Basic Occupational Safety and Health (BOSH for SO1)
with Training of Trainers(v.2)

Prescribed Basic Occupational Safety and Health Training Course for Safety Officer 1 (SO1) (Pursuant to Section 3(n) of RA 11058 and Section 3(v) of DO 198-18)

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Module 4	New addition	Include health (original does not include health)	April 12, 2019
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The OSH Training Framework

The main goal of Occupational Safety and Health (OSH) is to prevent the occurrence of accidents and illnesses in the workplace. Factors contributing to these accidents and illnesses are health and safety hazards which can be addressed with the guidance of OSH Laws and Standards as well as OSH Fundamentals.

Figure 1. presents that accidents and illnesses are 98 percent preventable (Heinrich, n.d.), potential workplace accidents/illnesses can be avoided through Hazard Identification (Job Hazard Analysis, Safety Inspection, Work Environment Measurement (WEM), Medical screening & surveillance), Risk Assessment, and Risk Control (Elimination, Substitution, Engineering, Administrative, Personal Protective Equipment (PPE)—collectively referred to as HIRADC.

If accidents/illnesses do happen (with 2 percent chance), there are means to effectively manage and mitigate its impact. This OSH Course covers topics such as Workplace Emergency Preparedness, Employee Compensation and Accident Investigation and Reporting.

In institutionalizing safe workplace practices and conditions, the abovementioned strategies can be designed into a formal plan of action to prevent workplace injuries and illnesses—the OSH Program. Following the safety and health principles and guidelines found in the program, there will be a significant improvement in the company's compliance with laws and regulations and reduction of costs, including significant reductions in workers' compensation premiums.

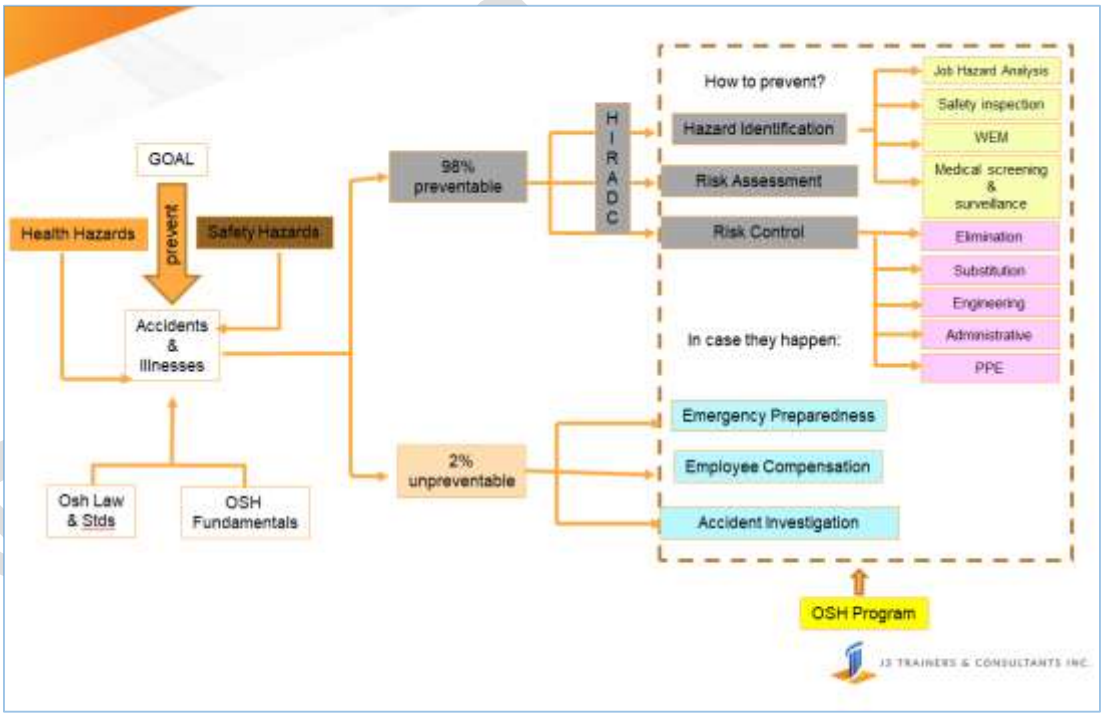


Figure 1. The OSH training Framework

Basic Occupational Safety and Health (BOSH) for Safety Officer 1

General Objective

This 10-hour course on Basic Occupational Safety and Health (BOSH) for Safety Officer1 provides participants a clear and concise explanation of the various responsibilities of a Safety Officer with regards to the OSH Standards and the OSH Law. Participants are able to gain significant learning on the concepts and principles of safety and health to improve their competence to perform as Safety Officers. The program is aimed at equipping participants with the necessary knowledge and skills in keeping the workplace healthful and safe.

Specific Objectives

At the end of this 10-hour training, participants are able to:

- Recognize hazards in the workplace
- Protect themselves from the adverse effects of workplace hazards
- Perform the duties and responsibilities of a Safety Officer 1
- Conduct one-day OSH orientation for all workers

Scope

Module 1 - Overview of OSH
Module 2 - Accidents and their Causes
Module 3 - Safety Hazards and their Controls
Module 4 - Health Hazards and their Controls
Module 5 - Hazard Identification, Risk Assessment and Control
Module 6 - Workplace Emergency Preparedness
Module 7 - Presentation and Training Facilitation
Module 8 - Guideline on Covid-19 Prevention and Control

Module 1 – Overview of OSH

1.1. What is OSH?

Do you feel safe at work? What makes you feel safe at work? Some may feel safe, some may not. Some considerations are workplace policies, procedures and practices, wearing of PPEs, compliance to the requirements of the law, presence of safety officers, etc.

OSH is a state of being certain that exposure to workplace conditions will not cause adverse effects to the well-being of a worker/person in terms of injury and illness.

1.2. Why is OSH important?

OSH is important based on 3 arguments: 1) it is the right thing to do, 2) it is the smart thing to do, and 3) it is the law (WHO, 2010).

1. The first argument – *right thing to do* – is based on ethical principle in that the employer, while earning profit, has the moral obligation to protect employees from accidents and illnesses. Workers have the right to safe and healthful workplace.

2. The second argument – *the smart thing to do* – is based on the economic principle in that no business owner wants accidents because accidents and illnesses impose a massive cost to business. They not only lower productivity, but in the worst case, can even end the business.

3. The third argument – *it is the law* – is based on the legal principle in that employers violating the provisions of the law are imposed penalties and can be issued work stoppage orders by the appropriate authorities.

1.3. OSH Statistics

According to the International Labor Organization (ILO) during the World safety Day Celebration in 2019:

- average of 7,500 die everyday due to work-related accidents
- 160 million incidents of occupational illness every year
- 270 million work-related accidents every year

The biggest killer in the workplace is cancer, causing roughly 640,000 or 32% of deaths, followed by circulatory diseases at 23%, then accidents at 19% and communicable diseases at 17%. Asbestos alone takes about 100,000 lives annually (ILO).

In the Philippines, there were 38,235 accidents recorded in 2017 which resulted to a total of 46,283 injuries, 43.9 percent of which are non-fatal with lost workdays, 55.1 percent without lost workdays and 1 percent fatal.

Philippine OSH Situation Accidents (2017)

Total accidents	38,235

Total injuries	46,283
Non-fatal with lost workdays	20,318 *(43.9%)*
Without lost workdays	25,501.93 *(55.1%)*
Fatal	463 *(1%)*

Source: Integrated Survey on Labor and Employment (ISLE) – 2017/2018

1.4. Occupational Injuries with Workdays Lost

1.4.1. Type of Injuries

Superficial injuries and open wounds were the most common type of occupational injuries with more than half or 50.8 percent of the total cases reported. This was followed by dislocations, sprains and strains with 12.0 percent and fractures with 10.7 percent.

Superficial injuries and open wounds	50.8%
Dislocations, sprains, strains	12.0%
Fractures	10.7%

1.4.2. Part of Body Injured

Wrist and hand was collectively recorded as the most injured part of body accounting for 35.9 percent. Lower extremities and arm and shoulder came next with 18.7 percent and 17.6 percent, respectively.

Wrist and hand	35.9%
Lower extremities	18.7%
Arm & shoulder	17.6%

1.4.3. Causes of Injury

The leading cause of work-related injury in establishments was stepping on, striking against or struck by objects, excluding falling objects (36.3%). Other causes of injury include caught in or between objects (21.0%) and falls of persons (10.5%).

Stepping on, striking against or struck by objects	36.3%
Caught in or in between objects	21.0%

Falls	10.5%

1.4.4. Agent of Injury

The top three (3) agents of injuries in 2017 were machines and equipment (26.2%); materials and objects (24.4%); and hand tools (18.3%).

Machines and equipment	26.2%
Materials and objects	24.4%
Hand tools	18.3%

1.4.5. Occupational Diseases

Occupational diseases reported in 2017 totaled to 101,851 cases, a decrease of 19.1 percent from 125,973 reported cases in 2015. Highest among the work-related illnesses reported by workers was backpains, followed by essential hypertension and neck-shoulder pains, occupational asthma and other infections.

Back pains	31.3%
Essential hypertension	15.5%
Neck-shoulder pains	11.4%
Occupational asthma	5.4%
Other infection	5.3%

Workers engaged in administrative and support service activities reported the highest share of cases with occupational diseases with 31.8 percent. Followed by manufacturing industry (28.9%) and wholesale and retail trade; repair of motorcycles (9.6%).

1.4.6. Profile of Most Commonly Injured Worker

- Male
- Married
- 26-30 years old
- With 1 to 5 years work experience
- Assigned in the first shift

1.5. Department Order No.198 Series of 2018

"Implementing Rules and Regulations of Republic Act No. 11058 Entitled "An Act Strengthening Compliance with Occupational Safety and Health Standards and Providing Penalties for Violations Thereof".

1.5.1. The State

- affirms labor as a primary social and economic force, and that a safe and health workforce is an integral aspect of nation building.
- shall ensure that labor code, domestic laws and internationally recognized OSH standards are fully enforce and complied with by the employers.
- shall ensure a safe and healthful workplace for all working people by affording them full protection against all hazards in their work environment.

1.5.2. Coverage

- Establishments located inside special economic zones and other investment promotion agencies
- Utilities engaged in air, sea, and land transportation
- Industries such as mining, fishing, construction, agriculture, and maritime
- Contractors and subcontractors including those engaged in the projects of the public sector
- *Does not apply to the public sector*

1.5.3. Duties of Employers

- Keep workers from hazards that can cause death, illness and physical harm
- Provide complete job safety instruction
- Ensure that chemical, biological and physical agents and ergonomic and psychosocial stresses are under control
- Use only approved equipment and devises
- Comply with OSHS and provision of PPE
- Allow workers to participate in the planning, implementing, monitoring and evaluation of the OSH management system
- Provide for measures identifying training and drills to deal emergencies
- Comply with reportorial requirement.

1.5.4. Duties of Workers

- Join in OSH capacity building
- Use safeguards and safety devices
- Comply with all instructions to prevent accident
- Follow all instructions in cases of emergency
- Report hazards in the workplace

1.5.5. Rights of Workers

Right to know all hazards in the workplace through training, education and orientation. Re-orientation for workers in high risk establishment shall be done not less than once a quarter.

Right to refuse unsafe work without threat or reprisal from the employer if imminent danger situation exist, as may be determined by DOLE.

Right to report accidents, dangerous occurrences and hazards to the employer, to the DOLE and other government agencies using any form of communication and without retaliation.

Right to Personal Protective Equipment (PPE)

1. free of charge
2. appropriate type as tested and approved based on its standards
3. appropriate size, weight, and type to specific workers exposed to hazards

1.6. Other Requirements of the Law

Safety signage and devices posted in prominent positions to warn the workers and the public of the hazards in accordance with the OSH Standards in terms of colors and sizes and with the Globally Harmonized System pictograms.

Safety in the use of equipment complying the requirements of DOLE including the requirement on training and certification of the operators by the Technical Education and Skills Development Authority (TESDA) and the Professional Regulation Commission (PRC).

OSH information shall be made available to workers including hazards and risks in the workplace, control mechanisms to reduce the risk of exposure to the hazards and emergency and disaster management protocols.

OSH Reports, as required by law shall be submitted by employers in prescribed forms and at a designated time.

1.6.1. Reportorial Requirements

W – Work Accident/Illness Report (WAIR)
A – Annual Exposure Data Report (AEDR)
R – Report of Safety Organization (RSO)
M – Minutes of the meetings of health and safety committee
A – Annual Medical Report (AMR)

1.6.2. Safety and Health (OSH) Programs

Safety and Health (OSH) Programs containing detailed policies, processes and procedures to conform with OSH standards shall be developed and implemented as main tool to achieve the company's OSH objectives.

Minimum Requirement of OSH Program for Low to Medium Risk Establishments

- Company Commitment
- General Safety and Health Program (HIRAC, medical surveillance, first-aid)
- Promotion of mental health services and drug-free workplace
- Prevention of HIV, Tuberculosis, Hepatitis B
- Complete company/project details
- Composition and duties of OSH Committee
- OSH Personnel and Facilities
- Training and safety orientation of all workers
- Conduct of toolbox meeting and job safety analysis
- Accident investigation and reporting
- Provision and use of PPE
- Provision of Signages
- Provision of workers' welfare facilities
- Emergency and disaster prepared and drills
- Solid waste management system
- Control and management of hazards
- OSH Committee shall be organized in every workplace to ensure that the OSH program is developed and enforced.

1.6.3. Safety Officer

Safety Officer 1	– completed the required training – for low risk establishments with 1 to 50 employees

	– for medium risk establishments with 1 to 9 employees
Safety Officer 2	– completed the required training – for low risk establishments with 51 to 199 employees – for medium risk establishments with 10 to 199 employees – for high risk establishments with 1 to 9 employees
Safety Officer 3	– completed the required training – for low risk establishments with 200 and more employees – for medium risk establishments with 100 and more employees – for high risk establishments with 10 to 1,000 employees
Safety Officer 4	– completed the required training – for medium risk establishments with more than 1,250 employees – for high risk establishments with more than 1,000 employees

1.6.4. Health Personnel and Facilities

First Aider	– completed required training and certified – for all establishments (low, medium, risk)
OH Nurse	– completed the required training and licensed – for low risk establishment with 100 or more employees – for medium to high risk with 51 and more employees
OH Dentist	– completed the required training and licensed – for low risk establishments with 200 and more employees – for medium to high risk establishment with 100 and more employees
OH Physician	– completed the required training and licensed – for low risk establishments with 200 and more employees – for medium to high risk establishment with 100 and more employees

- Medical supplies, check requirement at Table 47 of the OSH Standard *(pp 207 to 211 of the 2019 updated OSH Standard)*
- Treatment room or clinic
- Hospital and dental clinic* *(Section 15 of DO 198-18 pp 432 of the 2019 updated OSH Standards)*

1.6.5. Workers Welfare Facilities

- Adequate supply of safe drinking water
- Adequate sanitary and washing facilities
- Suitable living accommodation, applicable
- Separate sanitary, washing and sleeping facilities for all gender, if applicable
- Lactation station for covered establishments (DOLE Dept Order No 143-15)
- Ramps and railings, as required

- Others as prescribed by the OSH Standard *(Section 19 of DO 198-18 at pp 435 of the 2019 updated OSH Standards)*

1.7. Safety and Health Training Requirements

All Workers to undergo mandatory 8-hour OSH orientation by the Safety Officer or any Accredited Safety Practitioner or Consultant.

Workers in high risks processes shall be appropriately trained and certified for competency and given regular re-orientation not less than once every quarter.

1.7.1. Safety Officers

Safety Officer 1 (SO1)
- Mandatory eight (8)-hour OSH training course applicable to the industry
- Other industry specific course as may be prescribed
- Two (2) – hour trainer's training

Safety Officer 2 (SO2)
- Mandatory forty (40) – hour OSH training course applicable to the industry
- Other industry specific mandatory training as may be prescribed

Safety Officer 3 (SO3)
- Mandatory 40 - hour OSH training course applicable to the industry
- Other industry specific mandatory training as may be prescribed
- Additional 48 - hour advanced/specialized OSH training relevant to the industry
- Other requirements as prescribed by the OSH standards

Safety Officer 4 (SO4)
- Mandatory forty (40) - hour OSH training course applicable to the industry
- Other industry specific mandatory training as may be prescribed
- Additional 80 - hours of advanced/specialized OSH training relevant to the industry
- Other requirements as prescribed by the OSH standards

1.7.2. Health Personnel

First Aider
- Standard first aid training

OH Nurse

- At least 40 – hour basic OSH training course for OH Nurses

OH Dentist

- At least forty (40) – hour Basic OSH training course

OH Physician

- At least fifty-six (56) – hour Basic OSH Training course for OH Physicians

1.8. Penalty

DO 198-18 Section 29. Prohibited Acts and its Corresponding Penalties. – Any willful failure or refusal of an employer, contractor or subcontractor to comply with the following OSH standards below or with a compliance order issued by the Secretary of Labor and Employment or his/her authorized representative shall be penalized of the administrative fines as follows:

Registration of Establishment to DOLE ……	Php 20,000.00
Provision of job safety instruction or orientation prior to work ……..	Php 20,000.00
Provision of worker's training (first-aid, mandatory workers training, mandatory OSH training for safety officers and health personnel) …….	Php 25,000.00
Provision of safety signages and devices ……	Php 30,000.00
Provision of medical supplies, equipment and facilities ……	Php 30,000.00
Submission of reportorial requirements as prescribed by OSH standards ……	Php 30,000.00
Provision of safety officer and/or OH personnel …….	Php 40,000.00
Provision of certified personnel or professionals required by the OSH standards …	Php 40,000.00
Establishment of a safety and health committee ……	Php 40,000.00
Formulation and implementation of a comprehensive safety and health program …	Php 40,000.00
Provision of information on hazards and risk (absence of chemical safety data sheet, no written SOP in materials handling, lifting etc., no permitting system for confined spaces/hot workers, no lock-out/tag-out system etc.) ……	Php 40,000.00
Provision of sanitary and welfare facilities ……	Php 40,000.00
Use of approved or certified devices and equipment for the task ……	Php 50,000.00
Provision of PPE or charging of provided PPE to workers ……	Php 50,000.00
Compliance with DOLE issued WSO ……	Php 50,000.00
Compliance to other OSH standards ……	Php 40,000.00

Module 2 – Accidents and their Causes

2.1. Accidents/Incidents

Accidents are "occurrences or events that are unexpected, unforeseen, unplanned and unwanted which result to damage, injury, loss or death".

Incidents, on the other hand, are "events, which under slightly different circumstances, may have resulted in injury or ill health of people, or damage or loss to property, plant, materials or the environment or a loss of business opportunity" (HSE-UK).

Example: Accident

> *"A window cleaner dropping a bucket from a height, which caused injury to a person underneath, would be classed as an accident."*

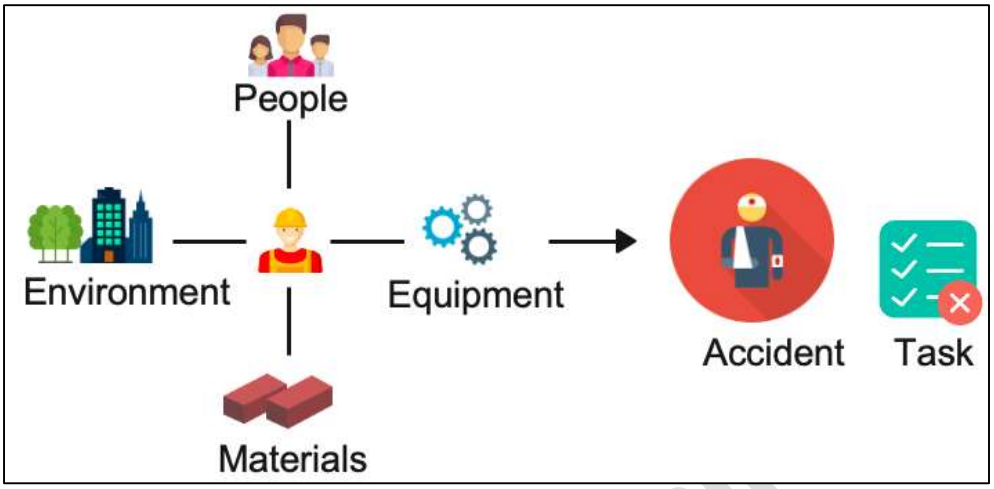
Example: Incident

> *"A window cleaner dropping a bucket from a height, which just missed a person standing underneath, would be classed as a "near-miss" incident. This incident did not cause an injury to a person but, under slightly different circumstances (the person standing nearer to the contact point) the person may have been injured."*

2.1.1. How do Accidents Happen?

The System Theory of Accident Causation proposes that work is a system composed a group of regularly interacting and interrelated components such as people, equipment/machineries/tools, materials and environment as shown in the figure below.

The likelihood of an accident to occur is dependent on how these components interact. Each component or a combination of these components are considered source of hazard that can either cause injury or illness to the worker after being exposed.



Example: An inexperienced worker who temporarily replaces a competent operator of a machine has increased probability of figuring an accident.

It takes a hazard and someone exposed to the hazard to produce an accident. Expressed in equation:

Hazard + Exposure = Accident/Incident

2.1.2. Types of Accidents

1. Fall to:
   - lower level
   - same level

2. Caught:
   - on
   - in
   - in between

3. Struck:
   - against
   - by

4. Contact with:
   - chemicals
   - electricity
   - heat/cold
   - radiation

5. Rubbed or abraded by:
   - friction
   - pressure

- vibration

2.1.3. Causes of Accidents

Fatalism which is a belief that accidents are bound to happen are not the real causes of accidents because the real and immediate causes are 1) unsafe acts which account for 88% and 2) unsafe conditions which account for 10% (W.H. Heinrich).

2.1.4. Unsafe Acts

Unsafe Acts are "any human action that violates a commonly accepted work procedure" (American National Standards Institute).

Examples of unsafe acts are:

- Operating Equipment without Authority
- Disregard of SOP or instructions
- Removing Safety Devices
- Using Defective equipment
- Using PPEs improperly
- Horseplay
- Willful intent to injure
- Working while under the influence of alcohol or drugs

Factors Contributing to Unsafe Acts

- Improper Attitude
- Physical Limitations
- Lack of Knowledge or Skills

2.1.5. Unsafe Conditions

Unsafe conditions are "physical or chemical property of a material, machine or the environment which could result in injury to a person, damage or destruction to property or other forms of losses" (American National Standards Institute).

