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# ADB Health, Safety and Security (HSS)

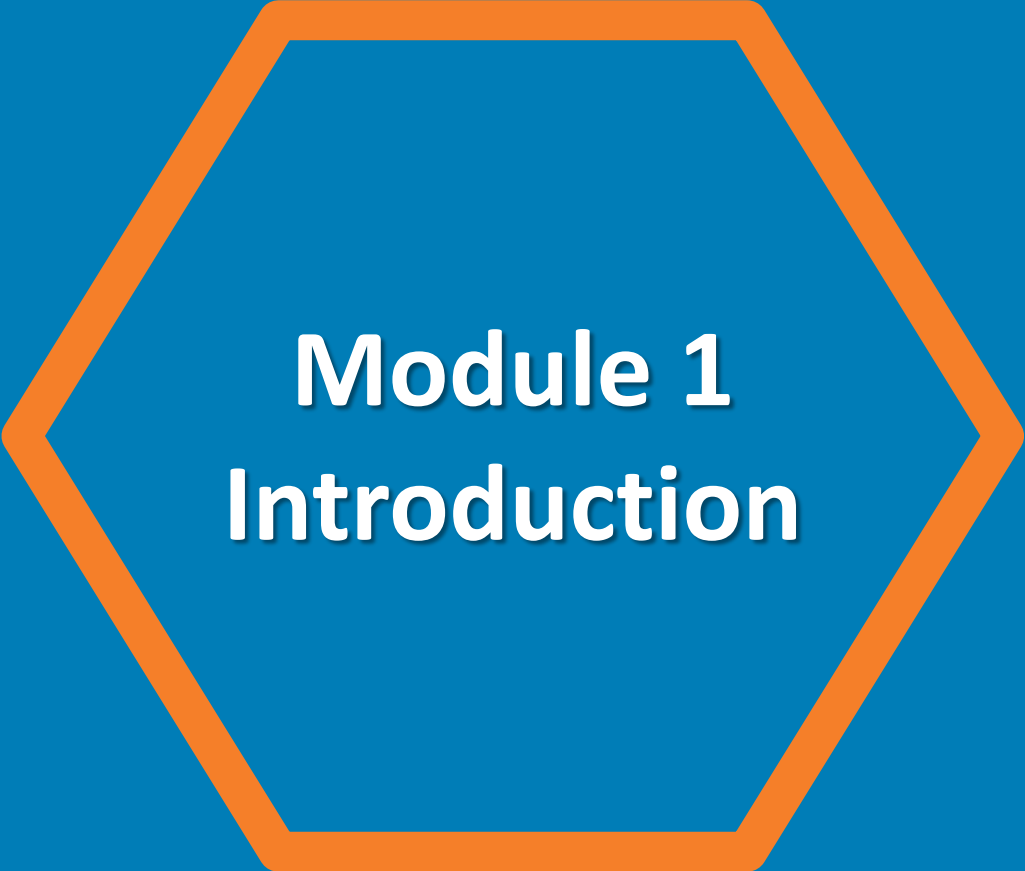
## Awareness Training Course

ADB



# Training on Health and Safety in Pakistan

**19–22 August 2024 • Islamabad, Pakistan**



**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>



# 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

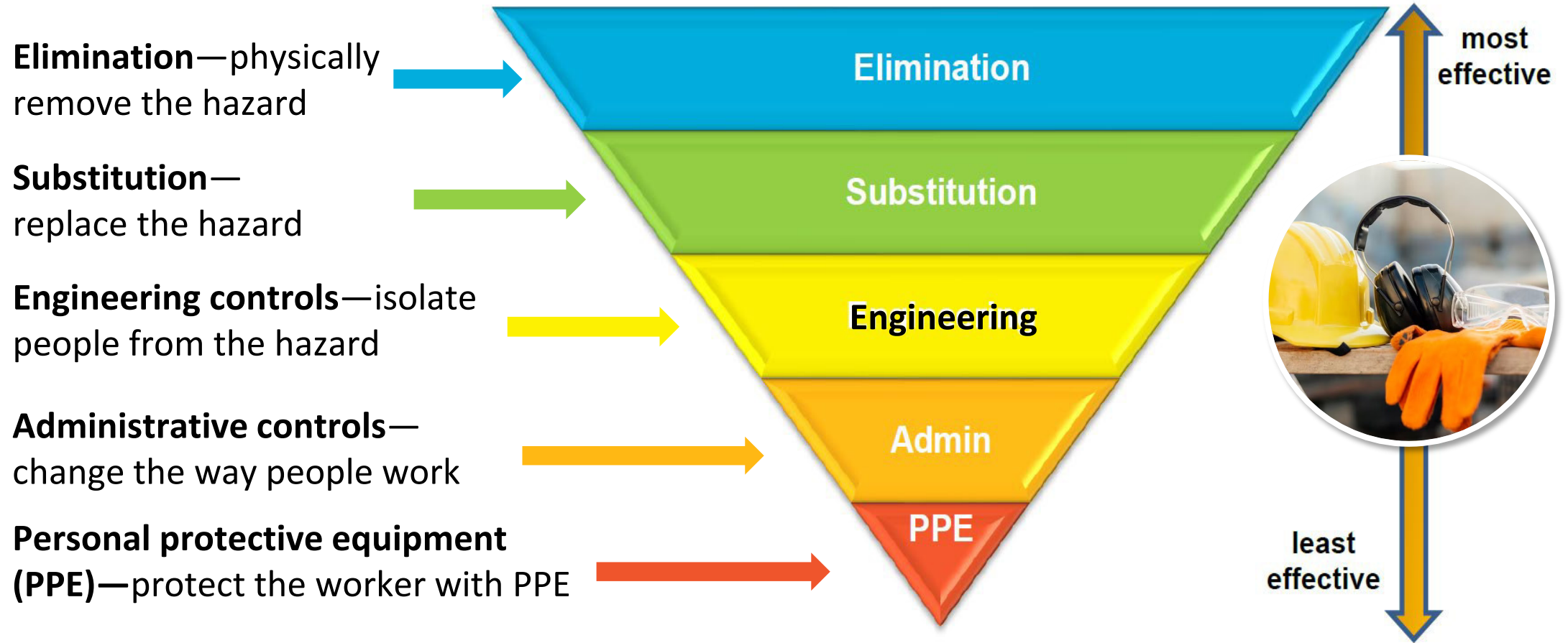
A risk matrix is used during a risk assessment.

