

## KITWE VOCATIONAL TRAINING CENTRE

# TOT-08 OCCUPATIONAL SAFETY AND HEALTH ENVIRONMENT (OSHE II) TRAINING

FIRST AID - 4th March - 6th March, 2024

FIRE SAFETY TRAINING - 18th March, 2024

THE PROJECT FOR PROMOTING YOUTH EMPLOYMENT THROUGH CONSTRUCTION EQUIPMENT OPERATING SKILLS TRAINING









#### 1. PROJECT SUMMARY

With the shift in Zambian economy towards more capital and skill intensive sectors such as mining, construction, transportation and manufacturing, the demand for technical skills for the operation of heavy equipment has increased. However, construction and mining sector employers struggle to find skilled local workers who meet modern machinery operational skills requirements. The situation is compounded by the need to integrate fourth industrial Revolution technologies into heavy machinery operation.

To address this skills mismatch, the Government of Japan, the Government of Zambia, Hitachi Construction Machinery, and the United Nations Industrial Development Organisation (UNIDO), have joined forces in a Public-Private Development Partnership (PPDP).

The project for promoting youth employment through construction equipment operating skills training, will align industrial skills development to the needs of the industry and labour market, ultimately promoting productive youth employment and sustainable practices in global supply chains. This will be achieved by jointly establishing a centre of excellence for construction equipment operators at the Kitwe Vocational Training Centre (KVTC).

#### 2. INTRODUCTION

In accordance with the project's staff development programmes, KVTC trainers, management and project staff participated in the 2<sup>nd</sup> Occupational Safety and Health Environment (OSHE) training, as per project activity 2.4. The overall objective of this training was to enhance safety measures within the institution.

The OSHE training was divided into two distinct courses: first aid training and fire safety training. Its objective was to foster a safety-conscious culture among staff, thereby promoting a safer environment for all. This initiative aims to reduce injuries, potentially saving lives, and decreasing costs associated with accidents, ensuring the well-being and safety of both staff and students.

The first aid training took place over three days, from the 4<sup>th</sup> to the 6<sup>th</sup> of March 2024, at the KVTC, and was conducted by the Red Cross Association of Zambia.

Subsequently, the fire drills training occurred on the 18th of March 2024, at KVTC and was conducted by the Fire Brigade of Zambia.

#### 3. OBJECTIVES

#### 3.1. FIRST AID

- Interpretation of first aid principles and best practices.
- Management of various medical emergencies; such as unconsciousness, shock, cardiac arrest, poisoning, haemorrhage, spinal and chest injuries, snake bites, and stings.
- Treatment and transportation of casualties with fractures and injuries.
- Management of burns and scalds.
- Use of a defibrillator for resuscitation.
- Prevention and preservation of lives through first aid and preventive measures.

#### 3.2. FIRE DRILL TRAINING

- Demonstration of effective fire evacuation plans.
- · Recognition and prevention of fire hazards.
- Understanding fire alarms and actions.
- Effective use of fire extinguishers.
- Identification of potential fire breakout hazards.
- Knowledge and application of safety protocols.

#### 4. PARTICIPANTS

NAME	POSITION
Mr. Chrispin Kakoma	Principal
Mr. Freddie Mulenga	<u>Trainer</u>
Mr. Prince Tembo	BDO
Mr. Sililo Lyomba	KVTC Staff
Mr. Harry Siaziba	<u>Trainer</u>
Mr. Hasford Silwamba	Trainer
Mr. Henry Sakala	<u>Trainer</u>
Emily Mumba	<u>Trainer</u>
Ms. Leah Mwewa	Project Staff
Mr. Clara Mwale	Project Staff
Mr. Chipo Nkomo	Project Staff
Mr. Sunday Kalunga	Project Staff
Mr. Frank Malenji	Project Staff
Mr. Nephas Moyo	UNIDO

#### 5. PROCEEDINGS OF FIRST AID TRAINING

The first aid training conducted at KVTC covered a comprehensive range of topics, both theoretical and practical, aimed at equipping participants with essential skills to respond effectively to medical emergencies in the workplace. The topic covered include:

- I. Principals of first aide: to attend to a casualty, the 3 principals to bear in mind which is diagnosis by finding out what the challenge could be, treatment offering help in accordance with the problem and lastly transport to the hospital for further management.
- **II. Basic life support skills** are one of the most important elements of the first aid to ensure a life is saved, it includes cardiopulmonary resuscitation (CPR), using an automated external defibrillator (AED), and managing airway obstructions.
- **III. Injury response**: After basic life support, we learnt how to respond to various injuries, such as cuts, abrasions, fractures, sprains, and burns. The participants also learned how to use bandages, splints, and burn dressings.
- **IV. Scene assessment and safety:** First aid trainees learn to assess how safe a scene is to ensure their safety and the victim's safety.
- **V. Triage**: In the case of multiple casualties, knowledge on how to prioritize victims based on the severity of their conditions has been acquired through the training.
- **VI. Management of haemorrhage:** uncontrolled bleeding is a major course of death in many injuries and accidents. However, a teaching on how to respond to both internal and external bleeding was done and demonstrated.
- **VII. Respiratory obstruction management:** To ensure the casualty is receiving adequate blood supply to the vital organs, in emergencies such as choking, strangulation, hanging, drowning and smoke inhalation a management was taught and demonstrated in the first aid training.
- VIII. Method of lifting: Lifting a casualty correctly can help prevent injuries from worsening. Therefore, different types of lifting techniques were taught and demonstrated in the training.
  - **IX. Practical drills**: To reinforce learning, practical drills that mimic real-life emergencies were demonstrated.
  - X. Fire management training: After general first aid training, the participants also trained on how to respond to other emergencies such as a fire breakout. In this training, the participants learned on the types and use of fire extinguishers.

- **XI. Management of stings and bites**: In the emergence of snake bites and stings a correct immediate first aid response was taught and demonstrated.
- **XII. Personal protective equipment:** To prevent cross infection, the use of personal protective equipment was encouraged, such as gloves, masks, and eye protection.
- **XIII. Procedures Demonstration:** Participants were tasked with demonstrating various procedures learned during the training, including CPR, bandaging, vital sign assessment, and management of choking casualties.

#### 6. PROCEEDING OF FIRE DRILLS TRAINING

Similarly, fire drills training was conducted to ensure that personnel were equipped with the necessary skills to handle fire emergencies effectively. Here's a breakdown of the proceedings:

- I. Introduction to Fire Safety: In serving the context of the fire training, the trainers provided fundamental information regarding the significance and necessity of fire safety training. The participants got an awareness of fire and its components, this is to ensure that there's an understanding of safety in case of fire breakouts.
- II. **Common Causes of Fires**: The most common causes of fire breakouts in the society that was highlighted in the training are electrical malfunctions, improper storage of flammable materials, careless smoking or negligence with flammable materials and poor housekeeping. With this the participants acquired knowledge on how to avoid fire breakouts in the institution.
- III. **Fire Prevention Measures**: Fire prevention measures are crucial for ensuring the safety of the students, staff, and the institution at large. The following key measures were highlighted in the training:
  - Implement smoking policies that restrict smoking to designated areas and provide proper disposal methods for cigarette butts to reduce the risk of fire caused by discarded smoking materials.
  - Place fire extinguishers in easily accessible locations and ensure that people around have knowledge on how to use them effectively.
  - Educate the students and the staff about fire hazards and train them on fire safety protocols, including proper use of fire extinguisher.
  - Proper housekeeping will reduce the risk of fire breakout.
  - Keep exit routes clear of obstructions to facilitate quick evacuation in the event of a fire.
  - Keep flammable materials in designated areas away from potential fire sources.
- IV. **Emergency Procedures**: To ensure readiness and preparedness the participants were taught on the evacuation procedures, including fire assembly points, responsibilities of a warden during an emergency and the communication and alarm systems.
- V. **Fire Extinguisher Training:** In preparing the participants to fight fire in case of a breakout a topic of the types of fire extinguishers and their appropriate uses was done. A practical demonstration on how to operate a fire extinguisher safely by using the PASS (pull, aim, squeeze and sweep) method and maintaining a safe distance from the fire to prevent injuries to self as a fire warden.
- VI. **Feedback and Demonstration**: Participants actively engaged in questions and answers, which demonstrated a good understanding of fire safety principles and the practical use of a fire extinguisher which enhanced confidence and readiness to respond in case of a fire emergency.

### 7. RECOMMENDATIONS

#### 7.1. FIRST AID

• Implement regular refresher courses to reinforce the knowledge and skills acquired during the initial first aid training.

• Provide scenario-based training sessions at the Ndola airport to give participants practical experience in handling various medical emergencies.

#### 7.2. FIRE DRILL

- Regular Inspection and Maintenance of Electrical Systems
- Implement policies to restrict smoking to designated areas and provide proper disposal methods to reduce the risk of fire caused by discarded smoking materials.
- Educate students on fire safety protocols and train them in the proper use of fire extinguishers.
- Conduct fire drill practices regularly to ensure preparedness and familiarize personnel with emergency procedures.
- Ensure all fire extinguishers are placed in easily accessible locations throughout the institution.
- Specifically place CO2 fire extinguishers in laboratory areas where they may be needed.
- Acquire additional types of fire extinguishers to ensure comprehensive fire safety measures.

### 8. CONCLUSION

In conclusion, the fire drills and first aid training conducted at KVTC have significantly contributed to enhancing safety preparedness and response within our workplace. These initiatives have equipped participants with valuable knowledge and practical skills to effectively respond to fire emergencies and provide immediate assistance in medical situations. Ensuring the safety and wellbeing of all individuals within our institution remains a top priority, and these training efforts play a crucial role in achieving that goal.