

Occupational Health & Safety

Injuries and Illnesses in Pakistan

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27th April, 2019



Definitions

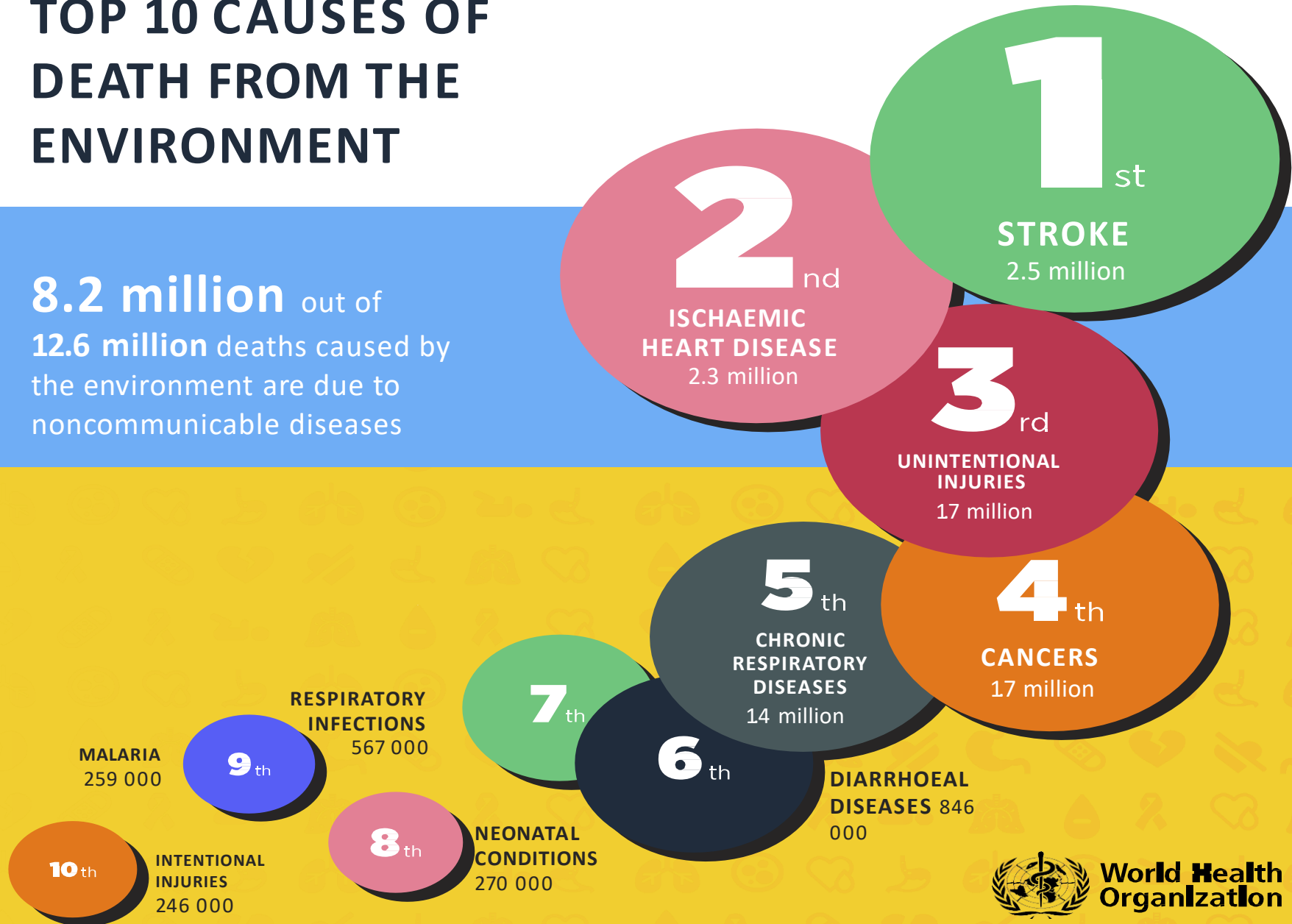
International Labour Organisation defines

Occupational injury as "any personal injury, disease or death resulting from an occupational accident".

