

# Cooperation between health and agricultural sectors for occupational health, safety and services

Intersectoral action with the agricultural sector for strengthening primary health care

WHO webinar, 29 November 2021



# Worldwide, 1 out of every 4 workers is employed in agriculture

**In 2020, about 874 million people were employed in agriculture, 87% of them in rural areas, 64% male, 36% female**



Tunisia, Credit: WHO / Diego Rodriguez

Source: ILO Labour statistics, Employment, <https://ilostat ilo.org/topics/employment/>

# The determinants of workers' health in agriculture

Agriculture is among the most hazardous and unfair sectors

## Most common occupational hazards

- Risks of accidents – falls, cuts, burns
- Heavy physical workload, awkward postures
- Hazardous chemicals – pesticides and fertilizers
- Thermal discomfort – heat and cold stress
- Solar UV radiation
- Biological hazards – bacteria, viruses, parasites, snake bites, venomous insects and plants

## Most common occupational diseases

- Pesticide poisonings – acute and chronic
- Infectious and parasitic diseases – schistosomiasis, dengue, malaria, zoonoses
- Musculo-skeletal disorders

## Social determinants of workers' health

- Precarious work –informality, piece work, seasonal contracts, labour migration
- Low levels of unionization
- Child labour, elderly
- Low income
- Lack of social protection
- Low level of education
- Insufficient access to affordable health services of decent quality.

# Occupational zoonotic diseases



Need for collaboration between occupational health and veterinary public health

## Exposure to biological hazards

### • Presence of animals

- Farms, animal trade plants, fairs, markets, exhibitions, racecourses
- Animal transportation
- Mating and seminal material production centres
- Kennels, catteries, animal housing
- Surgeries and clinics
- Diagnostic laboratories (collection and analysis of biological samples, organs, carcasses)

### • Presence of products of animal origin

- Slaughter (also presence of animals)
- Meat processing
- Milk collection and transportation
- Production of cheeses, dairy and egg products
- Collection. Transportation and processing of carcasses, waste of animal origin, by-products
- Maintenance of plants for animal waste depuration or recycling

## Principal zoonoses in animal husbandry

### Viruses and prions

Avian flu (in particular farming conditions)  
Bovine spongiform encephalopathy  
Contagious ecthyma  
Newcastle disease  
Rabies  
Rift Valley fever  
Tick-borne encephalitis

### Bacteria

Anthrax  
Bovine tuberculosis  
Brucellosis  
Chlamydiosis (avian strains)  
Helicobacter pylori infection  
Leptospirosis  
Tetanus  
Q fever  
Salmonellosis  
Streptococcus suis infection  
Swine erysipelas

### Fungi

Cryptococcosis  
Dermatomycoses  
Histoplasmosis

### Protozoa and metazoa

Cystic echinococcosis  
Cryptosporidiosis  
Larval ascaridosis  
Toxoplasmosis

Source: Batelli, G. (2008) Zoonoses as occupational diseases, *Veterinaria Italiana*, 44 (4), 601-609



# Occupational health services and primary health care in rural areas



## Advice for workplace improvements

- workplace visit for rapid risk assessment and advice
- health education of workers

## Management of occupational diseases and injuries

- early detection and referral
- notification to employment injury benefit scheme,
- treatment, counselling, surveillance

## Preventive medical examinations of high-risk workers

- regular check-ups
- biological monitoring (insecticides)
- work capacity assessment



Basic occupational health services in primary care units in Thailand. Courtesy by Bureau of Occupational and Environmental Health, Ministry of Public Health of Thailand

Source: World Health Organization. (2012). Connecting health and labour: bringing together occupational health and primary care to improve the health of working people: Global conference "Connecting health and labour: what role for occupational health in primary health care", the Hague, Netherlands, 29 November - 1 December 2011: executive summary. World Health Organization. <https://apps.who.int/iris/handle/10665/124659>

# Cooperation between health and agricultural sectors for workers' health and safety

OneHealth needs to apply also to workers' health

## Health

Occupational health and safety – occupational health services for farms and plantations, notification of occupational diseases and injuries, health surveillance of agricultural workers

Primary health care, community health – respond to the specific health needs of agricultural communities, first aid

Public health, epidemiology, infection prevention and control, environmental health – assessment of health risks from agricultural activities, disease control



## Agriculture

Veterinarian public health – prevention and control of zoonotic diseases

Plant health and plant protection – safe use of pesticides and fertilizers

Agricultural technologies – safe machinery and processes, mechanization

Agricultural extension services – advice for health and safety at work

Grades and standards in agriculture – to take into account health and safety of workers





Health Topics ▾

Countries ▾

Newsroom ▾

Emergencies ▾

Data ▾

About WHO ▾

Home / Health topics / Occupational health



Our work



Promoting healthy, safe and resilient workplaces for all



Protecting health and safety of health workers



Expanding health coverage to all workers



WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury