

# **AUTOMOBILE WORKSHOP SAFETY**

## **Cover Page – Slide 1**

This is a product of the Industrial Training Fund.... we are Nigeria's leading Human Resource development organization.

We are located along Miango Road, Jos, Plateau State, Nigeria.

I welcome you all to this exciting session on Automobile Workshop Safety.

Come along with me.

## **Learning Outcomes – Slide 2**

At the end of this session, it is my belief that we would have achieved the following Learning Outcomes:

- Discuss workshop good safety practices.
- List safety guidelines to be followed in the workshop.
- Demonstrate what to do in an emergency.
- Identify safety signs and symbols.

## **What is Safety – Slide 3**

Safety is a concept that includes all measures and practices taken to preserve the life, health, and bodily integrity of individuals.

In the workplace, safety is measured through a series of metrics that track the rate of near misses, injuries, illnesses, and fatalities. In order to improve these metrics, employers and safety officials must also conduct investigations following any incident to ensure that all safety protocols and measures are being followed or to implement new ones if needed.

Also, we can state that Safety is any of the following:

1. Freedom from danger.
2. Protection from risk of harm or injury.
3. Protection against damage to machines, tools, and,
4. Prevention or removal of factors that can lead to accident.

## What is Workshop Safety? – Slide 4

***Workshop Safety is the protection from risk of harm or injury to humans or damage to machines and tools in the workshop.***

An efficient workshop can be one of the most cost-effective ways of maintaining plant and equipment on site. It can also be an area of great risk.

The number of potential hazards in a workshop will vary on the size and complexity of activities carried out however there are a number of general issues that should be continuously monitored.

Workshops should:

1. Well lit.
2. Adequately ventilated and where necessary have local exhaust ventilation.
3. Have a good standard of housekeeping.
4. Provided with adequate firefighting equipment.
5. only contain flammable material necessary for the day-to-day operation of the workshop.
6. have clearly identified pedestrian routes and, where possible, reversing of mobile plant should be avoided.
7. have pits that are covered when not in use or have guard rails in place.
8. have an inspection scheme for all tools and equipment so that they are safe to use.
9. have access to workstations restricted to maintenance personnel.
10. have gas bottles racked and gas welding bottles should be fitted with a flashback arrestor.
11. control the use of naked flames.
12. have adequate sanitary and hygienic washing facilities.
13. have procedures for waste management of used oils, tyres, batteries, brake, and clutch linings etc.

## Some Safety Precautions/ Attitudes in the Workshop – Slide 5

The following are some Safety Precautions and Attitudes that should be observed in the Workshop:

- Attendants must obey the instructions lay down in the workshop.
- Show respect to everybody and when in doubt ask questions.
- There should be no horseplay in the workshop.
- The ON/OFF switch of machines, equipment and tools should not be tampered with unnecessarily.
- Use caution sign/symbols to barricade slippery areas such as freshly mopped floor.
- Obey all posted safety and danger sign/Symbols.

## What is Workplace Accident? – Slide 7

Let's now look at what Workplace accident is.

***An accident is an unexpected event resulting in injury, illness, or death as well as damage to property.***

- ***Accident occurs because of hazards.***

We can then conclude that, Hazard is any activity, situation or substance that causes harm or injury.

## Causes of Accidents – Slide 8

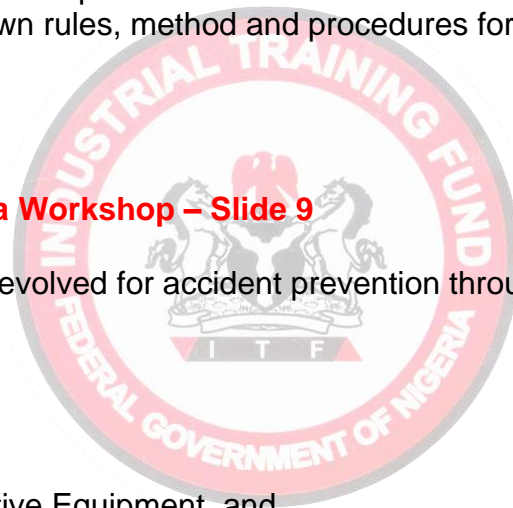
The following are the major causes of accidents:

- Lack of safety devices.
- Failure to use safety devices provided.
- Failure to follow laid-down rules, method and procedures for handling tools, equipment and machines.

## How to Prevent Accident in a Workshop – Slide 9

Simple techniques have been evolved for accident prevention through experience. These may include:

1. Identify the hazard.
2. Estimate the hazard.
3. Engineering Control.
4. Use of Personal Protective Equipment, and,
5. Education.



## Workspace Housekeeping – Slide 10

***Housekeeping are activities undertaken to create or maintain an orderly, clean, tidy and safe working environment. Effective housekeeping can eliminate many workplace hazards and help get work done safely and properly.***

Effective house keeping can eliminate some workplace hazards and help get a job done easily and properly.