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"><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>

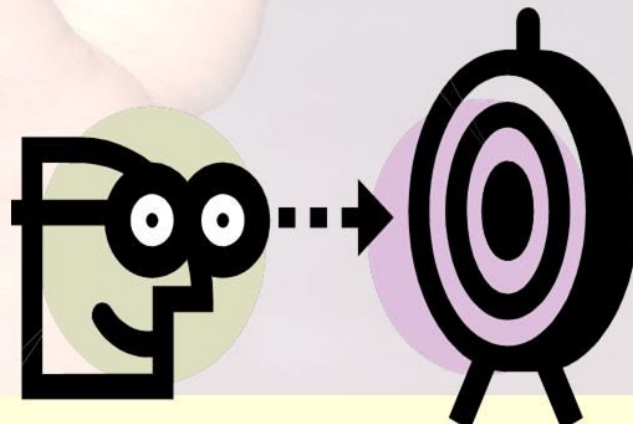
# Performance Target

**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



## Workers' Accommodation: Processes and Standards

A Guidance Note by IFC and the EBRD

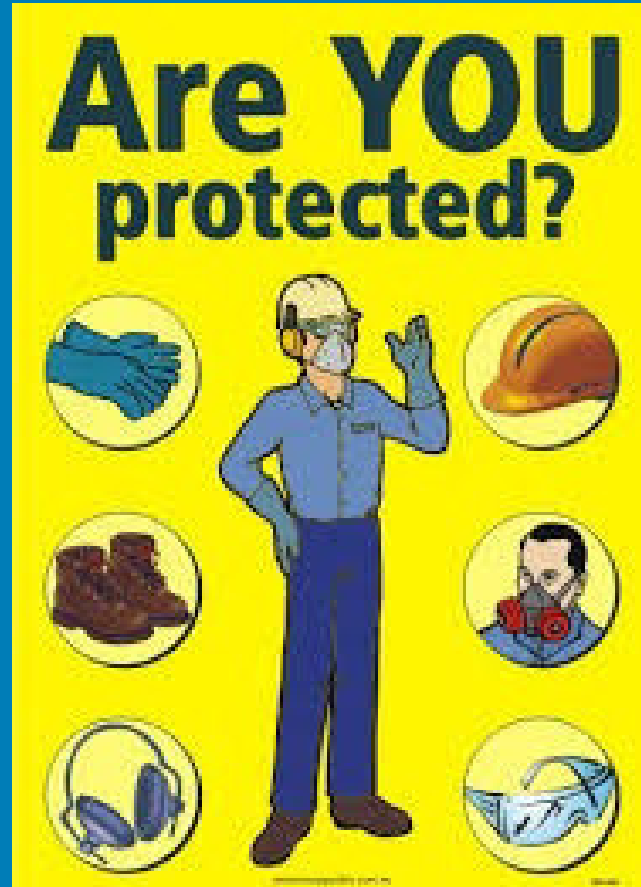
[https://www.ebrd.com/downloads/about/sustainability/Workers\\_accomodation.pdf](https://www.ebrd.com/downloads/about/sustainability/Workers_accomodation.pdf)

