IAPSM - PUBLIC HEALTH INFOGRAPHICS (IPHI)

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THEME

Beat the Bite: National Vectorborne Disease Control Program

CONTACT US

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Infographics Iapsm

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Channel: IAPSM Public Health Infographic

MORE INFO

IAPSM - PUBLIC HEALTH INFOGRAPHICS (IPHI)

INDEX

BEAT THE BITE

National Centre for Vector Borne Diseases Control

VECTOR BORNE DISEASES: RECOGNITION TO RESPONSE

Identify. Report. Respond

JAPANESE ENCEPHALITIS
High grade Fever with Confusion /Drowsiness

DENGUE
Fever with Rash, Pain behind eyes, Bleeding gums

CHIKUNGUNYA
Fever with Rash Joint Pain

MALARIA
Fever with Chills Headache, malaise

KALA-AZAR
Prolonged Fever, Darkening of Skin

FILARIASIS
Fever, Swelling of Lower limbs/Genitals

Spot the Signs. Be the Shield

EMERGENCY RESPONSE : Fogging

Indoor Residual Spraying

LLIN

Mosquito Repellents

Personal Protection

Mechanical Barriers

Biological Control

R21/Matrix-M Vaccine

MDA - Filariasis
Mass Drug Administration
Ivermectin + DEC + Albendazole

ASHA

Source Reduction

Scrub & Dry

SUNDAY DRY DAY

ENVIRONMENTAL MEASURES

DANGER SIGNS
Visit Nearby AAM or PHC within 24 hours

FREE DIAGNOSTICS
RDTs, Confirmatory Test

IHIP- Report fever clusters

DIAL
108 - Ambulance
104 - Fever Advice

SCAN TO FIND YOUR NEAREST PHC or AAM

Early Detection + Reporting + Integrated Control = Vector Free India

TEAM - IPHI

Chairperson - Dr.Annarao Kulkarni
Co-Chairperson - Dr. Krupal Joshi
Chief Coordinator - Dr. Krishna Jasani
Assistant Coordinator -Dr. Kushant Bhatt, Dr. Nanda Kumar, Dr. Nidhi Patel

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SOURCE: https://ncvbdc.mohfw.gov.in/

BEAT THE BITE!

NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME

COMMON SYMPTOMS (ALL MOSQUITO DISEASES)

- Fever (sudden onset)
- Body aches / joint pain
- Weakness / fatigue
- Headache
- Body aches / joint pain
- Nausea / vomiting

If fever persists → **SEEK MEDICAL CARE**

DISEASE - SPECIFIC SIGNS & SYMPTOMS

DENGUE

- High fever
- severe headache
- Pain behind eyes
- Muscle & joint pain
- Skin rash

⚠ Bleeding(gums,nose)
⚠ Low platelets

MALARIA

- Fever with chills & rigor
- Sweating after fever
- Recurrent fever pattern
- Anemia
- Enalrged spleen

⚠ Severe cases: Confusion, coma

CHIKUNGUNYA

- Sudden high fever
- severe joint pain
- Joint swelling
- Rash
- Pain may persist for months

⚠ Severe cases: Confusion, coma

⚠ DANGER SIGNS (EMERGENCY)

- Bleeding
- Persistent Vomiting
- Convulsions
- Unconsciousness

IMMEDIATE HOSPITAL REFERRAL

JAPANESE ENCEPHALITIS

- High fever
- Headache
- Vomiting
- Rash

⚠ Altered sensorium
⚠ Seizures
⚠ Can lead to coma

PROTECT YOURSELF & YOUR COMMUNITY !

CALL TO ACTION — Your one step can break the mosquito life cycle

For help: Contact your nearest health facility

Team- IPHI
Chairperson -Dr.Annarao Kulkarni
Co chairperson -Dr.Krupal Joshi
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For more information visit: https://iapsm.org

Source: 1.National Vector Borne Disease Control Programme. Operational Guidelines for Vector Borne Disease Control. New Delhi: Directorate General of Health Services, Ministry of Health & Family Welfare,Government of India.
2.Park K. Park's Textbook of Preventive and Social Medicine. 28th ed. Jabalpur: Banarsidas Bhanot; 2025.