Examples of unsafe conditions:

- Slippery and wet floors
- Dusty work area
- Congested plant lay-out
- Octopus wiring
- Unguarded rotating machines
- Protruding nails/sharp objects
- Scattered objects in the work area

2.1.6. Can accidents be prevented?

Answer: YES.

And the truth is most accidents happened because they have not been prevented! According to W.H. Heinrich accidents are 98% preventable and 2% non-preventable.

2.2. What is a hazard?

"A hazard is any source of potential damage, harm or adverse health effects on something or someone" (CCOSH). Harm is referred to as physical injury or damage to health."

Generally, there are 2 classification of hazards: Safety and Health, hence the term (OSH) Occupational Safety and Health. *Safety hazards* are something that has potential for injury while *health hazards* are something that has potential for illness.

2.2.1. Types of hazards

A common way to classify hazard is by category: biological, chemical, physical, ergonomic, psychosocial and safety hazards.

Health Hazards	Biological	bacteria, viruses, insects, plants and animals
	Chemical	gas, vapors, mist, fumes,
	Physical	radiation, noise, temperature extremes, pressure, electricity, etc.
	Ergonomic	repetitive movement, improper set-up of work stations, awkward positions, over exertions
Safety Hazards	Psychosocial	stress, violence, etc.
	Safety	clutters (slip and trip), unguarded machines, heights (fall), equipment malfunctions, inappropriate use of tools, electricity, etc.

2.2.2. What is exposure (to hazards)?

Exposure is a state of being where a worker is within the "danger zone" in which way the worker is in a position of imminent danger (Safeopodia). Example: a maintenance worker performing task in less than 10 feet away from a live wire.

Exposure to hazards can be:

Physical – when a worker is generally within arm's length (example: unguarded rotating machine)

Environmental – when a worker is an unhealthy atmosphere (example: extremely hot working area)

2.2.3. Examples of Hazards

Source	Hazard	Harm
Object	Knife	Cut
Substance	Benzene	Leukemia
Material	Asbestos	Mesothelioma
Source of Energy	Electricity	Shock, electrocution
Condition	Wet floor	Slips, falls
Process	Welding	Metal fume fever
Practice / Task	Hard rock mining	Silicosis

2.2.4. Hazard vs Risk

Hazard is the potential source of harm or adverse health effect on a person or persons. Risk is the likelihood and the severity that a person may be harmed or suffers adverse health effects if exposed to a hazard.

2.3. Classification of Establishments

The OSH Law classifies establishments in terms of the level of risk. There are 3 classifications: low, medium and high.

High risk establishment	workplace wherein the presence of hazard or potential hazard within the company may affect the safety and/or health of workers
Medium risk establishment	workplace where there is moderate exposure to safety and health hazards and with probability of an accident injury or illness
Low risk establishment	workplace where there is low level of danger or exposure to safety and health hazards or with low probability to result in accident, harm or illness

2.3.1. High Risk Establishments

Section 3(h) High risk establishment refers to a workplace wherein the presence of hazard or potential hazard within the company may affect the safety and/or health of workers not only within but also persons outside the premises of the workplace. There is high level of exposure to safety and health hazards, and probability of a major accident resulting to disability or death or major illness is likely to occur if no preventive or control measures are in place. The following are workplaces commonly associated with potentially high-risk activities:

1. Chemical works and chemical production plants;
2. Construction;
3. Deep sea fishing;
4. Explosives and pyrotechnics factories;
5. Firefighting;
6. Healthcare facilities
7. Installation of communication accessories, towers and cables;
8. LPG filling, refilling, storage and distribution
9. Mining
10. Petrochemical works and refineries;
11. Power generation, transmission and distribution in the energy sector
12. Storage and distribution center for toxic or hazardous chemicals;
13. Storage of fertilizers in high volume;
14. Transportation;
15. Water supply, sewerage, waste management, remediation activities;
16. Works in which chlorine is used in bulk; and
17. Activities closely similar to those enumerated above and other activities as determined by DOLE in accordance with existing issuances on the classification of establishments.

Module 3 – Safety Hazards and their Controls

3.1. Workplace Housekeeping

Good housekeeping practices can help control or eliminate workplace hazards. Poor housekeeping frequently contribute to incidents.

It is based on the premise that if a workplace accepts debris, clutters, spills and disorder as normal, then other more serious hazards may be taken for granted.

Housekeeping is not just cleanliness. It is also:

- keeping work areas neat and orderly;
- maintaining halls and floors free of slip and trip hazards;
- removing of waste materials and other fire hazards from work areas; and
- keeping the discipline among employees to sustain the practice.

Poor housekeeping can cause accidents like:

- tripping over clutters on floors, stairs, platforms;
- being hit by falling objects;
- slipping on greasy, wet and dirty surfaces;
- striking against projecting and poorly stacked items or misplaced materials; and
- cutting, puncturing, or tearing the skin of hands or other parts of the body on projecting nails, wire or steel strapping.

On the other hand, good housekeeping can:

- prevent accidents;
- prevent fire;
- prevent illnesses (poor housekeeping attracts pests that can make workers sick);
- improve productivity; and
- boost employee morale.

3.1.1. 5S of Good Housekeeping

5S of Good Housekeeping involves the principle of waste elimination through workplace organization. It is derived from the Japanese words seiri, seiton, seiso, seiketsu, and shitsuke which can be roughly translated to English as sort, set in order, clean, standardize, and sustain, respectively *(APO, n.d.)*.

3.1.2. Principles of 5S of Good Housekeeping

Seiri	Sort	Separate necessary from unnecessary. – take out unnecessary items – label unserviceable or defective equipment/tools – dispose of trash regularly
Seiton	Set in order	Orderliness eliminate extra motion. – place items in the dedicated location to be more visible – apply systematic labeling to separate exclusive items – practice First-in-first-out (FIFO) method
Seiso	Sweep	Cleaning as purifying the spirit, cleaning as inspection and elimination of minor defects. – place items in dedicated location to be more visible – keep workplace as clean as required by the product/service – inspect while cleaning and clean before things get really dirty
Seiketsu	Standardize	Visual management and standardization. – maintain high standard of housekeeping at all times

		– make the first 3 S as your standard and write them – use standard signs and safety signage
Shitsuke	Self-Discipline	Sustaining, maintaining discipline and reviewing standards. – do housekeeping spontaneously without being told – do regular inspections/audits – adopt the kaizen principle (continuous improvement)

3.2. Materials Handling

Materials handling is a technique which includes the art of lifting, placing, storing or moving materials through the use of one's physical strength or appropriate handling equipment.

There are two ways to handle materials: manually, where workers physically lift and manipulate materials using their physical strength and mechanically, where special machines and lifting equipment are used to perform the task.

Manual vs. Mechanical or Automated Materials Handling

Both methods are effective, but there are important things that workers need to be aware of for both their safety and that of the materials they are handling *(Engineered Ergonomics, 2019).*

3.2.1. Manual Materials Handling

Manual Materials Handling consists of lifting, lowering, emptying, moving, carrying, transporting and packaging of products using physical strength. When doing these activities, a worker might:

- cut himself/herself
- hurt his/her back, spine, muscles

- hurt his/her fingers, hand, arm or legs
- sprain his/her ankle

Manual materials handling exposes workers to physical risks. The main risk factors associated with manual materials handling as identified by the National Institute for Safety and Health (NIOSH) are the following:

- awkward posture (bending and twisting)
- repetitive motion (frequent lifting, reaching, carrying)
- forceful exertions (carrying or lifting heavy loads)
- pressure points (grasping loads, leading against hard or sharp edges)
- static postures (in a fixed and prolonged position)

Repeated or prolonged exposure to these risk factors over time may cause damages to muscles, tendons, ligaments, nerves and blood vessels or what is known as musculoskeletal disorders (MSDs).

3.2.2. Precautions in Manual Materials Handling

When moving materials manually, the following practices are recommended by OSHA to prevent injury among workers:

- attach handles to loads to reduce the chances of getting fingers smashed;
- wear appropriate personal protective equipment;
- use proper lifting techniques; and
- seek help when a load is too bulky to properly grasp or lift, cannot see around or over the load and cannot safely handle the load.

3.2.3. Personal Protective Equipment

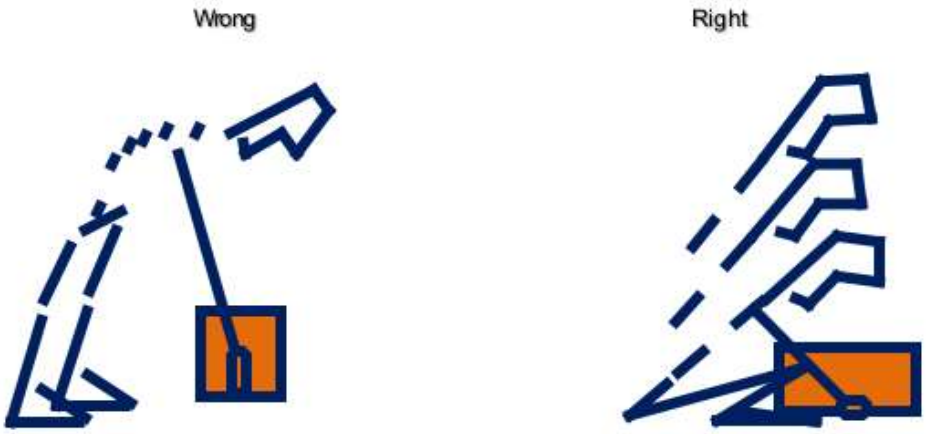
Using the following personal protective equipment prevents needless injuries when manually moving materials:

- hand and forearm protection (such as gloves for loads with sharp or rough edges);
- eye protection;
- steel-toed safety shoes or boots (to prevent impact on feet for objects that may fall);
- metal, fiber, or plastic metatarsal guards to protect the instep area from impact or compression.

3.2.4. Proper Manual Lifting Technique

- stand in front of the load
- bend the knees

- using both hands, grasp the object firmly and pull close to your body
- lift with the legs -- NOT THE BACK
- straight back and feet apart



3.2.5. Mechanical Materials Handling

Mechanical Materials Handling pertains to use of rigid, manually or mechanically-powered equipment mainly for handling bulky and heavy items reducing the risk of worker injury by placing the burden on the machine or equipment.

There are types of materials handling equipment (MHE), *manually-powered* and *mechanically-powered* or *automated MHE.*

3.2.6. Manually powered MHE

- reduce physical effort making the handling of materials easier and safer
- provide easy access
- protect the operator
- prevent any damage to materials

Examples are trolley, hand and pallet truck, cart, drum tilter, wheelbarrow

Mechanically-powered or automated MHE are classified as:

- *Lifting equipment* such as stationary, tower and gantry cranes
- *Transport equipment* such as industrial trucks, forklifts, trailers, dump trucks and conveyors

3.3. Working with Machines

Machine is a mechanical structure that uses power to apply forces and control movement to perform an intended action. It is necessary for efficiency of work. Machines have moving parts, sharp edges and hot surfaces (OSHA).

