmes at such sites in order to raise health awareness and awareness about the kind of hazards which the workers are exposed to everyday.

Points to Remember

Occupational health and safety addresses the broad range of workplace hazards from accident prevention to the more insidious hazards including toxic fumes, dust, noise, heat, stress, etc.

Preventing work-related diseases and accidents must be the goal of occupational health and safety programmes, rather than attempting to solve problems after they have already developed.

Occupational health and safety is more than accident prevention —it encompasses all aspects of working conditions.

That training is an essential component of health and safety programmes.

Workers at brick kilns are faced with a multitude of hazards in the workplace.

Effective workplace health and safety programmes can help to save the lives of workers by reducing hazards and their consequences.

Effective programmes can also have positive effects on both worker morale and productivity, and can save employers a great deal of money.

Points to Remember

Strong management commitment and strong worker involvement are necessary elements for a successful workplace health and safety programme.

Measures to mitigate risks attached with hazards include administrative control, improving technology at kilns and providing personal protective equipment to workers.

We learned that work at brick kilns have greater impact on both women and children.

Existing laws which cater to occupational health and safety at brick kilns include Factories Act, Inter-State Migrant Act, BOCW Act and Workmen Compensation Act.

We discussed about the labour inspection system and the authorities associated with the system.

Finally, there is a mention of the needs and demands of workers at brick kilns to be raised with the employers as well as the government.

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