A good housekeeping program plans and manages the orderly storage and movement of materials from point of entry to exit. It includes a material flow plan to ensure minimal handling.

Worker training is an essential part of any good housekeeping program. They should be reporting any unusual conditions or hazards as well as obeying posted warning signs.

The final addition to any housekeeping program is inspection. It is the only way to check for deficiencies in the program so that changes can be made.

Let's look at how housekeeping should be carried out at the following spaces:

1. Floors.
2. Light fixtures.
3. Stairways.
4. Spill Control.
5. Tools and Equipment.
6. Maintenance.
7. Waste Disposal, and,
8. Storage. Fire prevention.



## Housekeeping: Floors – Slide 11

Clean up spills such as oil on floors immediately. Floors should be free of debris and accumulations of dust. Areas that cannot be cleaned continuously, such as entranceways, should have anti-slip flooring.

Replace any worn, ripped, or damaged flooring that poses a tripping hazard. Repair all trap doors and railings. Any equipment or tools not in use should be removed from the work area.

Guard floor openings. Trap doors, cages or railings around hay chutes will prevent anyone from accidentally falling into them.

Cut down and remove weeds and brush from around buildings. They can hide tripping hazards.

### **Housekeeping: Light fixtures – Slide 12**

All buildings and yards should be adequately lighted. Dirty light fixtures reduce essential light levels. Light fixtures in storage areas containing combustible materials should be protected against breaking (i.e. explosion proof fixtures).

Maintain lighting evenly, since shadows mixed with light spots inside animal handling facilities will increase the animal's fear and tension.

### **Housekeeping: Stairways – Slide 13**

Stairways should be clearly marked and kept clear of objects that can cause trips and falls.

Aisles should be wide enough to accommodate people and vehicles comfortably and safely. Warning signs and mirrors can improve sight lines at blind corners. Properly arranged aisles encourage people to use them so that they do not take "shortcuts" or "bottleneck" storage. Stairways and aisles also require adequate lighting.

### **Housekeeping: Spill Control – Slide 14**

The best way to control spills is to stop them before they happen. Regularly cleaning and maintaining machines and equipment is one way to do this. Another is to use drip pans and guards where possible spills might occur. When spills do occur, it is important to follow cleanup procedures as indicated on the Material Safety Data Sheet.

Spills must be cleaned up immediately. Absorbent material is useful for wiping up greasy, oily or other liquid spills. Used absorbents must be disposed of properly and safely.

### **Housekeeping: Tools and Equipment – Slide 15**

Keeping tools neat and orderly can be very important to everyone's safety, whether in the tool room, on the rack, in the yard, or on the bench.

Returning tools promptly after use reduces the chance of them being misplaced or lost. Workers should regularly inspect, clean and repair all tools and take any damaged or worn tools out of service.

### **Housekeeping: Maintenance – Slide 16**

A good maintenance program provides for the inspection, maintenance, upkeep and repair of tools, equipment, machines and processes.

Maintenance involves keeping buildings, equipment and machinery in safe efficient working order and in good repair. This includes maintaining sanitary facilities and regularly painting and cleaning walls, maintaining windows, damaged doors, defective plumbing, and broken floor surfaces.

### Housekeeping: Waste Disposal – Slide 17

The regular collection, grading and sorting of scrap contributes to good housekeeping practices. Allowing materials to build up on the floor wastes time and energy since additional time is required for cleaning it up.

Placing scrap containers near where the waste is produced encourages orderly waste disposal and makes collection easier. All waste receptacles should be clearly labelled (e.g., recyclable glass, plastic, metal, toxic and flammable etc.) All waste containers should be emptied regularly.

### Housekeeping: Storage – Slide 18

Stored materials should allow at least one meter (or about 3 feet) of clear space under sprinkler heads. Stacking cartons and drums on a firm foundation and cross tying them, where necessary reduces the chance of their movement. Stored materials should not obstruct aisles, stairs, exits, fire equipment, emergency eyewash fountains, emergency showers, or first aid stations.

All storage areas should be clearly marked

### Housekeeping: Fire Prevention – Slide 19

Flammable, combustible, toxic and other hazardous materials should be stored in approved containers in designated areas that are appropriate for the different hazards that they pose.

All combustible and flammable material must be present only in the quantities needed for the job and kept in safety cans during use. Oily or greasy rags should be placed in a metal container and disposed of regularly.

### Conclusion – Slide 20

Hey, so in the past few minutes, we have been able to look at:

1. Workshop Safety.
2. Safety Precautions in the Workshop.
3. Workplace Accident.
4. How to Prevent Accident in a Workshop, and,
5. Workspace Housekeeping.

***So, in conclusion, if you're not safety conscious, you could end up unconscious. SO THINK ABOUT IT!***

Thank you and Stay Safe. Bye.