BEAT THE BITE:
NATIONAL VECTORBORNE DISEASE CONTROL PROGRAMME

SEARCH,DESTROY,PREVENT

OBSERVE WEEKLY DRY DAY

MOSQUITO OVERVIEW:

AEDES

DENGUE & CHIKUNGUNYA

ANOPHELES

MALARIA

CULEX

LYMPHATIC FILARIASIS

SEARCH & DESTROY:

1. — COVER OVERHEAD TANKS : ENSURE ALL WATER STORAGE HAS A TIGHT FITTING LID
2. — DRY INTERIOR SOURCES : EMPTY FLOWER VASES AND DESERT COOLERS WEEKLY AND MAINTAIN.
3. — CLEAR THE COMPOUND: REMOVE OLD TIRES,COCONUT SHELLS,AND TIN CAN WHERE RAINWATER COLLECTS.
4. — SHEILD THE WINDOWS : INSTALL INSECTICIDE- TREATED MESH OR SCREENS ON ALL WINDOW AND DOORS.

EMPTY,SCRUB,DRY :

1. 

EMPTY - TIP OUT STAGNANT WATER FROM COOLERS AND VASES.

2. 

SCRUB - SCRUB THE EDGES TO REMOVE HIDDEN MOSQUITO EGGS.

3. 

DRY - LET CONTAINERS TO BE DRY COMPLETELY BEFORE REFILLING.

WEEKLY DRY DAY CALENDAR

NVBDCP ACTIONS

1. 

LET US SPRAY

ALLOW HEALTH WORKERS TO CONDUCT INDOOR RESIDUAL SPRAYING

2. 

BIO-CONTROL(LARVIVOROUS FISH)

INTRODUCE GAMBUSIA /GUPPY FISH IN PERMENENT WATER BODIES.

3. 

FREE DIAGNOSIS

VISIT UHTC/PHC FOR FREE MALARIA & DENGUE TESTING.

SMART REPORTING

MEDICAL INSTITIUTE / CHC USE MOBILE APP/QR CODE SO PEOPLE USE FOE REPORTING OF MOSQUITO BREEDING.

&

PREVENTION :

BED NET : SLEEP UNDER LONG LASTING INSECTICIDIAL NETS

CLOTHS : WEAR FULL SLEEVE LIGHT COLORED CLOTHES.

WINDOW: USE INSECTICIDE-TREATED MESH ON ALL WINDOWS.

REPELLENT : APPLY MOSQUITO REPELLENT CREAM TO EXPOSED SKIN

SUMMARY- OBSERVE "WEEKLY DRY DAY" BY EMPTYING, SCRUBBING, AND DRYING CONTAINERS TO BREAK THE MOSQUITO CYCLE. VISIT YOUR NEAREST UCHC/PHC FOR FREE TESTING AND SUPPORT NVBDCP ACTIONS FOR 100% PROTECTION AND BEAT THE BITE,..

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DR. NANDA KUMAR
DR. NIDHI PATEL

BEAT THE BITE

NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME

7 DAYS • ONE HOME • ZERO MOSQUITOES

BREAK THE BREEDING CYCLE BEFORE IT HARMS YOUR HEALTH

WHY YOUR HOME & SURROUNDINGS MATTERS?