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





# Health and Safety Quiz



# Questions - OHS



# Objectives

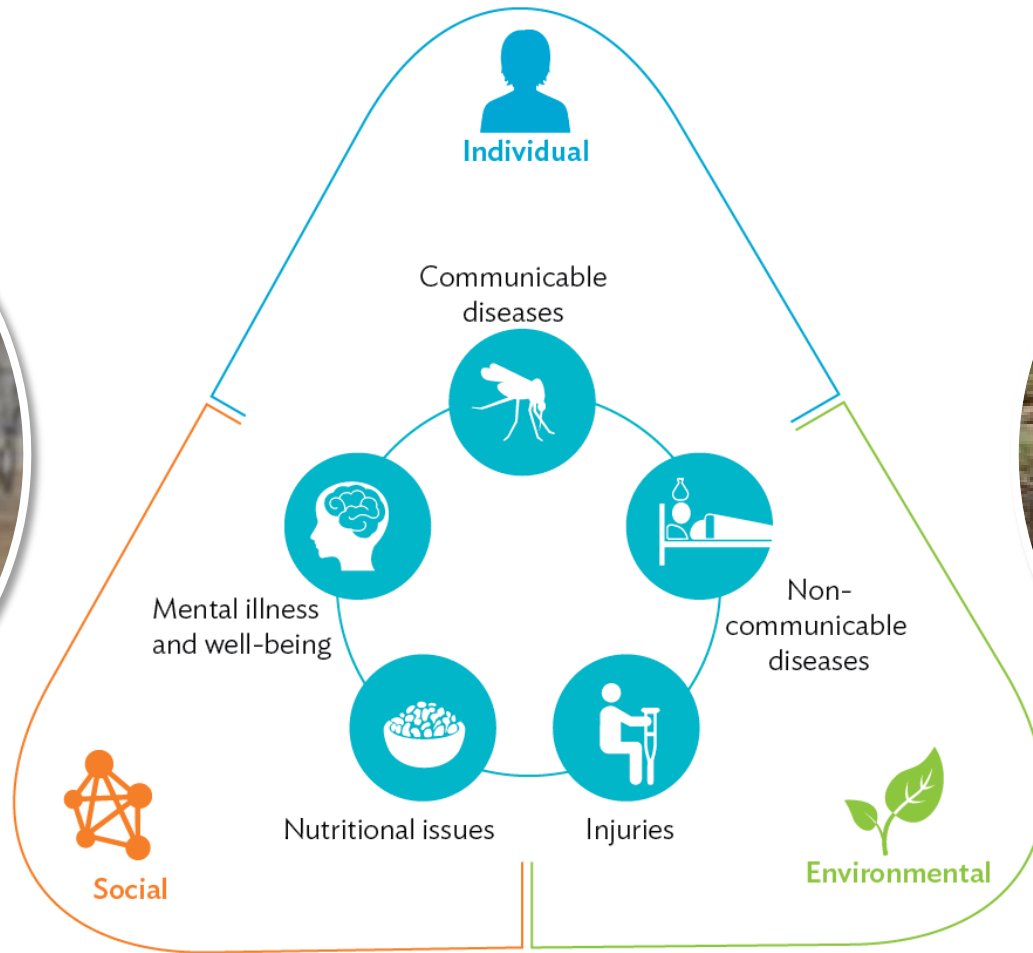
Understand the SPS community health and safety requirements