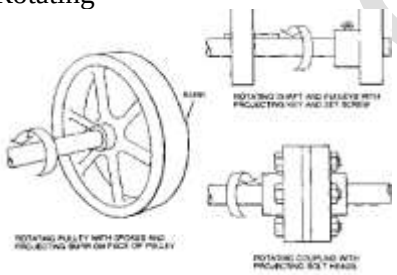
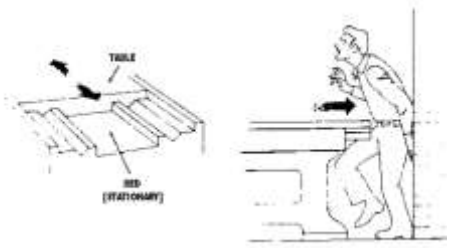
3.3.1. Mechanical Hazards

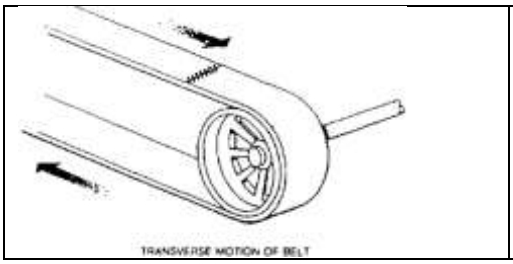
They occur in 3 basic areas where safeguarding is required:

- at the point of operation where work like cutting, shaping, boring, or forming are done;
- power transmission where components of mechanical system transmit energy -flywheels, pulleys, belts, couplings, cams, spindles, chains, cranks, and gears; and
- moving parts like reciprocating, rotating, and transverse moving parts, as well as feed mechanisms and auxiliary parts of the machine (OSHA).

3.3.2. Hazardous Mechanical Motion

The basic types of hazardous mechanical motions:

Motion	Danger
Rotating 	Injuries due to contact with rotating parts can be severe. Even smooth, slowly rotating shafts can grip clothing, and through mere skin contact force an arm or hand into a dangerous position.
Reciprocating 	Reciprocating motions may be hazardous because, during the back-and-forth or up-and-down motion, a worker may be struck by or caught between a moving and a stationary part.
Transversing	Transverse motion which is a movement in a straight, continuous line creates a hazard because a worker may be struck or caught in a pinch or shear point by the moving part.



Source: OSHA

3.3.3. Preventing against Machine Hazards

A good rule to remember is: any machine part, function, or process which many cause injury must be safeguarded. Machine operation or accidental contact with it can injure the operator or others in the vicinity (OSHA).

Machine guarding is a safety feature on a machine consisting of a shield/device covering hazardous parts to prevent contact with body parts or to control hazards like chips or sparks.

Machine guards must meet these minimum general requirements (per OSHA) which are also required by Rule 1200 of the OSHS:

- Prevent contact
- Secure
- Protect from falling objects
- Create no new hazards
- Create no interference
- Allow safe lubrication

3.3.4. Personal Protective Equipment (PPE)

Engineering controls be given priority for maximum worker protection. But whenever engineering controls are not available or are not fully capable of protecting the employee, operators must wear personal protective equipment which should be:

- appropriate to the hazards;
- maintained in good condition;
- properly stored when not in use, to prevent damage or loss; and
- kept clean, fully functional, and sanitary.

It is important to note that protective clothing and equipment can create hazards. Examples:

- A protective glove can be caught between rotating parts.
- A respirator facepiece can hinder the worker's vision.
- Loose-fitting shirts might possibly become entangled in rotating spindles or other kinds of moving machinery.
- Jewelry can catch on machine parts or stock and lead to serious injury by pulling a hand into the danger area.

3.4. Electrical Safety

3.4.1. Leading Causes of Electrical Accidents

- Drilling and cutting through cables
- Using defective tools, cables and equipment
- Failure to maintain clearance distance of 10 feet
- Failure to de-energize circuits and follow Lockout/Tagout procedures
- Failure to guard live parts from accidental worker contact
- Unqualified employees working with electricity
- Improper installation/use of temporary electrical systems and equipment
- By-passing electrical protective devices
- Not using GFCI (ground fault circuit interrupters) devices
- Missing ground prongs on extension cords

3.4.2. Hazards of Electricity

Shock	most common, can cause electrocution
Fire	enough heat or sparks can ignite combustible materials
Explosions	electrical spark can ignite vapors in the air
Arc Flash	can cause burns
Arc Blast	a pressure wave caused by expansion of copper in short circuit

3.4.3. Fundamentals of Electricity

Electrical current is the flow of electrons through a conductor.
A conductor is a material that allows electrons to flow through it.
An insulator resists the flow of electrons.
Resistance opposes electron flow.
Current Flows in a Loop or Circuit

Electric shock occurs when the body becomes a part of the circuit where current enters at one point and leaves at another. Current travels in closed circuits through conductors, example: water, metal, the human body.

Severity of the shock depends on the amount of current determined by voltage and resistance to flow and individual differences.

Effects of Current Flow

More than 3 milliamps (ma)	painful shock
More than 10 ma	muscle contraction
More than 20 ma	considered severe shock
More than 30 ma	lung paralysis - usually temporary
More than 50 ma	possible ventricular fibrillation (usually fatal)
100 ma to 4 amps	certain ventricular fibrillation (fatal)
Over 4 amps	heart paralysis; severe burns

3.4.4. The Four Pro-Active Methods of Controlling Electrical Hazards

1. *Electrical isolation* - keep electricity away from workers through insulation and enclosures.

2. *Equipment grounding* - give the stray current somewhere to go and keep a person from becoming part of the circuit.

3. *Circuit interruption* - automatically shuts off the flow of electricity in the event of leakage, overload, or short circuit breakers, fuses and ground fault circuit interrupters.

4. *Safe work practices*
   - inspect equipment for defects and damage before use
   - do not use damaged cord set
   - post warning signs/labels near exposed electrical circuits

- ensure safe distance of the worker to the energy source
- apply lockout/tagout to de-energized circuits and equipment

3.5. Fire Protection and Control

Fire is rapid oxidation of a fuel evolving heat, particulates, gases and ionizing radiation. Three elements are needed: Heat, Oxygen and Fuel, without which, fire will not start.

Key strategy to prevent fire is to remove one or more of the elements.

3.5.1. Basic Principles of Fire

- Fire is a process that emits light and heat. To sustain most fires, three elements must be available at the same time: elevated temperature, oxygen, and fuel.
- Fire spreads from an ignition source to a fuel source to other fuel sources.
- The spread can either be by conduction, convection and radiation.
- Conduction transfers heat through contact with solid material.
- Convection transfers heat through heated air.
- Radiation heat transfers through electromagnetic waves given off by flames.

Fuels

- Paper & Boxes etc.
- Expanded polystyrene beads
- Plastics
- Solvents
- Carpets
- Furniture
- Waste materials

3.5.2. Common Causes of Fire

- Machines not properly maintained leading to overloading
- Smoking or use of naked flame
- Excessive storage of waste and scrap materials
- Improper use or storage of flammable liquid e.g. thinner and paint
- Short-circuiting, overloading or poor joints in electrical cables

- Defective electrical equipment and wiring

3.5.3. Fire Protection System

Fire Protection System aims to protect the lives of the occupants of buildings and prevent property damage or loss through 3 strategies: Fire Prevention, Fire Detection and Fire Suppression. Safety Officers together with all the occupants of buildings/structures have great roles to play in the Fire Prevention.

3.5.4. Fire Prevention

The best way to deal with fire is ***PREVENTION***. This requires anticipation of fire sources and the creation and implementation of relevant policies.

Fire Prevention involves the steps in preventing a fire from occurring. It also involves eliminating the risks that may cause fire to occur. In facilities where a Fire Suppression System is in place, fire prevention requires inspection, testing, and maintenance of systems to ensure they are operating properly and they are effective during a fire. Systems need to be periodically inspected for mechanical deficiencies, proper function, valve actuation, water flow, sprinkler clearances, etc.,

Some tips to Prevent Fire

- Store LPG cylinders and other flammable materials properly
- Turn-off LPG at the cylinder when not in use
- Make sure everyone abides by site rules on smoking
- Practice permit-to-work system
- Keep site tidy and clear rubbish away promptly and regularly
- Avoid unnecessary stockpiling of combustible materials

3.5.5. Fire Detection

Fire Detection and Alarm System (FDAS) - System to alert the occupants of a facility to potential or imminent danger from fire. It detects changes in ambient temperature and send an alarm to the control panel.

- Designed to discover early in the development
- Starts control effort while fire is still small
- Allows safe evacuation of occupants
- Protects the safety of emergency response personnel
- Detectors must be coupled with alarms
- Alarm system provide notice to building occupants and to some extent to the fire department
- Fire detection/suppression system required depends on the Fire Code of the Philippines

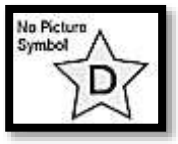
- Most basic are fire extinguishers and fire exits (refer to Section 9 of RA 9514 – RIRR of the Fire Code
- FDAS – Fire Detection and Alarm System

3.5.6. Fire Suppression

Fire Suppression - System to control fire
Examples:

- Automatic sprinklers
- Fire extinguishers
- Wet stand pipes
- Fire hose system
- Fire trucks

3.5.7. Classes of Fire

Class of Fire	Type of Fire	Type of Extinguisher	Extinguisher Identification	Symbol
A	Ordinary combustibles: wood, paper, rubber, fabrics, and many plastics	Water, Dry Powder, Halon		
B	Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar	Carbon Dioxide, Dry Powder, Halon		
C	Fires involving Live Electrical Equipment	Carbon Dioxide, Dry Powder, Halon		
D	Combustible Metals or Combustible Metal Alloys	Special Agents		
K	Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or			

	Animal Oils and Fats			

3.5.8. 10 Tips on How and When to Use a Fire Extinguisher

1. Most fires start small. Except for explosions, fire can usually be brought under control using the right type and size of extinguisher within the first 2 minutes!
2. Fire extinguishers should bear Product Safety Mark (PS). The higher the rating number on an A or B extinguisher, the more fire it can put out.
3. Before attempting to fight a small fire, be sure everyone is out of the area and ensure someone has called the fire department. If the fire starts to spread or threatens people's escape path, get out immediately!
4. The operator must know how to use the extinguisher quickly without taking time to read directions during an emergency. Remember that the extinguishers need care and must be recharged after every use.
5. **PULL** the pin. Some extinguishers require releasing a lock latch, pressing a puncture lever or other motion.
6. **AIM** low, pointing the extinguisher nozzle (or it's horn or hose) at the base of the fire.
7. **SQUEEZE** the handle. This releases the extinguishing agent.
8. **SWEEP** from side to side at the base of the fire until it appears to be out. Watch the fire area in case fire breaks out again, and repeat use of extinguisher, if necessary.
9. Read and follow the directions on extinguisher. If in doubt about whether or not to fight a fire -DON'T! get out and close the door behind.
10. Safety comes first. When in doubt leave the firefighting to the professionals.

Module 4 – Health Hazards and their Controls

4.1. Biological Hazards

Biological hazards are biological substances that pose threat to health. They are also called biohazards.

Biological hazards are classified into micro and macro organisms which might possibly present biohazards in work settings (Dutkiewicz et al., 1988 quoted in ILO). Four broad classes of micro-organisms that can interact with humans are bacteria, fungi, viruses and protozoa. They are hazardous to workers due to their wide distribution in the working environment.