~80% AEDES BREEDING OCCURS IN HOUSEHOLD CONTAINERS

A MOSQUITO CAN DEVELOP FROM EGG TO ADULT IN ~7–10 DAYS

MOST BREEDING OCCURS IN AND AROUND HOMES

WEEKLY SOURCE REDUCTION REDUCES MOSQUITO DENSITY

UNSAFE HOUSE

UNCOVERED WATER CONTAINERS

DISCARDED TYRES

DISCARDED POTS

UNCOVERED WATER TANKS

GARBAGE AROUND HOUSE

SAFE HOUSE

COVERED WATER CONTAINERS

CLEAN YARD

WATER CONTAINERS DRIED ONCE WEEKLY

WEEKLY CHECKING

WATER COLLECTS

NOT CLEANED WEEKLY

BREEDING STARTS

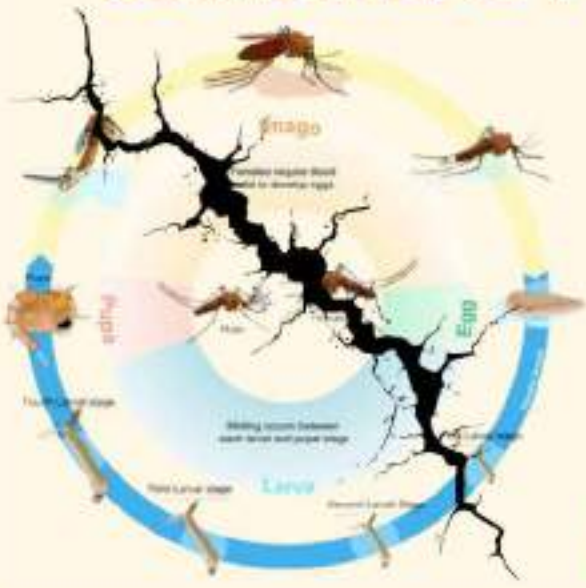
NO STAGNANT WATER

WEEKLY DRY DAY

NO BREEDING

SAME HOME BUT DIFFERENT OUTCOMES

SIGNIFICANCE OF 7 DAYS IN MOSQUITO LIFE CYCLE



MOSQUITO COMPLETES LIFE CYCLE IN ~7 DAYS

WATER LEFT FOR MORE THAN 7 DAYS → BREEDING OCCURS

ONE CONTAINER CAN PRODUCE 100S OF MOSQUITOES IN A WEEK

WEEKLY CLEANING INTERRUPTS THE BREEDING CYCLE COMPLETELY

BREAK THE 7-DAY CYCLE → STOP DISEASE BEFORE IT STARTS

SMART WAYS TO STOP BREEDING

CLEAN COOLERS, POTS & TRAYS EVERY 7 DAYS

REPORT MOSQUITO BREEDING SITES NEARBY

EMPTY & SCRUB ALL CONTAINERS WEEKLY

USE MOSQUITO NETS & REPELLENTS

COVER ALL WATER STORAGE TANKS TIGHTLY

INTRODUCE LARVIVOROUS FISH IN WATER BODIES

DISPOSE TYRES & UNUSED CONTAINERS

COMMUNITY PARTICIPATION IN WEEKLY DRY DAY CAMPAIGNS

1 WEEK OF NEGLIGENCE = MOSQUITO MULTIPLICATION

OBSERVE DRY DAY ONCE A WEEK

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SCAN TO ACCESS NVBDCP BCC/IEC RESOURCE MATERIAL

SOURCES

- WORLD HEALTH ORGANIZATION (WHO). DENGUE & VECTOR-BORNE DISEASES FACT SHEETS [HTTPS://WWW.WHO.INT/HEALTH-TOPICS/DENGUE-AND-SEVERE-DENGUE][HTTPS://WWW.WHO.INT/HEALTH-TOPICS/DENGUE-AND-SEVERE-DENGUE]
- NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME (NVBDCP), MOHFW, INDIA [HTTPS://NVBDCP.GOV.IN][HTTPS://NVBDCP.GOV.IN]
- NATIONAL CENTRE FOR VECTOR BORNE DISEASES CONTROL (NCVBDC), INDIA [HTTPS://NCVBDC.MOHFW.GOV.IN][HTTPS://NCVBDC.MOHFW.GOV.IN]
- WORLD MALARIA REPORT 2023, WHO [HTTPS://WWW.WHO.INT/TEAMS/GLOBAL-MALARIA-PROGRAMME/REPORTS/WORLD-MALARIA-REPORT-2023][HTTPS://WWW.WHO.INT/TEAMS/GLOBAL-MALARIA-PROGRAMME/REPORTS/WORLD-MALARIA-REPORT-2023]
- INTEGRATED DISEASE SURVEILLANCE PROGRAMME (IDSP), INDIA [HTTPS://IDSP.NIC.IN][HTTPS://IDSP.MC.IN]

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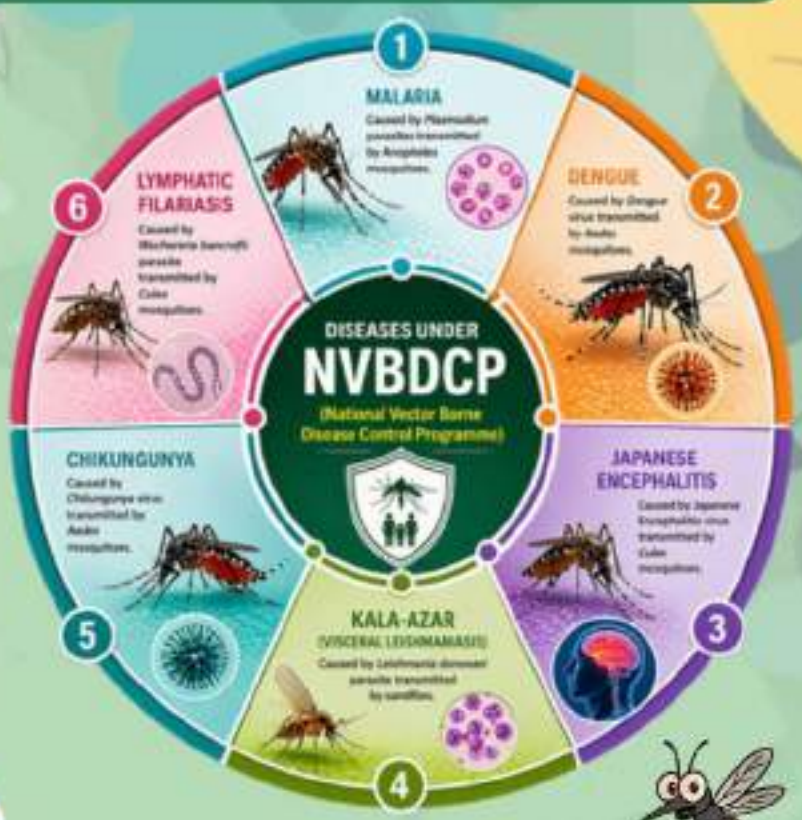
"BEAT THE BITE"

The All-in-One Strategy for a Vector-Free Future

The National Vector Borne Disease Control Programme (NVBDCP) is India's flagship public health initiative aimed at the prevention and control of major vector-borne diseases. It integrates surveillance, vector control, early diagnosis, and timely treatment to reduce disease burden and prevent outbreaks.



Targets under NVBDCP

DISEASE	TARGETS
MALARIA	Elimination by 2030 Annual Parasite Incidence (API) < 1 1 per 1000 population Zero indigenous cases in elimination phase districts
LYMPHATIC FILARIASIS (LF)	Elimination as a public health problem Microfilaria rate < 1% High coverage of Mass Drug Administration (MDA >65–85%) Morbidity management and disability prevention (MMDP)
KALA-AZAR (Visceral Leishmaniasis)	Elimination target: < 1 case per 10,000 population at block level Zero deaths due to Kala-azar Early diagnosis and complete treatment
JAPANESE ENCEPHALITIS (JE)	Reduction in case fatality rate (CFR) Reduction in outbreaks through vaccination & vector control Strengthening surveillance
DENGUE & CHIKUNGUNYA	Reduction in morbidity and mortality Case fatality rate (CFR) < 1% (Dengue) Early outbreak detection and rapid response Source reduction (Aedes control)

