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# ADB Health, Safety and Security (HSS)

## Awareness Training Course



ADB

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# Welcome and Introductions

- See Workshop Agenda

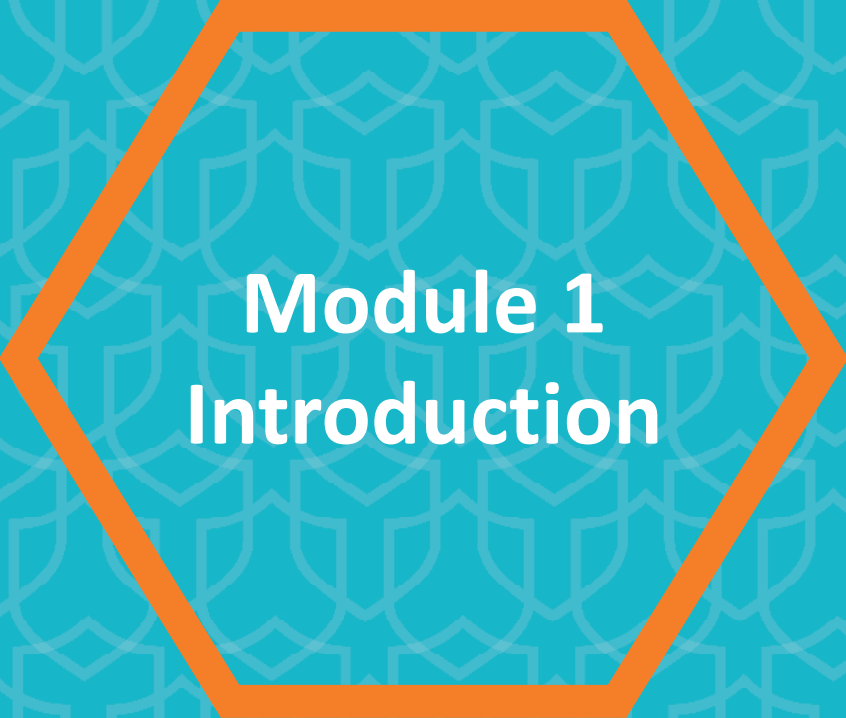


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# Module 1 Introduction

**UNDERSTAND THE PURPOSE,  
INTENT, AND SCOPE OF THE ADB:**

## Safeguard Policy Statement (SPS)

# OBJECTIVES

Understand the SPS occupational health and safety (H&S) requirements

Appreciate potentially significant occupational health and safety risks  
/impacts associated with ADB projects

Occupational H&S quiz to reinforce understanding





## OCCUPATIONAL H&S

According to the ILO, globally almost **two million workers** still die **every year** due to exposure to 19 occupational risk factors alone. It is estimated in Asia and the Pacific, work-related diseases and injuries are responsible for **at least 1.2 million deaths**, and the loss of 55 million healthy years. Occupational accidents and diseases **are all preventable**.

<https://www.ilo.org/asia/areas/safety-and-health-at-work/lang-en/index.htm#:~:text=It%20is%20estimated%20in%20Asia,and%20diseases%20are%20all%20preventable>



<https://www.youtube.com/watch?v=F11XrdBJIUI>



# Leading cause of Fatal incidents in the Construction Industry

## OSHA's "Fatal Four" - The leading causes of death in the construction industry

The [Bureau of Labor Statistics](#) reported 5,190 fatal work injuries in the U.S. in 2021. Of those deaths, nearly 20% occurred in construction, second only to transportation and materials handling. Fortunately, the "[Fatal Four](#)" leading causes of construction deaths – falls, stuck-by, electrocutions, and caught-in or -between -- are preventable by using these tips.

### 1. Use fall protection.

Falls caused 37% of construction deaths in 2021. [OSHA standards](#) require fall protection any time a construction worker is 6 feet or more above the ground.

### 2. Ground or double-insulate all electrical equipment.

Electrocution accounted for about 8% of construction worker deaths in 2021. Among the [electrocution risks](#) on construction sites are exposed wiring and wet conditions near outlets; contact with overhead power lines; energized conductors or circuit parts; poorly maintained power tools and cords; and lightning strikes. Strictly following [OSHA electrical standards](#) can prevent these accidents.

