OCCUPATIONAL EXPOSURE: ETHIOPIA

Occupational exposure is a significant public health concern in Ethiopia, a predominantly agrarian nation in East Africa. Rapid industrialization and growth in construction, manufacturing, and mining sectors have introduced new challenges, including exposure to hazardous chemicals and pollutants with limited safety measures, inadequate structural capacity, and poor enforcement of existing occupational health legislation. Effective surveillance and monitoring of exposure are crucial to protect worker health and promote safer practices.

Burden in Ethiopia

- Evidence suggest exposure levels to dust in textile and factories cement and chemical exposure in farms and industries in Ethiopia often the surpass international permissible limits.
- Over 60% of Ethiopian informal workers face poor ventilation, lack of protective equipment, and prolonged exposure dust and to chemicals.
- In Ethiopia, young and lesseducated workers particularly at risk due to limited awareness, inadequate training, and enforcement of workplace safety regulations.

Major challenges



Major source of occupational exposure in Ethiopia



Construction:

Construction sites,

Roads, Bridges

Havards Pesticides, Animal-borne disease, Fertilizers, Prolonged sun exposure At risk: Formers Seasonal workers, Children migrant laborers

Miners, Quarry workers Hazards Pathogens, contaminated waste, Radiation At risk: Health professional, Nurses,

Hazards: Chemicals. Heavy Metals, Dyes, Persistent Organic Pollutants, Injuries, Poor ventilation At risk: Laborers.

Industry workers,



Manufacturing:

Tannery, Textile

- Hazarda Physical Injuries, Noise, Dust exposure, Air and water pollutants At the Construction workers, Craft Doctors, Laboratory vorkers, Engineers, technicians, Waste Laborers, Machine handlers
- · Poorly enforced labor laws and occupational health regulations
- Shortages or improperly used personal protective equipment (PPE) and monitoring technology.
- Poor ventilation and limited implementation of engineering controls in industries, mainly informal sectors
- Workers and employers often lack knowledge about safe practices, increasing their vulnerability
- · Limited financial resources to invest in safety measures in small and medium enterprises
- Lack of comprehensive occupational health data hinders effective policymaking and programs





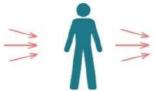






Route of exposure

- · Inhalation: Breathing in fumes, pesticides, dust and chemical
- · Ingestion: contaminated water
- · Skin Contact: Direct chemical absorption



Exposure related health effects

- Respiratory illness (byssinosis, silicosis, asthma) and cardiovascular illnesses
- Skin conditions, allergies
- Gastrointestinal issues
- · Long-term risks: Chronic diseases,
- Hospital acquired infections

Protective measure

- · Enforce occupational health laws and workplace safety standards.
- · Train workers on hazards, safe practices, and proper PPE use.
- · Support the transition from informal to formal employment for better worker protection.
- · Develop data collection systems on occupational health to guide policies and interventions.



In case of acute exposure



- · Move to fresh air if inhaled
- Remove contaminated clothing
- · Rinse affected areas with clean
- Seek medical help if symptoms persist!

Helplines & facilities



- Ambulance services by Red Cross: 939
- Ethiopian Public Health Institute (General emergency line): 8335
- Ministry of Labor and Social Affairs (MOLSA) primary responsibility to report occupational exposure

Behavioral and socio-economic exposure

- · Tobacco use, alcohol consumption, and poor diets are common behavioral exposures in certain occupational sectors, often driven by workplace stress, irregular schedules, limited access to healthy alternatives, and poor socioeconomic status, and.
- In Ethiopia, these risks are compounded by poverty, job instability, and the dominance of informal and subsistence farming, further intensifying occupational exposure to health hazards.



Developed by the BIONET Project in collaboration with partner universities

