The most important biological occupational hazards are:

Bacteria	salmonella, listeria, E.coli, *M tuberculosis*

Fungi	molds, algae
Virus	smallpox, influenza, mumps, measles, chickenpox, ebola, HIV, rubella, novel corona
Protozoa	Plasmodium parasites (malaria), Trypanosoma protozoa (chagas disease and sleeping sickness) Giardia protozoa (giardiasis)
Macro organism	insects, plants and animals

Adverse health effects of biological hazards include skin irritation, allergies, infections (AIDS, TB), acute respiratory illnesses, cancer.

These are commonly associated with agricultural work, health care and hospital work, research laboratories, building maintenance, sewage and compost facilities, industrial waste disposal, poor sanitation, handling of pathological wastes and poor personal hygiene.

Control measures include ventilation, isolation, negative pressure, ultra violet lamps, personal hygiene, training, disinfection practices and PPEs (surgical and N95 masks, eye and face shields, hazmat coverall, shoe cover and gloves).

4.2. Chemical Hazards

Chemical hazards arise from excessive airborne concentration of vapors, mists, fumes, gases, dusts and particulates. Exposure to these chemicals can be through inhalation, ingestion, and dermal contact, although inhalation is the most important route of exposure (Carex Canada, 2020).

Vapors are gases formed when liquid evaporates. Vapors are associated with solvents, adhesives and alcohols used in degreasing metals, printing, dry cleaning, painting, etc.

Mists are dispersion of liquid particulates in the air associated with acids, chlorine, formaldehyde, phenols which are common in electroplating, spay painting, soap and detergent production, lead-acid battery manufacturing and phosphate fertilizer production.

Fumes are volatilized solids that condenses upon contact with air associated with molten metals like lead, tin, chromium, zinc, and iron which are common in soldering, welding, mining, working with asphalt.

Gases are substances in the gaseous state at room temperature and pressure, usually do not have warning odors at dangerous concentration incomplete combustion, waste water treatment, refrigeration and diesel engines.

Dusts and particulates are suspended solid particles in the air such as silica, metal, asbestos and wood dusts which can be inhaled and deposited in the lungs. Hazardous dusts are associated with building materials, leaded paints, grinded metals, acoustic insulation, flooring materials and wood fixtures.

Control Measures

- Read and follow all directions when using chemical products
- Be guided by the Safety Data Sheets (SDS)
- Be guided by the labels through Globally Harmonized System (*AO No. 01 Series of 2009 pp 301 to 314 of the 2019 updated OSH Standards*)
- Maintain indoor air quality
- Store chemicals in proper and secure place

4.3. Physical Hazards

Physical hazards are agent, factor or circumstance that can cause harm with or without contact. Common types of physical hazards are:

4.3.1. Noise

Noise is an unwanted, excessive sound measured in decibel (dBA). The higher the level of noise and the longer individuals are exposed, the more risk they have of suffering harm such as temporary or permanent hearing loss.

Noise is present in almost all workplaces. Most common health effects are tinnitus (ringing in the ears), noise-induced hearing loss, effect on pregnancy, physiological effects, and occupational stress.

Hazard control measures for noise include good maintenance of equipment, enclosure of noisy machines, limit exposure of workers by shifting and long breaks and personal protective equipment like ear plugs and ear muffs.

4.3.2. Vibration

Vibration is a physical factor that transmits mechanical energy from sources of oscillation. Vibration can be low frequency whole body vibration or high frequency segmental body vibration.

Workers at risk are those using power hand tools, driving vehicles, driving earth moving equipment and tools such as jackhammers. Exposure to vibration puts workers at risk of musculoskeletal diseases, cardiovascular disorders and hand-arm vibration syndrome (HAVS).

Hazard control measures for vibration include using new tools, vibration damping seats, limit exposure by shifting and long breaks and operator techniques to lessen vibration.

4.3.3. Illumination

Illumination is a measure of stream of light falling on surface expressed in lux or foot candle. An instrument called “lux meter” is used to measure illumination.

Workers can be exposed to the hazard of poor lighting where there is insufficient light, glare, improper contrast, poorly distributed light and flicker. These can cause eye fatigue and headaches and can cause accidents as a result of “momentary blindness”.

Hazard control measures include installation of more lighting, redesign of work area, limiting exposure through job rotation and appropriate eye PPE depending on the hazard.

4.3.4. Extreme Temperature

Extreme temperature refers to too hot or too cold temperature in worksites affecting workers in terms of comfort and productivity. Extreme heat or cold, can be a hazard that can lead to serious illness such as heat stroke and hypothermia and increased accidents among the workers (OSH Rep, 2019).

Outdoor workers, workers in bakeries, foundries, boiler rooms, steelworks and in other manufacturing and hot processes are exposed to extreme heat while workers in refrigerated warehouses, food packaging and storage are exposed to extreme cold.

Hazard control measures include insulation, ventilation, acclimatization, job rotation and long breaks and appropriate PPEs.

4.3.5. Extreme Pressure

Extreme pressure is pressure exerted by the weight of the atmosphere measured by an instrument called "barometer". This can cause muscular fatigue, impaired memory, hypoxia and hypoxemia.

Exposed to extreme pressure are people working at high altitudes and below sea level like mining operations, diving, aviation, agricultural pursuits, military exercise and working in confined spaces like tunnel operations and sewage construction.

Hazard controls include acclimatization and oxygen supply (self-contained breathing apparatus).

4.3.6. Radiation

Radiation is the transmission of energy as waves or moving particles. It comes in two types: ionizing and non-ionizing. Ionizing radiation are known to cause adverse effects to health ranging from sterility to cancer.

Exposed groups are workers in healthcare, nuclear power plants, industrial and manufacturing, research, laboratories and security operations.

Hazard controls include shielding and interlock systems, signage and warning system, lead-lined aprons or vests.

4.4. Ergonomic Hazards

Ergonomic hazards are physical factors that can result in musculoskeletal injuries like damage to muscles, tendons, bones, joints, ligaments, nerves, and blood vessels.

Risk factors include poorly-designed workstation, poor posture and manual handling, repetitive and awkward movement and poor body positioning.

Hazard control measures include redesigning/improving the workstation to fit the worker, use of equipment in handling materials, work shifting, frequent breaks, use of proper body mechanics and right lifting techniques and use of appropriate PPEs.

4.5. Psychosocial Hazards

Psychosocial hazards are those that can have an adverse effect on employee's mental health or wellbeing. For example, stress and anxiety, sexual harassment, and workplace violence.

Harassment are actions that result to feeling intimated, humiliated and offended which can have serious impacts on a person's health and wellbeing.

For example, bullying in the workplace can result in the bullied individual experiencing psychosocial symptoms, including stress, anxiety and sleep deprivation, loss of appetite and a sense of vulnerability.

Workplace aggression and abuse can have serious effects on someone's mental and physical health, resulting in symptoms such as stress, anxiety and sleep deprivation.

Workplaces are encouraged to establish an effective mental health program that are meant to address this type of hazards.

Module 5 – Hazard Identification, Risk Assessment and Control

5.1. Requirement

Department Order No. 198, Series of 2018 which is the Implementing Rules and Regulations of RA 11058 (OSH Law) requires establishments to develop and implement an Occupational Safety and Health (OSH) Program which shall include Hazard Identification, Risk Assessment and Control (HIRAC).

Labor Advisory 04-19 (Guide for Compliance of Establishments to DO 198-18 requires establishments to determine its own level of risk (whether low, medium or high) based

on the Hazard Identification, Risk Assessment and Determination of Control (HIRAC) conducted by the company.

5.2. OSH Risk Assessment

OSH Risk Assessment is a process or method of assessing the likelihood of a risk factor to cause harm/illness to the worker, determining the severity or consequence of the risk factor and rating OSH risks in terms of significance as basis for identifying control measures.

Doing an OSH Risk Assessment in the workplace is so important that it is considered an integral part of an occupational health and safety management plan. Among its benefits are:

- help create awareness of hazards and risks;
- identify who may be at risk (e.g., employees, visitors, contractors, the public, etc.);
- determine whether a control program is required for a particular hazard;
- determine if existing control measures are adequate or if more should be done;
- prevent injuries or illnesses, especially when done at the design or planning stage;
- prioritize hazards and control measures; and
- meet legal requirements where applicable

HIRAC (Hazard Identification, Risk Assessment and Determination of Control) helps accomplish this task. The goal is to seek answers to the following:

- What can happen?
- What are the possible consequences?
- How likely will the consequences occur?
- How severe will the harm be?
- What can be done to control the harm?
- Are the controls effective?

5.3. The HIRAC Process

Step 1. Identify the hazards and possible consequences.

Hazard is defined as potential to cause injury, harm or damage. It can be health hazards (biological, chemical, physical and ergonomic) or safety hazards (poor housekeeping, improper materials handling, mechanical, electrical, fire, etc.).

In this step, identify first the activity, example, window cleaning at 3rd floor of a bldg.

Activity	Hazard	Possible Consequence
Cleaning window at 3rd floor	Height	Fall
	Poorly maintained ladder	

Step 2. Assess the risks.

Risk is defined as the degree of uncertainty expressed in likelihood of the consequence to occur and the severity of that consequence if, indeed, it will occur. In this step, after assessing likelihood and severity, there is need to calculate risk rating and find out risk significance.

Example, if we pursue the example in Step 1, risk assessment would be:

Activity	Hazard	Possible Consequence	Likelihood	Severity	Risk Rating	Risk Significance
Cleaning window at 3rd floor	Height Poorly maintained ladder	Fall	3	2	6	Medium

Note: There are different methods used in assessing likelihood and severity. For the purpose of this training, a 5 by 5 Risk Assessment Matrix is used with the following likelihood and severity rating guides:

Likelihood Rating

Score	Description	Condition(Example)
1	Rare	May only occur in exceptional circumstances
2	Unlikely	Could occur some time
3	Possible	Might occur some time
4	Likely	Will probably occur at some time
5	Almost	Expected to occur in many circumstances

Severity Rating

Score	Description	Condition(Example)
1	Insignificant	No injuries
2	Minor	First aid treatment
3	Moderate	Medical treatment required

4	Major	Extensive injuries, e.g. permanent disability
5	Catastrophic	Fatality

Note: Risk Rating (RR)is computed by multiplying likelihood score and severity score, while Risk Significance (RS) is determined with the following guide:

Risk Significance (Legend)

Risk Rating	Risk Significance	Decision Guide
15 - 25	Extreme Risk	Unacceptable level of risk. Activity must not proceed in current form.
8 - 12	High Risk	Unacceptable level of risk. Activity must be modified to include further control measures.
4 - 6	Medium Risk	Relatively acceptable. Activity can proceed subject to close supervision.
1 - 3	Low Risk	Considered acceptable. Activity can proceed subject to compliance with the specified control measures.

Looking back at the example in Step 2, the Risk Rating is 6 (Likelihood = 3 X Severity = 2). Based on the Risk Significance guide, the activity "cleaning window at third floor" is Medium Risk (score of 6), a risk that is relatively acceptable.

Urgent action is required for risks assessed as Extreme. The actions required may include:

- instructions for the immediate end of the work, process, activity, etc
- isolation of the hazard until more permanent measures can be implemented.

Actions taken to address an Extreme risk must be documented. Documented control plans with responsibilities and completion dates are required for High and Medium risks.