### 3. Know the greatest risk of being struck by an object on a job site.

Another 8% of construction deaths in 2021 were due to workers who were struck-by objects that were swinging, falling, or misplaced. These included falling objects due to rigging failure; loose or shifting materials; equipment malfunctions; and vehicle or equipment strikes. Be aware of all possible struck-by hazards including dropped tools and flying objects, and review these [tips](#) and [resources](#).

### 4. Use strict safety precautions when surrounded by moving vehicles, unguarded heavy equipment, or cave-in hazards.

About 5% of construction worker deaths in 2021 were from employees getting caught in or between machines, devices, tools, or trenches including workers caught between moving or rotating equipment or collapsing structures or materials. Ensure [control measures are in place](#) and workers are trained to prevent the most common caught-in and caught-between hazards including getting pulled into [unguarded machinery](#); caught between equipment and a fixed object; or trapped in a masonry wall, trench, or excavation [collapse](#).



# Occupational Health and Safety

## Policy Provisions Requirements



- The **borrower/client** will provide **workers** with a safe and healthy working environment, taking into account risks inherent to the particular sector and specific classes of hazards in the borrower's/client's work areas, including physical, chemical, biological, and radiological hazards.
- Prevent accidents, injuries, and disease arising from associated with or occurring during the course of work.
- Emergency preparedness and response arrangements at the workplace.
- Recognizes the Hierarchy of Risk Control – *avoid, minimize, manage*
- Refers to internationally recognized standards such as WBG EHS.
- Document and report OHS accidents, diseases and incidents



# H&S Risk Assessment



		Consequence		
		Slightly Harmful	Harmful	Extremely Harmful
Likelihood	Likely	Medium Risk	High Risk	Extreme Risk
	Unlikely	Low Risk	Medium Risk	High Risk
	Highly Unlikely	Negligible Risk	Low Risk	Medium Risk

A risk matrix is used during a risk assessment.

A risk matrix takes the likelihood of the risk and the consequence severity to assign a level to the risk.



# H&S Management Planning

## Mitigation Hierarchy



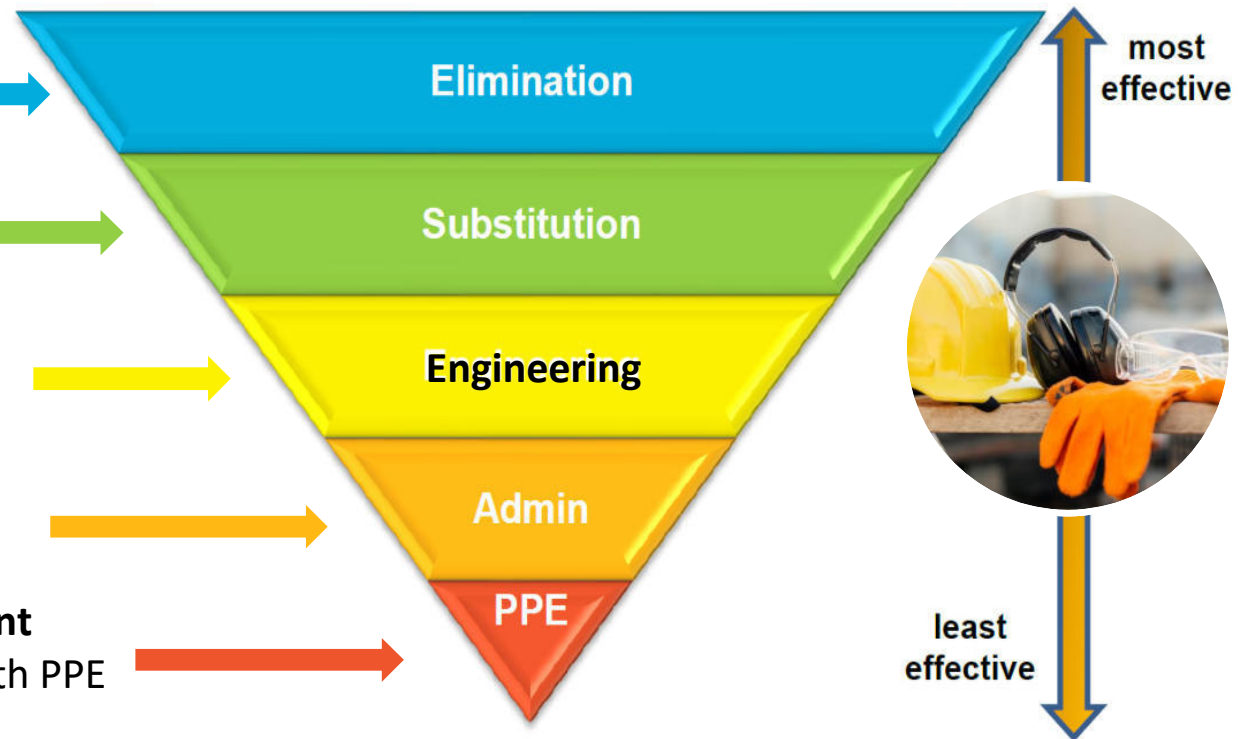
**Elimination**—physically remove the hazard

