



Regional Training on Health and Safety in South Asia

26–29 August 2024 • Colombo, Sri Lanka

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ADB Health, Safety and Security (HSS)

Awareness Training Course

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Programme Overview

1

**Introduction
HSS at ADB**

2

Safety Culture and
Risk Management

3

Workplace Health and
Safety

4

Community Health and
Safety





**Module 1
Introduction**

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

**Safeguard Policy
Statement (SPS) 2009**

OBJECTIVES

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

Appreciate potentially significant H&S risks /
impacts associated with ADB projects

H&S quiz to reinforce understanding



HEALTH & SAFETY

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>

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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.

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

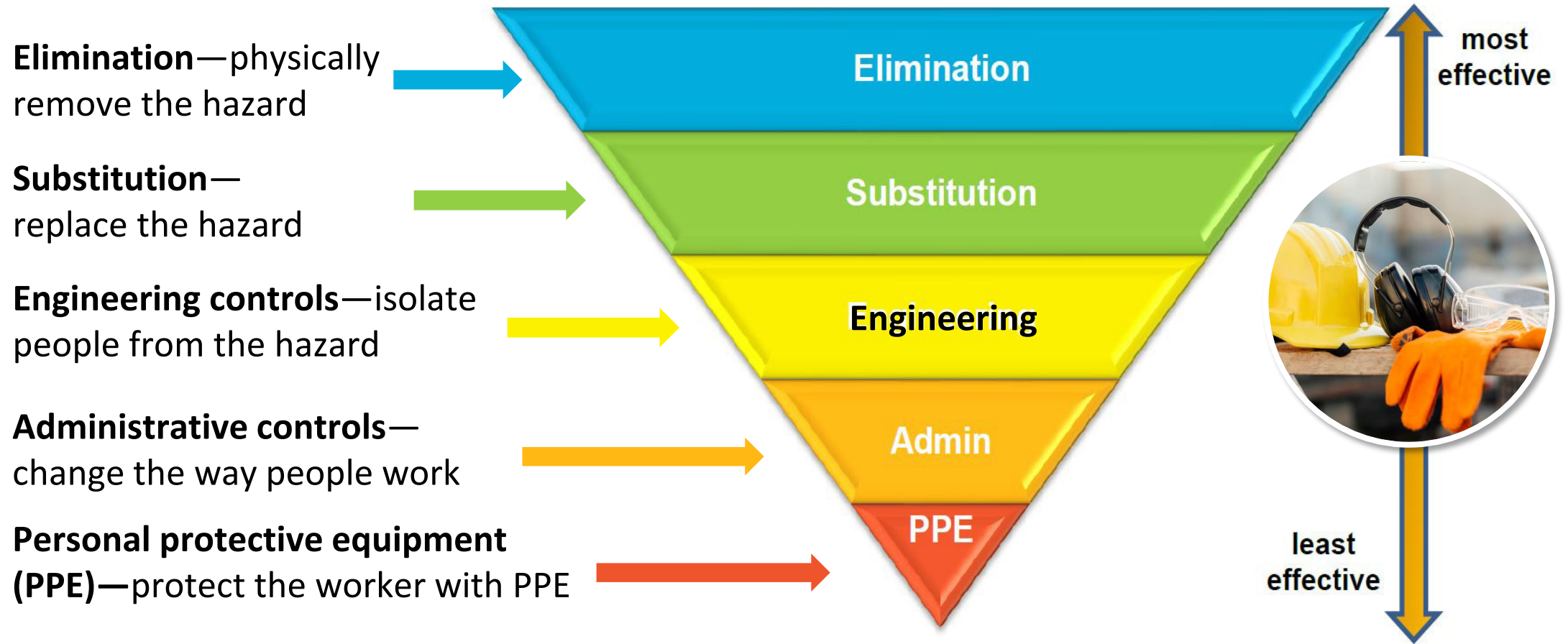
		Consequence		
		Slightly Harmful	Harmful	Extremely Harmful
Likelihood	Likely	Medium Risk	High Risk	Extreme Risk
	Unlikely	Low Risk	Medium Risk	High Risk
	Highly Unlikely	Negligible Risk	Low Risk	Medium Risk

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



H&S Management Planning – Mitigation Hierarchy

Environment Impact Assessment [EIA]
Initial Environmental Assessment [IEE]

Environment Management Plan [EMP]

Construction EMP

Operations
EMP

Health and Safety Management Plans
(including Emergency Response Plan)