Step3. Evaluate Existing Risk controls

There is a need to closely examine the existing risk controls and their effectiveness in controlling the risk at an acceptable level. The risk assessment team examines existing data of accidents, near misses, illnesses to determine if existing control measures are adequate.

The result of the evaluation in Step 3 is helpful to determine the residual risk which is the level of risk that remains after control measures are applied. If the residual risk is evaluated to be significant, additional control measures will be recommended.

Step 4. Implement Additional Risk Controls

If evaluation in Step 3 finds that existing risk controls are not adequate as evidenced by a significant residual risk, additional control measures shall be implemented, as recommended in Step 3.

Step 5. Monitor and Review Effectiveness of Risk Control

Note: OSH Risk Assessment which uses HIRAC as tool is an on-going process like a cycle because after risk is evaluated, controls are implemented, monitored and reviewed and then another round of hazard identification is done.

HIRAC is done with active involvement of workers and management in teams. A HIRAC done by a single or a few people is less effective.

5.4. Determination of Control

In performing Steps 3 and 4, the following risk control hierarchy is a good guidance.
Risk Control Hierarchy:

- Elimination of Hazard – examples include the proper disposal of redundant items of equipment that contain substances such as asbestos, the removal of excess quantities of chemical accumulated over time in a laboratory, etc. The elimination of hazards is 100% effective.

- Substitution of Hazard – examples include the replacement of solvent-based printing inks with water-based ones, of asbestos insulation or fire proofing with synthetic fibers or rockwool, the use of titanium dioxide white pigment instead of lead white, etc. The effectiveness of substitution is wholly dependent on the choice of replacement.

- Engineering Controls – examples include the installation of machine guards on hazardous equipment, the providing of local exhaust ventilation over a process area releasing noxious fume, fitting a muffler on noisy exhaust pipe, etc. The effectiveness of engineering solutions is around 70-90%.

- Administrative Controls – include training and education, job rotation to share the load created by demanding tasks, planning, scheduling certain jobs outside normal working hours to reduce general exposure, early reporting of signs and symptoms, instructions and warning, etc. The effectiveness of administrative controls ranges from 10 to 50%. They typically require resource to be maintained over long periods of time for continuing levels of effectiveness.

- Personal protective equipment – include safety glasses and googles, earmuffs and earplugs, hard hats, toe-capped footwear, gloves, respiratory protection, aprons, etc. The effectiveness in realistic work situations does not exceed 20%.

The following is the basic and standard form used in doing HIRAC.

HIRAC FORM			
Company	ABC Company (Example)	Process	Warehousing (example)
Conducted by		Approved by	
Date		Date	

No.	Activity	Hazard	Consequences	Existing Controls	Risk Analysis				Additional Control Measures
					Likelihood	Severity	Risk Rating	Risk Significance	
1									
2									
3									
4									
5									

Module 6 – Workplace Emergency Preparedness

The OSH Law (DO 198-18) provides in:

- Section 11 (d) that employers shall provide workers adequate and suitable information on emergency and disaster management protocols including proper evacuation and shutdown procedures.

- Section 12(14) that establishments are to develop a comprehensive OSH program that includes a plan to respond to emergencies and disasters.

6.1. Workplace Emergency

OSHA defines “workplace emergency” as situations that threaten employers, employees, customers and the public; disrupts or shuts down operations; or causes physical or environmental damage.

Emergencies may be natural or man-made. Many types of emergencies, however, can be anticipated which can help employers and workers plan to prepare how to respond to unpredictable situations. People can’t think clearly and logically during crisis.

Emergencies can be in the form of the following:

– Floods – Earthquakes – Hurricanes and tornadoes – Disease outbreaks – Fire – Toxic gas release	– Chemical spills – Radiological accidents – Explosions – Civil disturbances – Workplace violence – Collapse of structures

6.2. Emergency Action Planning

The key to preparing for workplace emergencies is to create an Emergency Action Plan which is a document that outlines actions of employers and employees during emergency situations. It describes how workers will specifically respond to different types of emergencies, taking into account specific worksite layouts, structural features, and emergency systems.

In planning, there are 3 basic steps to follow: 1) Identify potential emergencies; 2) assess how they would affect people in the workplace including the worst-case scenario; and 3) plan how to respond.

The Emergency Action Plan (EAP) should include the following components:

- Method for reporting the emergency
- Evacuation policy and procedures
- Procedure for workers who remain to perform critical operation
- Emergency escape procedure and route assignment
- Names, titles, departments and contact numbers for explanation of duties and responsibilities under the EAP
- Established evacuation routes
- Procedure to account personnel
- Rescue by those who are trained, equipped and certified
- Emergency Medical Services
- Role of Employees
- Employee Training
- Procedure in Handling Hazardous Substances
-

6.3 Safety Tips During Emergency Situations

The following are helpful tips Safety Officers can teach the employees. This will help prepare the employees to what to do in case emergencies like fire and earthquake happens.

6.3.1 In case fire happens in the workplace:

- **Raise the alarm.** Regardless of how small the fire, the alarm must be raised immediately because fire can develop very quickly. The Incident Commander evaluates and decides whether to extinguish the fire using the company's fire fighting equipment or to alert the Fire Department.

- **Evacuate.** In a calm and organized manner everyone must head immediately to the nearest exit without stopping to collect things and not using elevators or lifts. Hazardous machines need to be shut-down as part of the emergency procedure. Put hands against the doors to check that the fire is not on the other side. If the escape route is enveloped by smoke, drop to the ground and crawl towards nearest exit.

- **Stay at the assembly point.** Upon exit, all should meet at the designated assembly point where a head count is performed to make sure all are accounted for. Nobody should leave or re-enter the building until the Incident Commander or Fire Marshall or the Supervisor gives instructions to do so.

- **If trapped.** If trapped inside a burning building, get to a room with a window. If on the ground floor, open the window and lower yourself then drop to the floor. If you are too high to jump safely, call for help from the window and cover gaps with any materials that can prevent smoke from entering. If your clothes catch fire, remember not to run around, instead drop yourself to the ground and roll. (Reference: https://www.fireaction.co.uk/news/what-to-do-if-theres-a-fire-in-your-workplace/)

6.3.2 In case earthquake happens in the workplace:

- **Drop, cover and hold on.** Do not panic**.** Try to consciously protect your head and torso and limit your movement. Most of the injuries during earthquake are due to movement of people that result to head injuries, fall, sprains and fractures.

- **Stay indoors.** Remain inside the building until the shaking stops and you are sure that it is safe to go out. Do not use elevators when exiting the building because aftershocks may happen or there might be power outage.

- **Check for debris.** Before deciding to exit the building after the shaking stops, make sure there are not debris that might fall on you while exiting.

- **If you are outdoor.** Go to the nearest clear spot and drop to the ground until the shaking stops.

- **Stay away from buildings.** Do your best to stay as far away from structures that might collapse like buildings, power lines, trees and streetlights.

- **After the earthquake.** Return only when authorities give clearance. Check yourself for injuries and get first aid, if necessary. Expect and be prepared for aftershocks which may cause landslides or tsunamis. (Source: https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/earthquake.html.

6.3.3 In case flooding happens in the workplace:

- **Listen to advisories.** Keep informed of the latest developments through the radio or television. Usually, the authorities give warning if there is need to evacuate.

- **Be aware of possibility of flash floods.** If there is possibility for flash floods, move to higher ground immediately. Be aware that flash floods can occur in in certain places even without usual indicators like clouds and heavy rains.

- **Secure the building and yourself.** Turn-off main power switches or valves. Disconnect electrical equipment and appliances. Do not touch electrical equipment when you are wet or standing on water.

- **Stay on firm ground.** Moving water at 6 inches deep can already can already sweep you off your feet. There is also danger of water being electrically charged from power pipelines.

- **After the flood subsides.** Return only after the place is declared safe. Structures might have weakened or landslide might occur. (Reference: https://www.ci.patterson.ca.us/488/What-To-Do-Before-During-and-After-a-Flo)

Module 7 – Presentation and Training Facilitation

7.1. Requirement

DO 198-18, Section 16 (b) requires all workers to undergo the mandatory OSH seminar prescribed by the Department of Labor and Employment to be conducted by the Safety Officer of the establishment or any certified OSH practitioner or consultant.

7.2. What is Training?

Human Resource considers training as a process of providing skills to employees for doing a job effectively, efficiently and safely. It is the application of knowledge and gives people an awareness of rules & procedures to guide their behavior. It helps in bringing about positive change in the knowledge, skills & attitudes of employees.

Training, as a process, involves 5 steps in cycle according to the ADDIE model (David, 2014).

1	Analysis	Identify learning needs then set goals and objectives
2	Design	Line-up content and make prototype
3	Development	Create/produce the training materials as designed
4	Implementation	Actual delivery of the training
5	Evaluation	Feedback from learners, tests

In this session, focus is only in the Implementation phase consisting of training delivery/presentation and learning facilitation. But let us understand first the kinds and roles of a trainer.

Kinds of Trainers

There are 4 kinds of trainers. Which kind should an OSH trainer be?

- The average who tells
- The good who explains
- The superior who demonstrates
- The excellent who inspires

7.3. The Roles of an OSH Trainer

Safety Officers as trainers assume at least 6 roles.

1. Subject matter expert

A trainer, who is the Safety Officer, should be knowledgeable of the topic being presented.

2. Training technologist
   There is need for trainers to know how to use presentation technologies e.g. audio-video technologies, computers and internet-enabled technologies.

3. Sensitive to adult learners
   Adults learn differently. This differentiates training from education. Adults bring with them their own knowledge, skills and experiences into the training rooms. This is where trainers need to be sensitive in dealing with adults to encourage learning and behavior formation.

4. Course designer
   Before any course is delivered or presented, they are carefully designed and developed based on the training needs analysis.

5. Group facilitator
   The trainer has the ability to facilitate learning in a group setting. Learners are different individuals with different learning styles. It is a challenge for trainers to keep the environment safe for adults to learn.

6. Presenter
   A trainer is expected to be able to deliver the training in a manner that learning is conveyed effectively. A trainer should be able to get and keep the attention of adult learners.

7.4. Delivering the Presentation

One of the greatest challenge of trainers is delivering the presentation in the presence of the audience. There are 5 essentials to consider.

7.4.1. Authority

Learners decide to learn if they look up to the trainer as an authority.

- Try not to look awkward in front of the audience. Looking awkward lessens a trainer's authority.
- Looking confident, on the other hand, establishes authority.
- The best way to look confident and exude authority before an audience is to prepare. Know the topic well.

7.4.2. Involvement

The enthusiasm and excitement of the speaker extends to the learners.

- Show enthusiasm and sincerity about the topic.
- Be excited in meeting people and in the conduct of the training.
- If the audience see the speaker being excited about the session, participants get excited to learn, too.
- It is unfair to except excitement from the audience if the speaker is not excited himself or herself.

7.4.3. Communicativeness

The best way to teach something is to get the attention, sustain the interest and provide value to the listeners.

- Engage the audience, encourage and appreciate participation, listen to their stories.
- Give the best content, organize the presentation well, deliver with energy.
- Appear friendly to the audience. Smile is the most powerful to start engagement.

7.4.4. Vocal Expressiveness

The voice of the trainer is powerfully persuasive. It can be a factor in the success and failure of teaching.