Integrated Vector Management

ENVIRONMENTAL MANAGEMENT

- Environmental modification (drainage, filling, leveling)
- Source reduction (removal of containers, covering water storage)
- Solid waste management
- Water management (proper supply and disposal)
- Housing improvement (screening, improved ventilation)

BIOLOGICAL CONTROL

- Larvivorous fish (e.g., Gambusia fish, Guppy)
- Biological larvicides (e.g., Bti)
- Predators (copepods, larvivorous insects)
- Pathogens (fungi, bacteria, viruses)
- Wolbachia-based vector control (emerging strategy)

CHEMICAL CONTROL

- Larvicides
- Adulticides
- Insecticide-treated materials (ITNs, IRS, space sprays)
- Use judiciously and responsibly
- Resistance monitoring and insecticide rotation
- Integrated use with non-chemical methods

PERSONAL PROTECTION

- Long-lasting insecticidal nets (LLINs)
- Repellents (personal and space)
- Protective clothing (full sleeves, light colours)
- Window/door screens
- Use of coils, mats with caution

SOCIAL MOBILIZATION & HEALTH EDUCATION

- IEC/BCC activities (Information, Education, Communication/Behaviour Change Communication)
- Community participation and ownership
- Intersectoral collaboration (health, urban bodies, water, environment, etc.)
- Legislation and policy support
- Capacity building and training

MMIS: Monthly Malaria Information System

It is a web-based surveillance and reporting system under NVBDCP used for: Collecting real-time malaria data, Monitoring cases, deaths, and outbreaks & Tracking program performance

Source: National Vector Borne Disease Control Programme (NVBDCP), Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India

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BEAT THE BITE:

NATIONAL VECTORBORNE DISEASE CONTROL PROGRAM

" "SHIELD OF INTEGRATED DEFENSE""

Vector	Disease(s) Transmitted	Biting Habit
Aedes aegypti	Dengue, Chikungunya, Zika	Day-biter
Anopheles	Malaria	Night-biter
Culex	Filariasis, Japanese Encephalitis	Night-biter
Mansonia	Filariasis (Brugian)	Night-biter
Sandfly	Kala-azar (Leishmaniasis)	Night-biter
Hard Ticks	Zoonotic Fevers (e.g., KFD)	Diurnal

"Vector-borne diseases cause >1 million deaths annually worldwide."

UNPROTECTED

- Stagnant water
- Sick individual
- Poor sanitation

PROTECTED

- Clean surroundings
- Community action
- Healthy population

FOUNDATION PILLARS

Program Command Center

- Data analysis
- Decision-making

Early Warning System

- Surveillance
- Outbreak alerts

SOURCES

- https://nvbdcp.mohfw.gov.in/
- https://mohfw.gov.in/
- https://nhm.gov.in/
- https://vcrc.icmr.org.in/

Training (ASHA Workers)

- Grassroot implementation
- Awareness generation

Resilience Zone

- Final outcome of interventions

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BEAT THE BITE

NationalVector-Borne Disease Control Programme

Vector-borne diseases are illnesses caused bypathogens (viruses,bacteria, parasites) that are transmitted to humans through **vectors** like mosquitoes, ticks, or flies.

Vector (carrier) → Bites human → Transfers infection

- **Malaria** (Anopheles mosquito)
- **Dengue** (Aedes mosquito)
- **Chikungunya** (Aedes mosquito)
- **Japanese Encephalitis (JE)**
- **Kala-azar (Leishmaniasis)** – sandfly
- **Lymphatic Filariasis**

- Millions affected annually
- Peak transmission: **Monsoon (June–September)**
- Major diseases: **Malaria, Dengue, Chikungunya, JE**
- Urban + rural both at risk

"Preventable diseases, yet persistent burden"

ONE BITE CAN TRIGGER A CHAIN OF DISEASE

Diseases spread by vectors kill a millionpeople every year and more thanhalf of the world's population is at risk.