Site
Specific
H&S Plan

Work
Specific
H&S
Plan

Operations/
Maintenance
& Decommissioning
H&S Plan

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

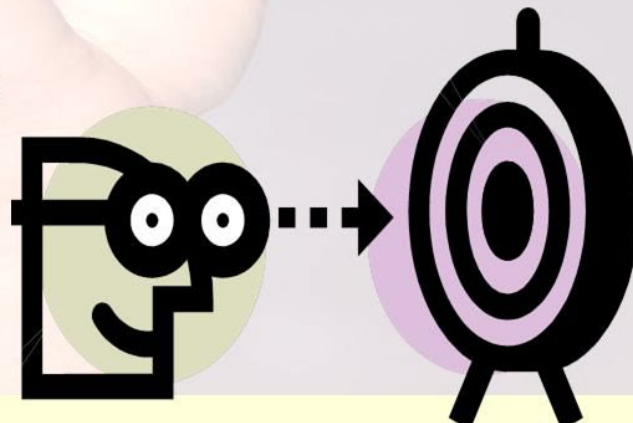
Performance Target

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



Workers' Accommodation: Processes and Standards

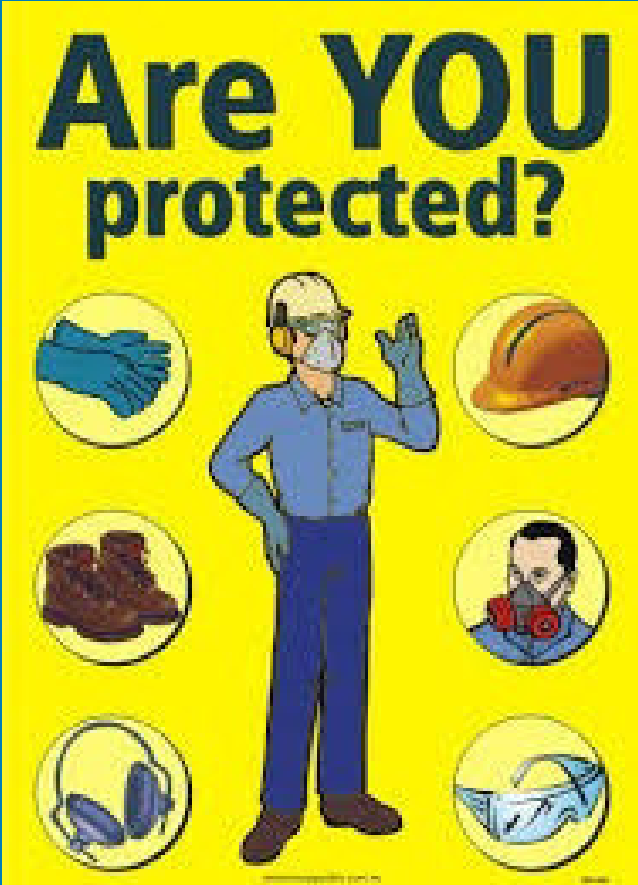
A Guidance Note by IFC and the EBRD

https://www.ebrd.com/downloads/about/sustainability/Workers_accomodation.pdf

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



Health and Safety Quiz



Questions - OHS



Objectives

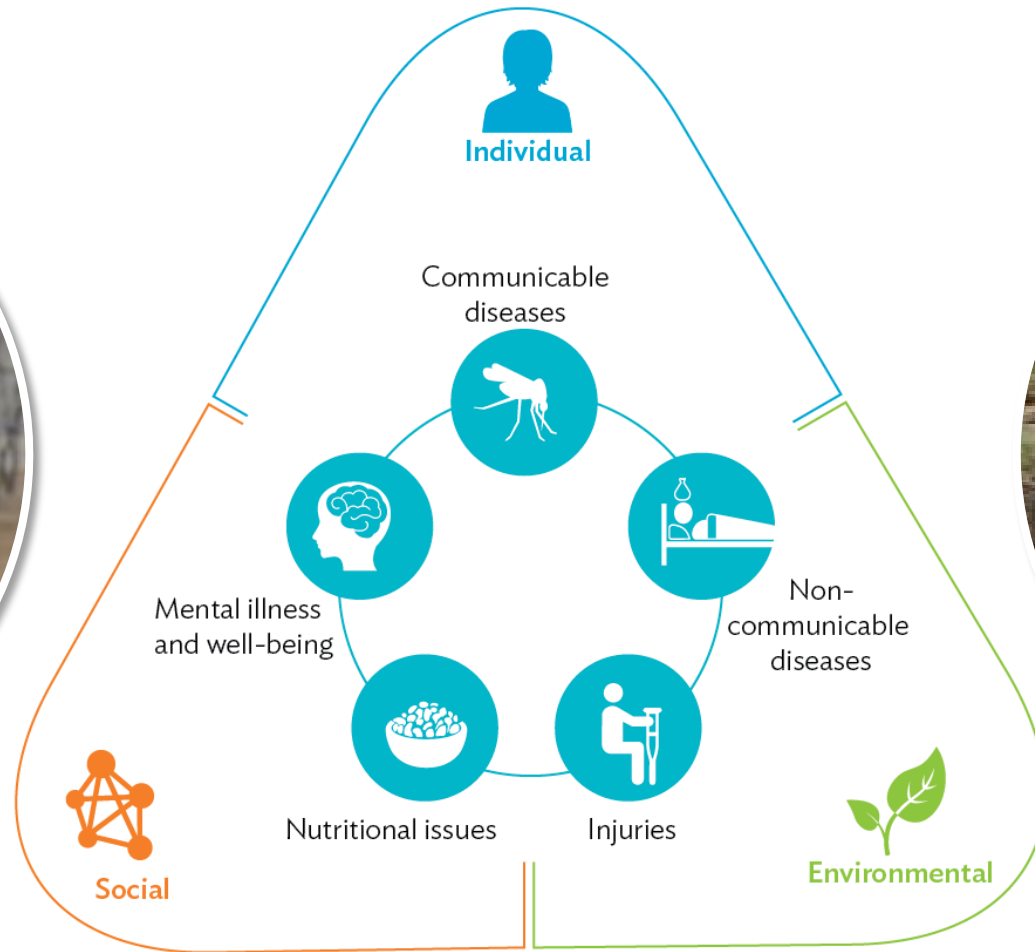
Understand the SPS community health and safety requirements

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)

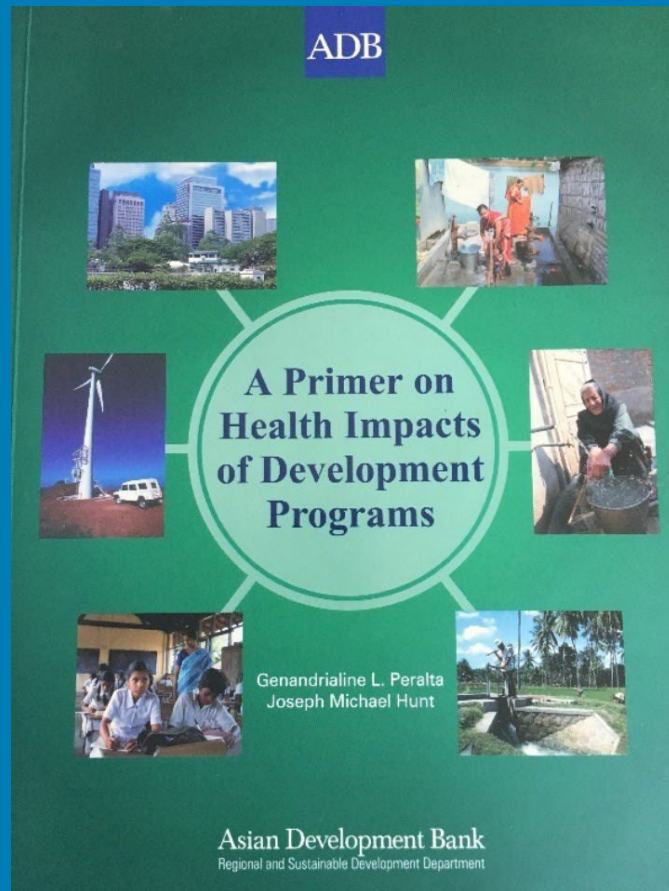
- Identify and assess risks/impacts on the safety of affected communities
- Establish preventative measures to address them
- Favor the prevention or avoidance of risks over minimization and reduction (management hierarchy)
- Consider accidental and natural hazards with particular attention to publicly 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



Questions- CHS



HSS TRAINING

FOCUS:



- **ADB - HSS**
- **Safety Culture**
- **Hazard Identification**
- **Life Saving Rules**
- **Risk Management**
- **HSS Good Practice Guide**
- **Safe Work Practices**
- **Incident Reporting & Investigation**
- **Emergency Preparedness**

Worksite Safety



Every ADB-supported project is unique and has a different range of hazards and risks.



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Activity

Serious Incidents



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Imagine the Headlines

An incident at work has wide-ranging impacts.