- Use conversational voice just like talking to friends plus a little energy.
- There are 3 pitfalls to watch:
  - *Not being heard because voice is too soft to get attention*
  - *Monotony providing no variation of voice, can put people to sleep*
  - *Use of artificial voice can disrupt focus of audience*

7.4.5. Physical Expressiveness

Body actions have meanings and help convey a message.

Movement	move freely as the setting allows
Posture	the basic rule is “erect and comfortable”
Gesture	just enough gesticulation is the best visual aid
Facial expression	mobile facial expression communicates worlds of ideas
Eye contact	maintain eye contact at least 90% of the time

7.5. Facilitating Learning

The Trainer is the main facilitator of learning. In conducting OSH orientation for workers who are all adults, the greatest challenge of the trainer is the fact that adults learn because they want to learn. A trainer cannot force "someone" to learn.

There are 4 facilitation skills that are proven helpful to deal with adults inside the training room. These are: 1) maintaining self-esteem, 2) responding with empathy, 3) checking for understanding, and 4) making procedural suggestions.

7.5.1. Facilitating Skills #1: Maintaining Self-Esteem

- Create "safe" learning environment
- Point-out strength
- Treat learners as competent individuals
- Acknowledge efforts

7.5.2. Facilitating Skills #2: Listening & Responding with Empathy

- Let the learner know that they are heard and understood
- Empathize with emotions

7.5.3. Facilitating Skills #3: Checking for Understanding

- Confirm or clarify understanding
- Give participants opportunity to ask questions
- Use phrases like…
  "Did I hear you say …"
  "Did we agree that …"

7.5.4. Facilitating Skills #4: Making Procedural Suggestions

- Do not blame anyone for distractions
- Show respect
- Communicate empathy

7.6. Tips to Control Nervousness

Feeling nervous when speaking before an audience is normal and very common. In fact, according to Mark Twain, there are only 2 kinds of speakers: those who get nervous and those who are liars.

Although speaking apprehension is real, there are things that can be done to lessen negative effects on the speaker's performance and even use the discomfort into adrenaline for an impressive presentation.

7.7. Techniques in Training

The following techniques are suggested by the Business Communication Center of the University of Arkansas:

7.7.1. Before Presentation

- Choose a topic that interests you.
  A speaker who is genuinely interested in the topic, will be able to communicate that during your presentation.

- Prepare ahead of time
  The more time spent on researching and organizing the more familiar the speaker will be with the presentation. Apply the 90/10 rule – 90 percent preparation, 10 presentation.

- Practice
  Practice increases confidence and quality of presentation. Envision the audience when practicing.

- Scrimmage
  Find somebody to listen while doing practice. Not only will this help a speaker become more comfortable, but may also receive valuable feedback.

- Set realistic expectation
  It is unrealistic to expect perfect presentation. Do not memorize, instead, remember main points, arguments and evidences and speak to the audience conversationally.

- Think positively
  Communicate honestly. Preparation, practice, and attitude give the best possible advantage. Positivity is the difference between nervousness and enthusiasm.

7.7.2. During Presentation

- Start loud and strong
  The very first line of introduction sets the tone for the rest of the presentation. Begin with enthusiasm, confidence, and volume.

- Breathe deeply and slowly
  Slow breathing lowers the heart rate and prevent a speaker from speeding through the presentation. Take time.

- Channel nervousness into movement
  Walking and gesturing will help a speaker use adrenaline to engage with the audience. It also helps to gain confidence.

- Focus on friendly faces
  Find somebody who are nodding, smiling, and make frequent eye contact. This will both engage the audience and reduce nervousness.

- Do not take yourself too seriously
  If the speaker makes a mistake, simply correct the error and move on. Try to be as conversational as possible while remaining appropriate to the situation.

7.7.3. Handling Questions and Answers

Questions from the audience can be terrifying but speakers should accept that questions are opportunity for listeners to clarify and integrate learning. The following guide suggested by Barnard (2017) are useful.

Anticipate possible questions while preparing the presentation
- Know the profile of the audience.
- A clearly defined scope of the topic helps the speaker respond to questions with confidence.

Set rules
- Make clear at the start when is the preferred time for questions (any time or at the end of the presentation).
- Allowing questions anytime gives chance to clarify confusions immediately, but this approach may disrupt the presentation.
- If questions are entertained at the end, consider leaving enough time.

Be guided by the framework for responding questions
- Listen to the whole question
  - ✓ Hear the content
  - ✓ Decipher the intention

    Note: examples of intention are to truly seek for the answer, to trick the speaker, to seek attention.

Understand the context

- If a question is not clearly understood the first time, ask and clarify before attempting to answer.

Involve the audience

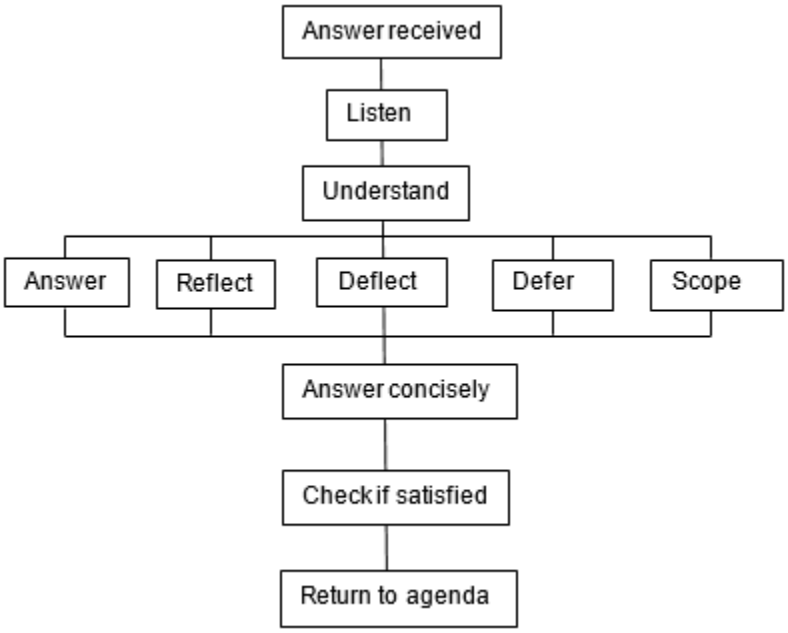
- Remember that even though a speaker is responding to a question of one person, the rest of the audience must hear and understand.
- This can be done by repeating or paraphrasing.

Respond concisely

- Keep responses as focused as possible but avoid too much details.
- Direct answer to both the questioner and the whole audience.
- Check back with the questioner whether the question has been answered e.g. "Did I answer your question?"

Know the options for answering questions

- There are 5 possible choices: 1) answer, 2) reflect, 3) deflect, 4) defer, and 5) scope.
- The following diagram shows how these choices are used.



1. Answer
   - If the speaker has a good answer, go ahead and answer briefly and clearly.

2. Reflect
   - Ask the question back such as "Can you clarify . . ." or "Do you mean…"
   - The speaker may opt not to answer if the question is personal or factually inaccurate.

3. Deflect
   - Ask the question back to the audience.
   - Pass to another participant who may have the best answer.

   Example: If question is about electricity and there is an electrician in the audience, the speaker may use this option.

4. Defer
   - Speaker may opt to deal with the question later.
   - Speaker may mention that the answer is in the upcoming slide.

5. Scope
   - Do not answer questions which are outside of the scope

   Example say "I am afraid that falls outside of the objective of our presentation. We may deal with it some other time."

7.8. Overview of the Mandatory Eight-Hour Safety & Health Orientation (MESH)

Mandatory 8-Hour Safety and Health Seminar for Workers (Pursuant to Section 16(b) of RA 11058 and Section 3 of DO 198-18; to be conducted by the Safety Officer of the Establishment)

7.8.1. Requirements

All workers shall undergo the mandatory OSH workers' seminar as prescribed by DOLE. The mandatory OSH seminar may be conducted by the Safety Officer of the establishment or any certified OSH practitioner or consultant.

The workers' OSH seminar and other training/orientation as required by the employer or by law shall be at no cost to the worker or considered compensable time (Section 16b, DO 198-18).

Willful failure of the employer to conduct the mandatory seminar results in administrative fine of P25,000 per day until complied (Section 29, Do 198-18).

7.8.2. Prescribed Content of the OSH Orientation

The mandatory orientation is composed of 6 modules with their corresponding objectives and minimum topics, namely:

7.8.3. Module 1: Overview of OSH

Objective: Participants to be able to express appreciation and recognize the OSH legislation.

Topics:

- Importance of OSH
- OSH Situationer (global, national, company statistics)
- Salient Features of the OSH Law
- Applicable OSH Standards
- Company OSH policies and program

7.8.4. Module 2: Understanding OSH

Objective: Participants are able to discuss the basic concepts of occupational safety and health.

Topics:

- Accident Causation and Prevention
- Definition of:
  - ✓ Safety Hazards
  - ✓ Health Hazards
  - ✓ Risk (low, medium, high)

7.8.5. Module 3: Recognizing Safety and Health Hazards and their Control Measures

Objective: Participants are able to recognize safety hazards and appropriate measures.

Topics:

- Safety in the premises - Housekeeping
- Materials Handling and Storage
- Machine safety
- Electrical safety
- Fire safety
- Chemical safety

- Biological Safety
- Physical safety
- Ergonomic safety
- Workshop on the application of learning

7.8.6. Module 4: Application of Hazard Identification, Risk Assessment and Control (HIRAC)

Objective: Participants are able to perform hazard identification, risk assessment and control (HIRAC).

Topics:
- steps in recognizing hazards
- risk assessment and prioritization
- application of controls (engineering, administrative, PPE)
- Workshop – accomplishing HIRAC matrix

7.8.7. Module 5: Workplace Emergency Preparedness

Objective: Participants are able to respond in workplace emergencies.

Topics:
- Roles of OSH personnel
- Responses during emergency
- Emergency drills

7.8.8. Module 6: Compliance to OSH Administrative Requirement

Objective: Participants are able to identify the required administrative requirements and express commitment to OSH.

Topics:
- Rule 1020 – Registration of Business Establishment
- Accident/Illness Exposure Data Report (AEDR)
- Work Accident/Illness Report (WAIR)
- Annual Medical Report (AMR)
- Report of Safety Organization (RSO)
- Minutes of OSH Committee Meetings
- Mandatory OSH program
- Penalties of violations

7.8.9. Workers Commitment Setting

Objective: Participants are able to commit, in writing, to perform work the safest way by complying with all safety policies and procedures of the company.

8 Module – Guidelines on Workplace Prevention and Control of Covid-19

8.1. Basic Information about Covid-19

Covid-19 caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a contagious and fatal respiratory illness. In March 2020, World Health Organization declared COVID-19 outbreak a pandemic. Symptoms may appear 2 to 14 days. Common signs and symptoms can include fever, dry cough, shortness of breath

Other symptoms can include muscles aches, chills, sore throat, runny nose, headache and chest pain *(Source: CDC).*

Like other respiratory illnesses, COVID-19 spreads through droplets that enter the air when someone with the disease coughs, sneezes or talks. COVID-19 spreads mainly through face to face contact (within about 6 feet or 2 meters), but the virus also may be spread on contaminated objects – such as doorknobs, telephones and elevator buttons.