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

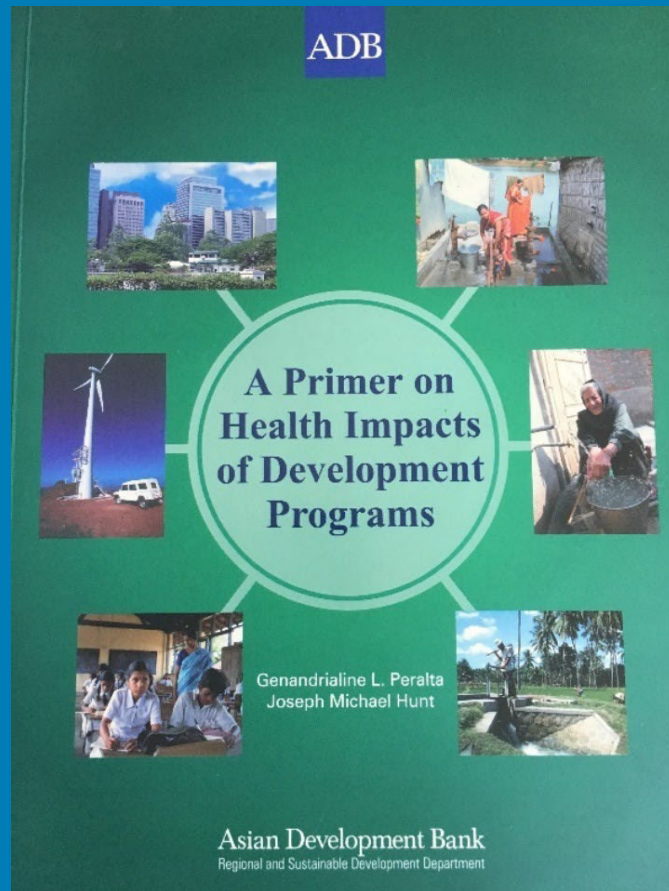


# SPS Requirements (community)

- 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.







**Activity**

**Serious Incidents**

# Imagine the Headlines

An incident at work has wide-ranging impacts.

Tragic domino / ripple effect...



# Imagine the Headlines...



## PAKISTAN

### Passenger train crashes in Sindh

At least 30 people killed and dozens of others injured after train from Karachi to Abbottabad derailed in the city of Nawabshah in Sindh province.



DAWN  
E-PAPER | AUGUST 18, 2024

HOME LATEST **GAZA SIEGE** PAKISTAN OPINION BUSINESS WORLD CULTURE PRISM SPORT MAGAZINES TECH VIDEOS POPULAR ARCHIVE FLOOD DONATIONS SEARCH

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14 روپے فی یونٹ کمی  
کاتاریخ کا سب سے بڑا ریلیف  
آئندہ جسٹس کے قوانین  
عوام کا بوجھ ہائٹس کر لیں 145 روپے حکومت پنجاب ادا کرے گی  
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حکومت پنجاب

### Complaint filed against construction firm over deaths of three labourers in Islamabad

The Newspaper's Staff Reporter | Published October 5, 2023

LISTEN TO ARTICLE 0:00 / 1:57 1x 1.2x 1.5x

JOIN OUR WHATSAPP CHANNEL

**ISLAMABAD:** The Bharakahu Police on Wednesday received an application seeking registration of a case against a construction company over the deaths of three labourers who had died due to falling of a crane over them on



# Imagine the Headlines...

News / International / Pakistan authorities investigate fatal site incident

Share In Share f Share X Share P

## Pakistan authorities investigate fatal site incident

🕒 27 Feb 23 Pakistan's prime minister, Shehbaz Sharif, has ordered a report into an incident in which two construction workers died on a road construction project in the capital, Islamabad.



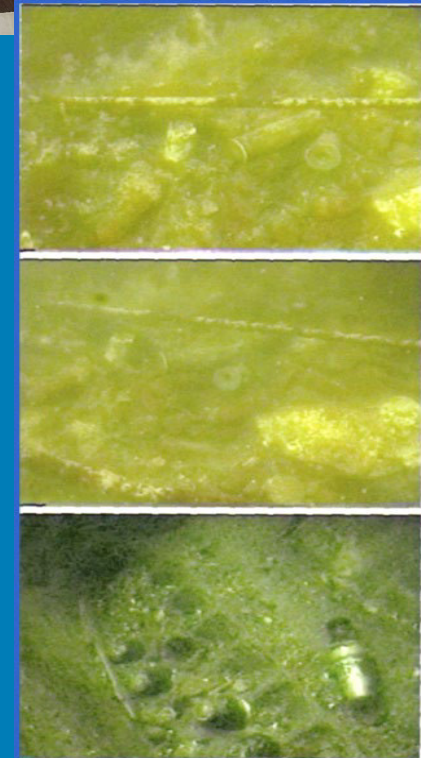
Above: Heavy vehicles were reportedly allowed through the site while work was underway

The victims were working on the Bhara Kahu flyover project when shuttering erected for construction of reinforced concrete column collapsed while the concrete was being poured.

The incident occurred in the early hours of Saturday 25<sup>th</sup> February.

The 5.6 km-long Bhara Kahu bypass extends from Malpur and culminates on Murree Road near the Jug bus stop from where the one-kilometre flyover will carry the road to end of the local bazaar at Murree.

According to local sources, Murree Road had been closed to heavy traffic during work on the Bhara



**Group Discussion:**

***What are your top 3-5 H&S risk scenarios... ?***

**ADB**