**Substitution**—replace the hazard

**Engineering controls**—isolate people from the hazard

**Administrative controls**—change the way people work

**Personal protective equipment (PPE)**—protect the worker with PPE



# H&S Management Planning – Mitigation Hierarchy



ADB Borrower/Client  
Legal agreement  
with ADB



Borrower/  
Contractor  
Requirements &  
Supervision  
Consultant/  
engineer



# H&S Monitoring



- Regular H&S inspections to ensure measures employed and effective
- Regular testing of H&S equipment
- Surveillance work area and workers health
- Document all training and emergency drills
- Set up a worker's GRM (not just for local community)
- **Report and record** all occupational accidents and diseases (fatal, non fatal, days lost)
- **Report, record, and investigate** all incidents or dangerous occurrences (near miss)

## Lagging and Leading Health and Safety Indicators

Lagging Indicators	Leading Indicators
<ul style="list-style-type: none"><li>› Total lost work days</li><li>› Restricted work days</li><li>› Number of fatalities</li><li>› Injuries/illness rate</li><li>› Asset/property damage</li><li>› Vehicle mishaps</li><li>› Near-miss incidents</li><li>› Chemical releases</li><li>› WC trends and amount</li><li>› Experience modification</li></ul>	<ul style="list-style-type: none"><li>› Safety/health meetings</li><li>› Supervisor training</li><li>› Employee training</li><li>› Number of inspections</li><li>› No. of audits/surveys</li><li>› No. of self-inspections</li><li>› Reward/recognition</li><li>› Employee turnover rate</li><li>› Observations/accidents</li><li>› Risk/hazard assessment</li></ul>



# Performance Target

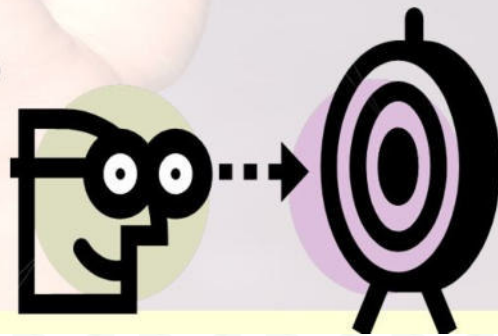


## Zero Accidents, Zero Incidents, Zero Tolerance!

### TARGET ZERO

“**Target Zero**” is a vision for continuous safety improvement.

Through “**Target Zero**”, we strive to perform all work activities free of accidents at all times.





# Worker's Accommodation



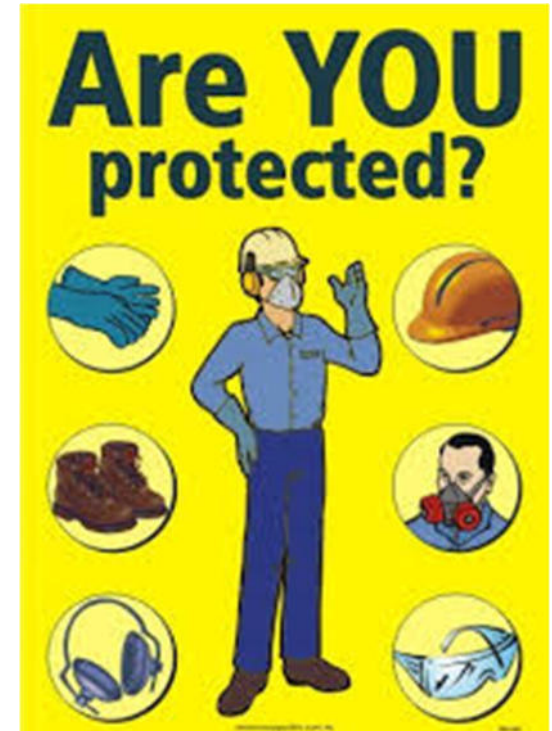
**Figure 1: Workers' Accommodation, Assessment, and Management Process**