Generally, people at greatest risk are those who have direct, closed contact with someone who is infected, such as family members and health care workers and recent travel history from in an area with ongoing community spread of COVID-19 *(Source: CDC/WHO.)*

WHO and CDC recommend following theses precautions for avoiding COVID-19:

- Avoid crowded places (large events and mass gatherings)
- Avoid close contact (within about 6 feet or 2 meters) especially those who are sick or has symptoms
- Stay home as much as possible and keep distance between yourself and others.
- Wash your hands often with soap and water for at least 20 seconds or use an alcohol-based hand sanitizer that contains at least 60% alcohol.
- Cover your face with a face mask in public spaces, such as the grocery store.
- Cover your mouth and nose with your elbow or a tissue when you cough or sneeze. Throw away the used tissue. Wash your hands right away.
- Avoid touching your eyes, nose and mouth.
- Clean and disinfect high-touch surface, such as doorknobs, light switches, electronics and counters, daily.

8.2 Requirements

A joint DTI and DOLE Interim Guideline issued April 30, 2020 requires all workplaces, employers and workers in the private sector to implement safety and health standards aligned with the following objectives:

- Increasing mental and physical resilience
- Reducing transmission
- Minimizing contact rate
- Reducing the risk of infection

8.3 Background of the Interim Guideline

The national government on March 8, 2020 issued Proclamation Number 922 declaring a "State of Public Health Emergency" recognizing the threat of Covid-19 to national security and address its effects.

The Interim Guideline jointly issued by the Department of Trade and Industry (DTI) and the Department of Labor and Employment (DOLE) is a response to the recommendation of the Inter-Agency Task Force (IATF) to provide policy direction to the private business establishments.

8.3.1. Increasing Mental Health and Physical Resilience

Promote healthy lifestyle among workers including good nutrition, enough sleep, regular exercise and taking vitamins to build body resistance.

8.3.2. Reducing Transmission

Prior to entrance

- Wear face masks at all time
- Accomplish daily health symptom questionnaire
- Check temperature by non-contact means
- Disinfect entering vehicles and equipment
- Physical distancing of 1 meter in long queues

Inside the workplace

- Disinfect frequently-handled objects at least every 2 hours
- Frequent washing of hands; avoid touching eyes, nose and mouth
- Make available sanitizers in common areas
- Maintain at least 1 meter radius space between workers

- Discourage eating in communal areas
- Regular disinfection of canteens and kitchen

8.3.3. Minimizing Contact Rate

- Use alternative work arrangements e.g work from home, telecommuting
- Discourage prolonged face-to-face interaction with clients
- Re-arrange work tables to maintain physical distancing requirement
- Use barriers in between work stations
- Limit people in meeting rooms and elevators
- If possible, use separate stairways in going up and going down
- Maximize use of online system
- Assign an officer to ensure protocols are followed at all times

8.3.4. Reducing the Risk of Infection

- Suspects shall immediately proceed to designated isolation area
- Clinic personnel must wear appropriate PPE
- If needed, take person to hospital following the health protocol
- Decontaminate workplace with appropriate disinfectant

8.4. Duties of Employers and Employees

Employers

- Establish company policy for the prevention and control of Covid-19
- Provide resources e.g. sanitizers, disinfectants, PPEs
- Designate safety officer to monitor compliance of policies and protocols
- Enhance health insurance provision for workers
- Provide shuttle bus, where feasible, and accommodation to limit movement of people
- Hire from local community, if possible
- Install a Covid-19 hotline

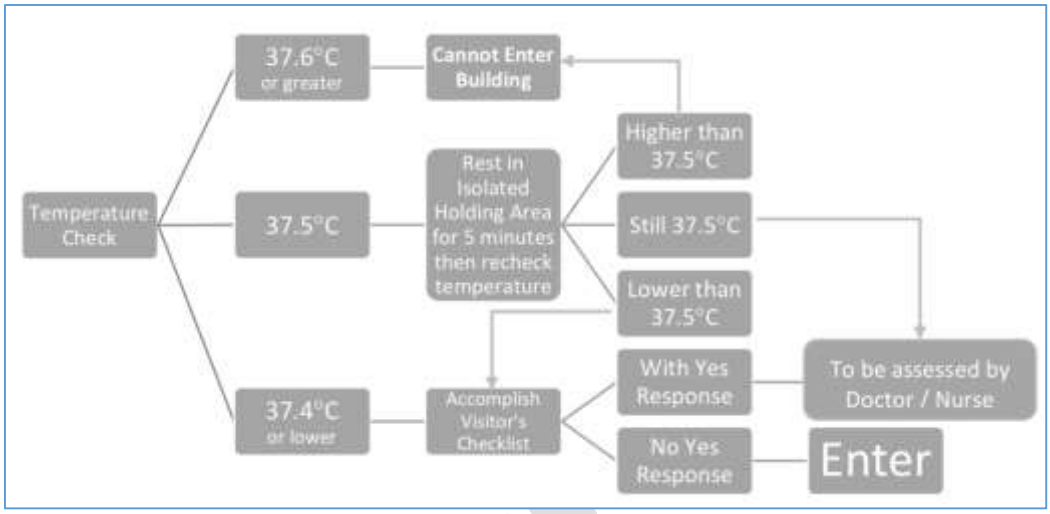
Workers

- Comply with all workplace measures
- Observe proper respiratory etiquette (coughing and sneezing)
- Dispose used tissues properly
- Disclose health conditions to employers

Other requirements

- In high risk workplaces (health care and other frontline services) workers take extra precautionary measures and comply the Interim Guideline on Health Care Provider Networks issued by the Department of Health (DOH).
- Company together with the employees formulate a policy on Covid-19 testing guided by the DOH protocols.

- The employer shall provide the DOLE and copy to DOH a monthly report on illness, injuries and diseases using the Work Accident/Illness Report Form (WAIR).



Sample protocol for temperature screening of workers and visitors

Sample visitor checklist

2. All visitors shall accomplish the visitor's checklist

Health Checklist

Temperature:

Name: _____ Sex: _____ Age: ___

Residence: _____

Nature of Visit: *Please check one* Official: ☐ Personal: ☐ **If official, fill-in company details below**

Company Name: _____

Company Address: _____

		Yes	No
1. Are you experiencing: (*nakakaranas ka ba ng:*)	a. Sore throat (*pananakit ng lalamunan / masakit lamunan*)	☐	☐
	b. Body pains (*pananakit ng katawan*)	☐	☐
	c. Headache (*pananakit ng ulo*)	☐	☐
	d. Fever for the past few days (*Lagnat sa nakalipas na mga araw*)	☐	☐
2. Have you worked together or stayed in the same close environment of a confirmed COVID-19 case? (*May nakasama ka ba o nakatrabahong tao na kumpirmadong may COVID-19 / may impeksyon ng coronavirus?*)		☐	☐
3. Have you had any contact with anyone with fever, cough, colds, and sore throat in the past 2 weeks? (*Mayroon ka bang nakasama na may lagnat, ubo, sipon o sakit ng lalamunan sa nakalipas ng dalawang (2) linggo?*)		☐	☐
4. Have you travelled outside of the Philippines in the last 14 days? (*Ikaw ba ay nagbyahe sa labas ng Pilipinas sa nakalipas na 14 na araw?*)		☐	☐
5. Have you travelled to any area in NCR aside from your home? (*Ikaw ba ay nagtungo sa iba pang parte ng NCR o Metro Manila bukod sa iyong bahay?*) Specify(*Sabihin kung saan*): _____		☐	☐

I hereby authorize [name of establishment], to collect and process the data indicated herein for the purpose of effecting control of the COVID-19 infection. I understand that my personal information is protected by RA 10173, Data Privacy Act of 2012, and that I am required by RA 11469, Bayanihan to Heal as One Act, to provide truthful information.

Signature: _____ Date: _____

8.5. Key Points

- The DTI and DOLE jointly issued an Interim Guideline for private establishments to prevent and control Covid-19 in the workplace, consistent with the health protocol and standards.

- Employers and workers have duties and responsibilities to fulfill to keep the workplace safe.

- Employers provide the policies and resources, the workers comply and practice proper hygiene and respiratory etiquette.

List of References

2017/2018 Integrated Survey on Labor and Employment (ISLE) – Part 6 Module on Occupational Injuries and Diseases (OID): 2017, Philippine Statistics Authority available at https://psa.gov.ph/content/20172018-integrated-survey-labor-and-employmentisle-part-6-module-occupational-injuries-and, accessed 4/9/2020.

ANSI Education and Training. Standards Learning Resources. Available in https://www.ansi.org/education_trainings/K_12_students?menuid=9, Accessed May 17, 2020.

Asian Productivity Organization (n.d.). 5S of Good Housekeeping. Available in https://www.apo-tokyo.org/publications/p_glossary/5s-or-good-housekeeping-3/, accessed April 22, 2020.

Barnard, D. (2017). Guide for Handling Questions After Presentation. Available in https://virtualspeech.com/blog/guide-for-handling-questions-after-a-presentation, accessd May 17, 2020.

Carex Canada (2020). Mists from Strong Inorganic Acids Profile. Available in https://www.carexcanada.ca/profile/mists_from_strong_inorganic_acids/, accessed April 16, 2020.

David L, "ADDIE Model," in *Learning Theories*, July 23, 2014, https://www.learning-theories.com/addie-model.html.

Department Order No.198 Series of 1998. "Implementing Rules and Regulations of Republic Act No. 11058 Entitled "An Act Strengthening Compliance with Occupational Safety and Health Standards and Providing Penalties for Violations Thereof".

Department of Labor and Employment (2016). Occupational Safety and Health Standards, as Amended. Manila, Philippines.

Dutkiewicz et al. (1988). Quoted in ILO Encyclopedia: Workplace Biohazards available in https://www.iloencyclopaedia.org/contents/part-vi-16255/biological-hazards, accessed April 16, 2020.

Health and Safety Executive, 2019. Kinds of Accident Statistics in Great Britain. Available in https://www.hse.gov.uk/statistics/causinj/kinds-of-accident.pdf, accessed April 29, 2020.

ILO (2019). "Safety and Health and the Future of Work". Available in https://www.ilo.org/moscow/areas-of-work/occupational-safety-and-health/WCMS_305902/lang--en/index.htm, accessed April 15, 2020.

National Institute for Occupational Safety and Health (NIOSH).Recommended exposure limits (RELs). Available in http://www.cdc.gov/niosh/homepage.html, accessed April 21, 2020.

OSHA. Basics of Machine Safeguarding. Available in https://www.osha.gov/Publications/Mach_SafeGuard/chapt1.html, accessed May 1, 2020.

OSH Rep, Victorian Trades Hall Council (2019). Workplace Conditions: Heat. Available in https://www.ohsrep.org.au/heat accessed April 23, 2020.

Safeopedia. Hazard Exposure. Available in https://www.safeopedia.com/definition/681/hazard-exposure-safety, accessed 4/10/2020.

University of Arkansas. Speaking Apprehension: Managing Nervousness, University of Arkansas Business Communication Center. Available in https://walton.uark.edu/business-communication lab/Resources/final_Speech_Apprehension_Resource.pdf, accessed May 17, 2020.

WHO (2010). Healthy Workplace, Framework and Model, Background and Supporting Literature and Practices. Available at http://www.who.int/occupational_health/healthy_ workplaces/en/index.html, accessed April 12, 2020.

What is Human Resource. Employee Training. Available in http://www.whatishumanresource.com/Employee-Training-Introduction