VECTOR BORNE DISEASES

Diseases caused by parasites,
viruses and bacteria that are transmitted by vectors



VECTORS

ARE SMALL ORGANISMS THAT CARRY SERIOUS DISEASES

COMMON VECTORS INCLUDE:



Mosquito



Tick



Sand Flies

WITH JUST ONE BITE THEY CAN TRANSMIT DISEASES SUCH AS:

- Dengue
- Yellow Fever
- Leishmaniasis
- Malaria
- Chikunguny
- CCHF (Crimean-Congo Hemorrhagic Fever)



DISEASES SPREAD BY VECTORS KILL A MILLION PEOPLE EVERY YEAR



Major Vector-Borne Diseases in Pakistan

DENGUE



Aedes Mosquito

MALARIA



Anopheles Mosquito

CHIKUNGUNY



Aedes Mosquitoe

LEISHMANIASIS



Sand flies

CCHF



Tick

Future Threats

J. ENCEPHALITIS



Culex Mosquito

FILARIASIS



Andese Mosquito

WEST NILE VIRUS



Culex Mosquito

YELLOW FEVER



Aedes mosquitoe

ZIKA VIRUS



Aedes Mosquito

PREVENTIVE MEASURES





Natural Remedies

Use Neem leaves or herbal oils to repel insects.



Use Fans

Use fans to deter mosquitoes.



Hygiene

Bath , wash hands, keep living areas clean.



Bed Nets

Sleep under bed nets to avoid mosquito bites.



Protective Clothing

Wear long clothes to prevent bites, especially post-flood.



Avoid Stagnant Water

Keep surroundings free of stagnant water to prevent mosquito breeding.



Stay Indoor

Stay indoors during peak mosquito times (morning and evening).



Smoke Treatment

Use smoke for elimination of breeding site elimination in living spaces.



Maintain the Rooftop

Clean out your roof and sun-shades regularly so rainwater flows freely and doesn't pool.



Keep Food Covered

Seal food and keep containers covered to prevent disease spread.



Apply Repellent

Use effective mosquito repellents on exposed skin.



Clear Drainage

Clean gutters and drains to prevent water logging.



Stay away from vegetation

Stay away from dense plants to avoid mosquitoes.



Use Screens

Install mosquito screens/ net on all windows & doors.



Educate Children

Share prevention methods with your Children

SYMPTOMS OF VECTOR BORNE DISEASES



DENGUE

- HIGH FEVER
- SEVERE HEADACHE
- PAIN BEHIND EYES
- JOINT & MUSCLE PAIN
- RASH

MALARIA

- CYCLICAL FEVER & CHILLS
- SEVERE SWEATING
- HEADACHE
- NAUSEA & VOMITING
- FATIGUE

LEISHMANIASIS

- SKIN SORES or ULCERS
- SWOLLEN LYMPH NODES
- FEVER
- WEIGHT LOSS
- ENLARGED SPLEEN/LIVER (in visceral)

CCHF

- FEVER
- SEVERE BACK & JOINT PAIN
- HEADACHE
- BRUISING & NOSEBLEEDS

CHIKUNGUNYA

- FEVER
- SUDDEN FEVER
- SEVERE JOINT PAIN (especially in hands/feet)
- JOINT SWELLING
- HEADACHE
- RASH

EARLY RECOGNITION IS VITAL - SEEK MEDICAL CARE

NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA)

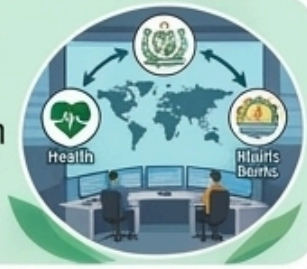
VECTOR DISEASE PREVENTION GUIDELINES FOR DEPARTMENTS

Healthy Departments | Healthy Communities | A Safer Tomorrow

Stop Vectors Stop Diseases

1 Inter-Sectoral Coordination for Vector Surveillance

- Establish task forces between health, municipal, and public works. Share data and coordinate surveillance.



2 Community-Based Larval Source Reduction

- Involve locals.
- Find and eliminate mosquito breeding spots.



3 Health Facility Strengthening

- Improve treatment and diagnosis
- Establish Vector Borne Disease Control Centers



4 Urban Planning & Solid Waste Management

- Enforce proper solid waste disposal.
- Minimize urban vector habitats.



5 School-Based Awareness

- Vaccinate students against vector-borne diseases at schools.



6 Irrigation & Drainage Management

- Maintain and clear irrigation canals.
- Prevent water stagnation in fields.



7 Standardized Insecticide Monitoring

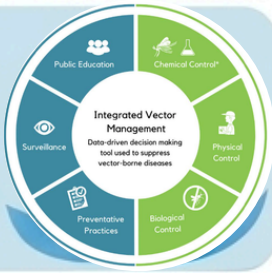
- Conduct standardized insecticide susceptibility and bio-assay tests regularly.



8 Combined Control

Integrated Vector Management (IVM)

- Use coordinated plans: rotate safe sprays and use mosquito predators.



9 Free Distribution of Bed Nets

- Distribute treated bed nets.
- Target vulnerable populations.



10 Mapping and Risk Assessment

- Identify high-risk areas.
- Map factors of disease spread.



11 Public Awareness Campaigns

Educate the public about vector-borne diseases and management.



12 Environmental & Health Legislation Compliance

- Enforce public health laws.
- Penalize non-compliance.
- Conduct departmental audits.



Prevent Vectors Protect Health

CLEAN ENVIRONMENT | HEALTHY COMMUNITIES | DISEASE FREE FUTURE

Source: MoNHSRC & WHO