An occupational disease was defined as "a disease contracted as a result of an exposure over a period of time to risk factors arising from work activity".

TOP 10 CAUSES OF DEATH FROM THE ENVIRONMENT

8.2 million out of **12.6 million** deaths caused by the environment are due to noncommunicable diseases

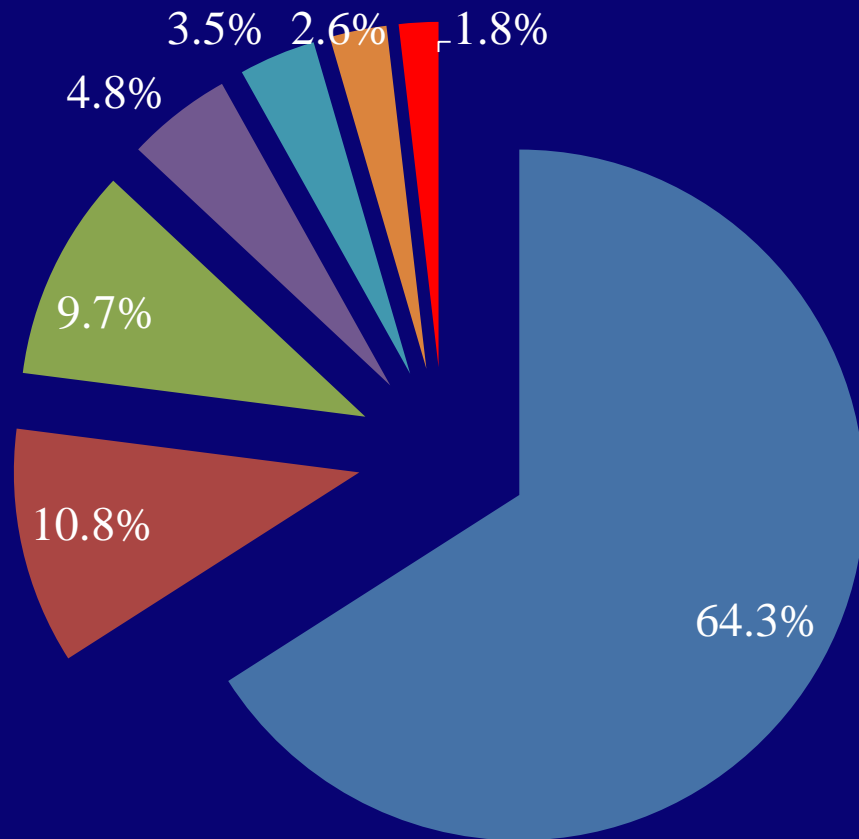


World Health Organization

#EnvironmentalHealth

Occupational Referral Clinic-Outpatient

General Diagnosis Categories



■ Respiratory

■ Musculoskeletal

■ Sensory organ disorders

■ Symptom-defined syndromes

■ Chemical poisoning syndromes

■ Skin

■ Psych/Neuro

Sectors at Risk in Pakistan

- Major industrial sectors and work places
 - Textile units
 - Dyeing units
 - Tanneries
 - Paint industry
 - Chemical plants
 - Pesticide formulation
 - Printing press
 - Maintenance workshops
 - Waste recycling units
 - Pharmaceutical sector
 - Automobile manufacturing

The infographic features a central dark grey oval with the title 'Top 10 Chemicals of Public Health Concern'. Surrounding this center are ten smaller ovals, each containing a chemical name. The ovals are arranged in a circle and are connected by a thick, multi-colored ring. The colors of the ovals are: Lead (red), Hazardous Pesticides (red), Air Pollution (red), Asbestos (teal), Dioxin (orange), Fluoride (maroon), Cadmium (green), Benzene (orange), Mercury (red), and Arsenic (red). The ring connecting them is composed of segments in teal, green, purple, and orange.