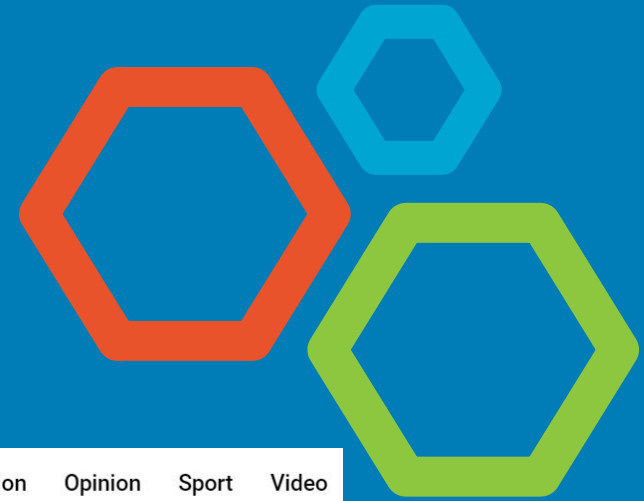
Tragic domino / ripple effect...



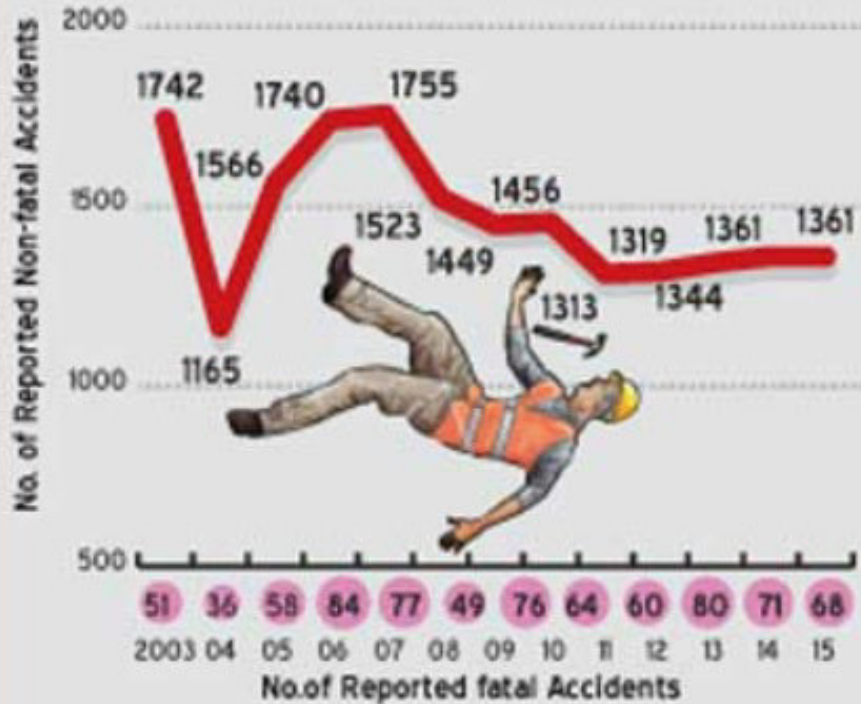
Imagine the Headlines...

<https://www.dailymirror.lk/print/news-features/Improving-health-and-safety-in-construction-sites/131-139474>

From data available at the Labour Department, nearly 2,500 to 3,000 fatal and non-fatal accident reports are annually reported to industrial safety. Out of them, 40 to 60 are fatal and some 30% occur due to construction methodologies.



Reported Industrial Fatal and Non-fatal Accidents



Source: Department of Labour-Industrial Safety Division



ALJAZEERA

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At least 20 die after crane collapses at India highway construction site

At least 20 killed and three admitted to hospital with injuries after accident in the Thane region of Maharashtra state.



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Imagine the Headlines...



OSHE officials at a press conference at Nazrul Hamid Auditorium of Dhaka Reporters' Unity on 29 December 2023. Photo: UNB

As many as 1,432 workers were killed and 502 were injured in their workplaces across the country in the outgoing 2023.

Non-governmental organisation 'Bangladesh Occupational Safety, Health and Environment (OSHE)' foundation revealed the information at a press conference at Nazrul Hamid Auditorium of Dhaka Reporters' Unity (DRU) on Friday.

The foundation collected the data from 15 media outlets and their own field-level sources.

<https://www.tbsnews.net/bangladesh/oshe-records-1432-workplace-deaths-2023-766314>

Lack of safety measures at construction sites causing accidents and taking lives

Stakeholders stress the need to implement safety standards on all construction sites.



Post Photo

<https://kathmandupost.com/province-no-1/2022/02/07/lack-of-safety-measures-at-construction-sites-causing-accidents-and-taking-lives>

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