**Workers' Accommodation: Processes and Standards**  
 A Guidance Note by IFC and the EBRD

[https://www.ebrd.com/downloads/about/sustainability/Workers\\_accomodation.pdf](https://www.ebrd.com/downloads/about/sustainability/Workers_accomodation.pdf)

# Occupational Health and Safety Quiz





## Questions



# Objectives

Understand the SPS community health and safety requirements

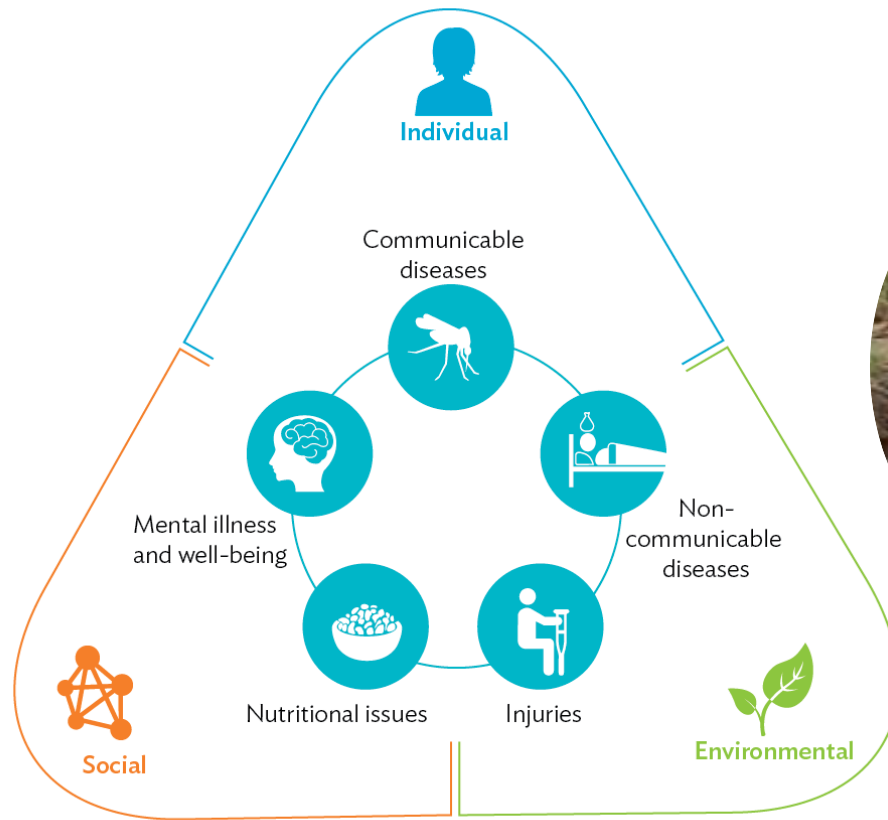
Appreciate potentially significant community health and safety impacts/risks associated with ADB projects

Community H&S quiz to reinforce theory





# Community Risks/Impacts



# SPS Requirements (community)



- Identify and assess risks/impacts on the safety of affected communities
- Establish preventative measures to address them
- Favor the prevention or avoidance of risks over minimization and reduction (management hierarchy)
- Consider accidental and natural hazards with particular attention to publicly accessible components and where structural failure could result in injury to the community
- Avoid or minimize exacerbation of impacts caused by natural hazards as a result of project land use change