Top 10 Chemicals of Public Health Concern

Lead

Hazardous Pesticides

Air Pollution

Asbestos

Dioxin

Fluoride

Cadmium

Benzene

Mercury

Arsenic

Risk to Workers in Pakistan

- **High risk Population:** Powerless, illiterate, Children, Bonded labor, Women, Workers in small businesses
- **Medical Care/Rehab:** Inadequate
- **Motor vehicles/Machines/Chemical:** Unsafe, Banned
- **Workplaces:** Hazardous, No Safety Measures

National Health Survey of Pakistan (NHSP), 1990-94

Variables	Overall
	% (SE)
Place of injuries	
Home	41.8 (2.6)
Road traffic/Street	37.6(2.7)
Workplace/farm/fields	13.0(1.6)
School	3.2(0.8)
Others	4.4(0.9)
Type of injuries	
Fall	48.6(2.8)
Poisoning	7.1(3.0)
Burn	3.2(0.6)
Other*	41.1(2.96)

Exposures among textile workers



Research on health of textile workers

- Nafees AA, Fatmi Z. Available interventions for prevention of cotton dust-associated lung diseases among textile workers. [Systematic review]. J Coll Physicians Surg Pak. 2016.
- Nafees AA, Fatmi Z, Kadir MM, Sathiakumar N. Chronic bronchitis and chronic obstructive pulmonary disease (COPD) among textile workers in Karachi, Pakistan. J Coll Physicians Surg Pak. 2016.
- Tanzil S, Nafees AA. Low prevalence of asthma among textile workers in Karachi, Pakistan. J Pak Med Assoc. 2015.
- Nafees A.A., Fatmi, Z., Kadir, M. M., & Sathiakumar, N. (2013). Pattern and predictors for respiratory illnesses and symptoms and lung function among textile workers in Karachi, Pakistan. *Occup Environ Med*, 70(2), 99-107.

Occup Environ Med 2013;70:99-107 doi:10.1136/oemed-2011-100561

Workplace

Original article

Pattern and predictors for respiratory illnesses and symptoms and lung function among textile workers in Karachi, Pakistan

Asaad Ahmed Nafees¹, Zafar Fatmi¹, Muhammad Masood Kadir¹, Nalini Sathiakumar²

This Article

- Abstract
- Full text
- PDF
- Supplementary Data

All Versions of this Article:

oemed-2011-100561v1
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Respiratory symptoms and illnesses among textile workers (n=372), Karachi, Pakistan, 2010

Conditions	Frequency	Percentage (%)
Sputum	48	13
Wheeze	83	<u>22</u>
Shortness of breath	78	<u>21</u>
Byssinosis	39	<u>10.5</u>

RESEARCH ARTICLE

Open Access

Respiratory symptoms and illnesses among brick kiln workers: a cross sectional study from rural districts of Pakistan

Shiraz Shaikh¹, Asaad Ahmed Nafees^{1*}, Vikash Khetpal², Abid Ali Jamali², Abdul Manan Arain² and Akram Yousof²

Risk factors for chronic respiratory conditions among brick-kiln workers; Sindh, 2012

Type of work	Chronic bronchitis	Asthma
Baking	4 times greater risk	4 times greater risk
Molding	3 times greater risk	

Tob Control doi:10.1136/tc.2011.043190

Research paper

Indoor air pollution (PM_{2.5}) due to secondhand smoke in selected hospitality and entertainment venues of Karachi, Pakistan

Asaad Ahmed Nafees¹, Tahir Taj¹, Muhammad Masood Kadir¹, Zafar Fatmi¹, Kiyoung Lee², Nalini Sathiakumar³

This Article

- [Abstract](#)
- [Full text](#)
- [PDF](#)

