



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:



Mosquitos



Tick



Sand Flies

WITH JUST ONE BITE THEY CAN TRANSMIT DISEASES SUCH AS:



Dengue



Yellow Fever



Leishmaniasis



Malaria



Chikunguny



CCHF

(Crimean-Congo Hemorrhagic Fever)

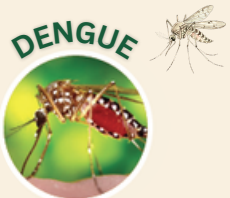


DISEASES SPREAD BY VECTORS KILL A MILLION PEOPLE EVERY YEAR



Major Vector-Borne Diseases in Pakistan

DENGUE



Andese 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 mosquito

ZIKA VIRUS



Aedes Mosquito



PREVENTIVE MEASURES



Natural Remedies

Use Neem leaves or herbal oils to repel insects.



Use Fans

Use solar fans or hand fans to deter mosquitoes.



Hygiene

Bath, wash hands, keep living areas clean.



Bed Nets

Sleep under treated nets to avoid mosquito bites.



Protective Clothing

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



Avoid Stagnant Water

Steer clear of standing water to stop 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 on all windows and doors.



Educate Children

Share prevention methods with your Children



SYMPTOMS OF VECTOR BORNE DISEASES



DENGUE



**SUDDEN
HIGH FEVER**



**SEVERE
HEADACHE**



**PAIN BEHIND
EYES**



**JOINT &
MUSCLE PAIN**



RASH



MALARIA



**CYCLICAL
FEVER & CHILLS**



**SEVERE
SWEATING**



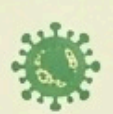
HEADACHE



**NAUSEA &
VOMITING**



FATIGUE



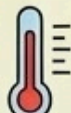
LEISHMANIASIS



**SKIN SORES
or ULCERS**



**SWOLLEN
LYMPH NODES**



FEVER



WEIGHT LOSS



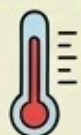
**ENLARGED
SPLEEN/LIVER
(in visceral)**



CCHF

SUDDEN FEVER & CHILLS

**SUDDEN
& CHILLS**



**SEVERE BACK
& JOINT PAIN**



HEADACHE



**BRUISING &
NOSEBLEEDS
(late stage)**



CHIKUNGUNYA

SUDDEN FEVER

**SUDDEN
FEVER**



**SEVERE JOINT PAIN
(especially in hands/feet)**



JOINT SWELLING



HEADACHE



RASH



EARLY RECOGNITION IS VITAL - SEEK MEDICAL CARE



VECTOR DISEASE PREVENTION GUIDELINES FOR DEPARTMENTS



Stop Vectors
Stop Diseases

Healthy Departments | Healthy Communities | A Safer Tomorrow

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 Immunization

- 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 (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