# SPS Requirements (community)

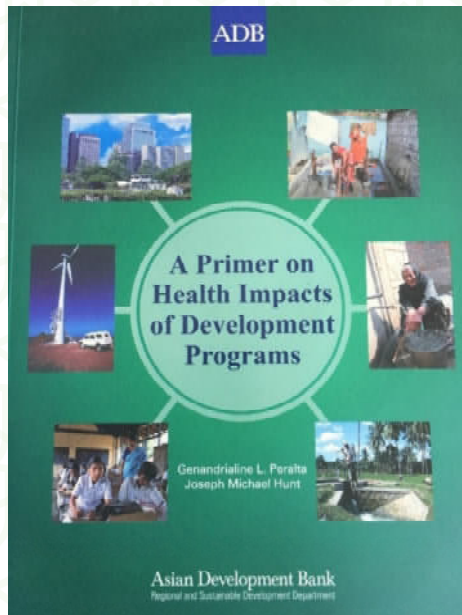


- Inform affected communities of significant hazards
- Prepare accident and emergency response plans to respond to hazards, including response procedures, responsibilities, communications, training, resources required
- Disclosure appropriate information about preparedness and response activities, responsibilities and resources to affected communities
- Major structural components, in areas of high risk that threaten safety of communities, must be independently reviewed by qualified and experienced experts throughout project



# Health Impact Assessment

Follows similar process to EIA and informed by it, but focused on health impacts and benefits of the development project





# Health Impact Assessment

Bangladesh: Rupsha 800-Megawatt Combined Cycle Power Plant Project



Oh, we are affected by the new power plant project.



Ms. Hridi and her family live in Rupsha near the proposed site for the gas fired power plant.

In her community, power outage is frequent, health clinics in the area don't have continuous access to energy needed to refrigerate medicines, vaccines or sterilize material.

PROJECT WELL MANAGED WITH HIA



PROJECT POORLY MANAGED



### HIA

Infrastructure and economic development affect human health. Solid policy and legal frameworks for health impact assessment, effective institutional arrangements between key sectors, sound public health management plan, and effective monitoring and mitigation systems are critical to realizing positive health impacts from infrastructure development.

#### In Bangladesh

4 in 10 people don't have access to electricity.

96% of the population use solid fuels as the main source of energy for cooking in Khulna division.

108,000 Number of people die from poor outdoor air quality every year, including 7,000 children under 5 years of age.

#### What does HIA require?

- Practical HIA Guidelines
- Capacity Development Training
- Policy and Regulatory Framework
- Clear Institutional Arrangement between Relevant Sectors

# Policy Update

## ESS4



### Requirements

#### » Occupational Health and Safety (OHS)

- General and Sector Specific OHS risk assessment and management planning.
- Health and Safety Management Plan – **HSMP + ESCP.**

#### » Community Health and Safety (CHS)

- General and Sector Specific CHS risk assessment and management planning.
- Health and Safety Management Plan – **HSMP +ESCP.**

#### » Common Requirements

- Designate a person responsible to implement the HSMP.
- Monitor and Report on Performance – **HSMP +ESCP.**
- Worker Right to refuse to work in unsafe environments.





## Requirements

» Community and Workers' Risk Assessment and Management Planning,\* with coverage based on screening:

- Security risk for workers and communities.
- Sexual abuse and harassment risks to workers and affected communities.
- Climate change and disaster risk assessment for projects in sensitive locations
- Life and Fire safety audits for new and refurbished facilities prior to use.
- Reporting on major incidents such as fatalities and accidents.
- Emergency preparedness and Response
- Safety of Services
- Dam Safety (New and DUC)

*\*Note, assessment needed only for projects based on screening of relevant issues, with scale of assessment and management needs commensurate issues and risks.*



# Key Takeways



- Project health and safety risk management requires strong partnership between ADB and their borrowers/clients.
- Risk Assessment is critical to a risk management planning and PPE is the last resort in the Mitigation Hierarchy.
- Safety is everyone's responsibility, but Your safety is your responsibility

## Detailed Health, Safety and Security Training Developed

- » [ADB Health, Safety & Security Course](#)
- » [Mental Health and Wellbeing in the Workplace](#)
- » [Mental Health and Wellbeing in the Workplace \(for Managers\)](#)
- » [Good Practice Guide for Management and Control of Asbestos: Protecting workplaces and communities from Asbestos Exposure Risks](#)  
<https://www.adb.org/publications/good-practice-management-control-asbestos>
- » [Asbestos Awareness eLearning Course](#)