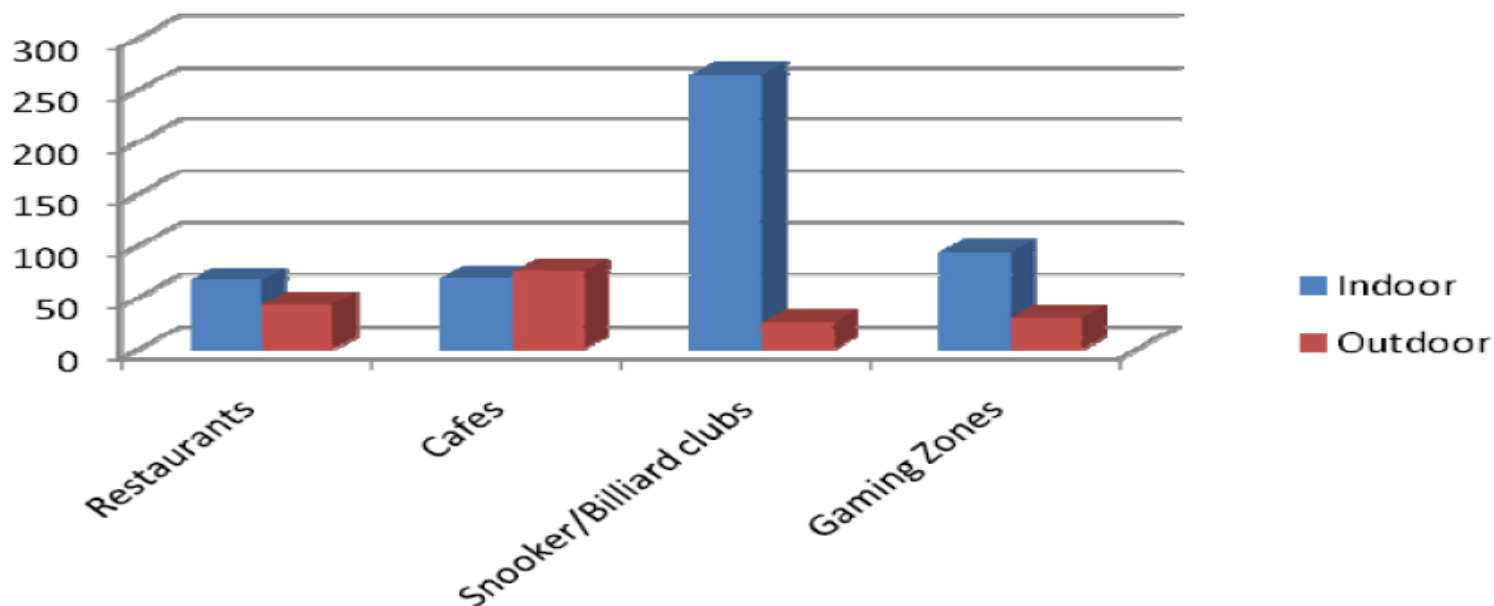
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Figure 1. Outdoor and indoor PM_{2.5} concentrations by type of venue (n=20), Karachi, Pakistan, 2009.



Workplace injuries





In rural areas, falls from trees are also common. In many parts of the world, many falls occur during house construction and repair. Photo: A. Falls are major problems in LDCs. In the cities,

Repetitive Stress Injuries

"FOR MORE INFORMATION ON
REPETITIVE STRESS INJURIES,
PRESS HERE REPEATEDLY."

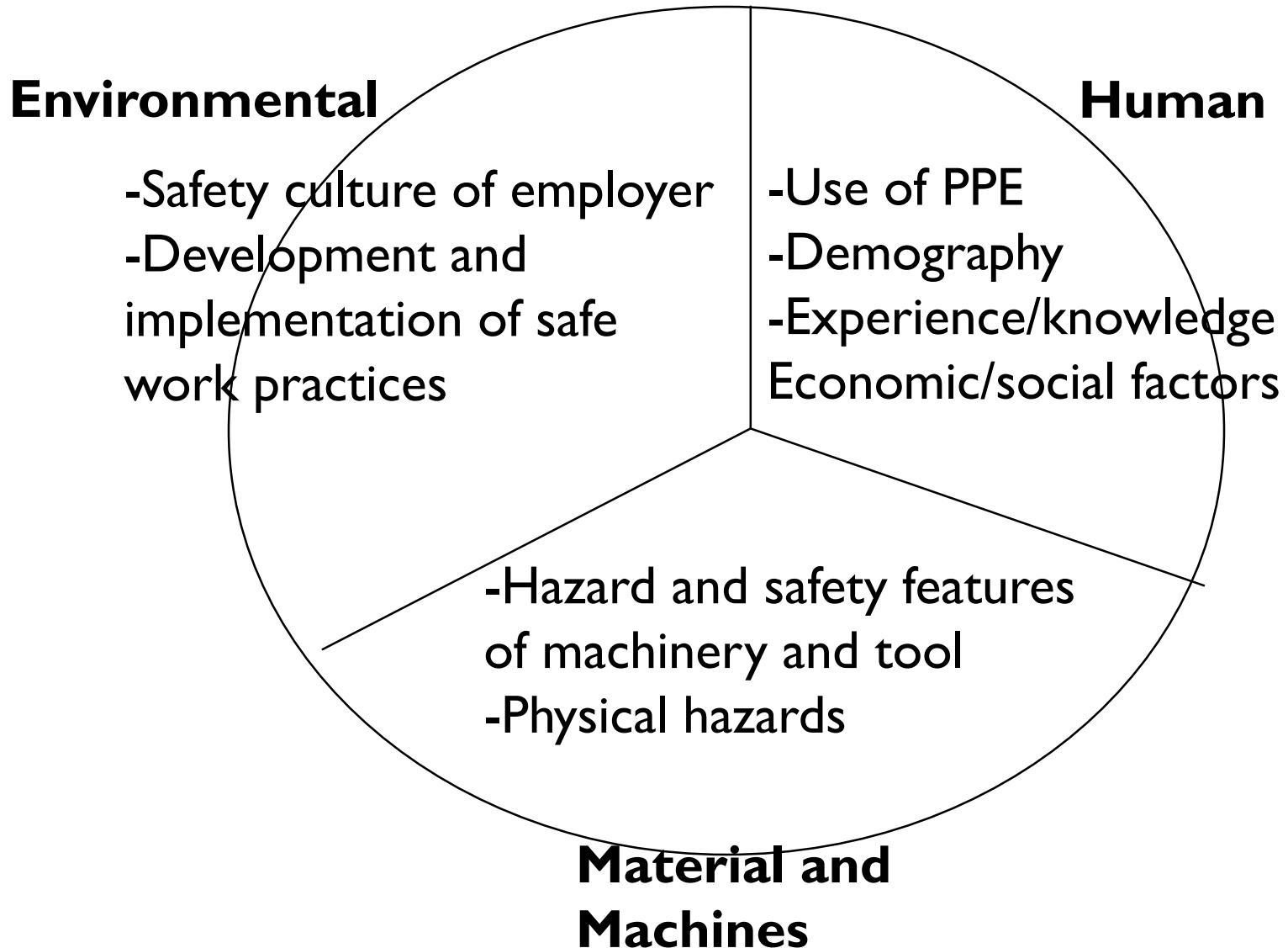


Pakistan Labor Force Survey (2014-15)

Percentage of employed persons >10 years by status of occupational injuries/diseases

- **4% overall (3.6% males, 0.4 females)**
- **41% self-employed, 40% employee and 18% Family work**
- **Agriculture (48%), construction (16%), manufacturing (16%), transport/storage (7%)**
- **Skilled agricultural (43%), crafts and related (20%), elementary occupation (20%)**
- **Consulted a doctor (59%), took the time off-work (21%), hospitalized (8%)**

Occupational Injury Prevention Model



Occupational Health Surveillance

- PESSI and SESSI
 - Pattern and trend of occupational diseases and condition of industrial exposures.
 - Better management of occupational health records for better management of occupational health related issues.
 - Capacity development within the government social security institutes for industries



Thank You!

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Acknowledgement: Asaad Nafees, Assistant
Professor CHS.