Prevention Begins at Home. Protect your Family. Protect your Community.

INTEGRATED VECTOR MANAGEMENT (IVM)

"A comprehensive, evidence-based approach to control vectors using multiple coordinated strategies."

Tackling Vector-Borne Diseases by Individuals and Communities

Tackling Vector-Borne Diseases by the National Programme

Created by:- Dr (Lt Col) Sakshi Sharma
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Source of information- *Home:: National Center forVectorBorne Diseases Control (NCVBDC)*

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Chairperson
Dr Annarao Kulkarni
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YOUR HOME: THE MOSQUITO FACTORY

"Breaking the breeding cycle to prevent vector-borne diseases"

Hidden Breeding Sites in Your Home

Plant Pot

Bucket

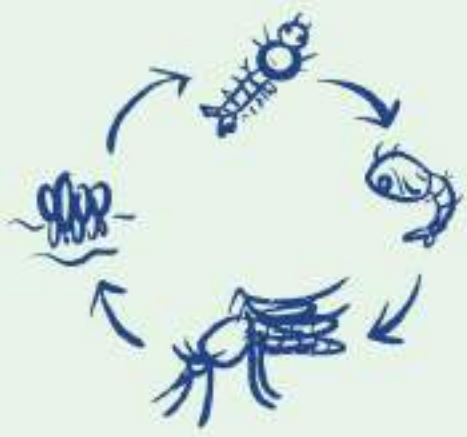
Cooler

Discarded Tyre

"Even a Bottle Cap is Enough!"

"7 Days. One Container. Hundreds of Mosquitoes."

- Aedes mosquito breeds in clean stagnant water
- Life cycle completes in ~7 days
- One container can produce hundreds of mosquitoes



Same Home. Different Outcomes.

Mosquito Factory

- Open containers
- Stagnant water
- Garbage accumulation
- No weekly cleaning

o

Safe Home

- Covered water containers
- Weekly dry day
- Clean surroundings
- No stagnant water

Break the Cycle : Weekly Actions

- Empty & scrub containers
- Cover all water
- Throw away tyres & junk
- Keep Sunday dry
- Use nets/repellents

NO WATER. NO MOSQUITOES. NO DISEASE.

"SUNDAY = DRY DAY"

Team IPHI:
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Chief coordinator: Dr. Krishna Jasani
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Sources:

- World Health Organization (WHO): https://www.who.int
- National Vector Borne Disease Control Programme (NVBDCP), India: https://nvbdcp.gov.in

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BEAT THE BITE: NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAM

BACKGROUND:

India carries major disease burden from vector borne diseases with filariasis burden 40% globally and malaria burden 3%. whereas Chikungunya and japanese encephalitis occupies third position in global burden.

SIGNS AND SYMPTOMS:

Fever with chills, joint pain, headache, Rashes , Fatigue, nausea

COMMON BREEDING SITES:

- Stagnated water
- Neglected pools
- Waste tyres
- Clogged gutters
- Open water containers

PREVENTIVE AND CONTROL MEASURES:

Integrated Vector Management

- Outdoor Fogging
- Indoor residual sprays
- Insecticide Treated Nets(ITNs)
- Mosquito repellants
- Using Fully covered clothes

NVBDCP - GOALS AND STRATEGY:

- Malaria elimination by 2030
- Lymphatic Filariasis by 2027
- Reducing morbidity & mortality of Dengue, Japanese encephalitis & Chikungunya.
- Early diagnosis and treatment
- Active & Passive surveillance
- Integrated Vector management
- Public awareness and capacity building

"Together with public and health care team efforts, we can end the transmission of vector borne diseases"

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BEAT THE BITE

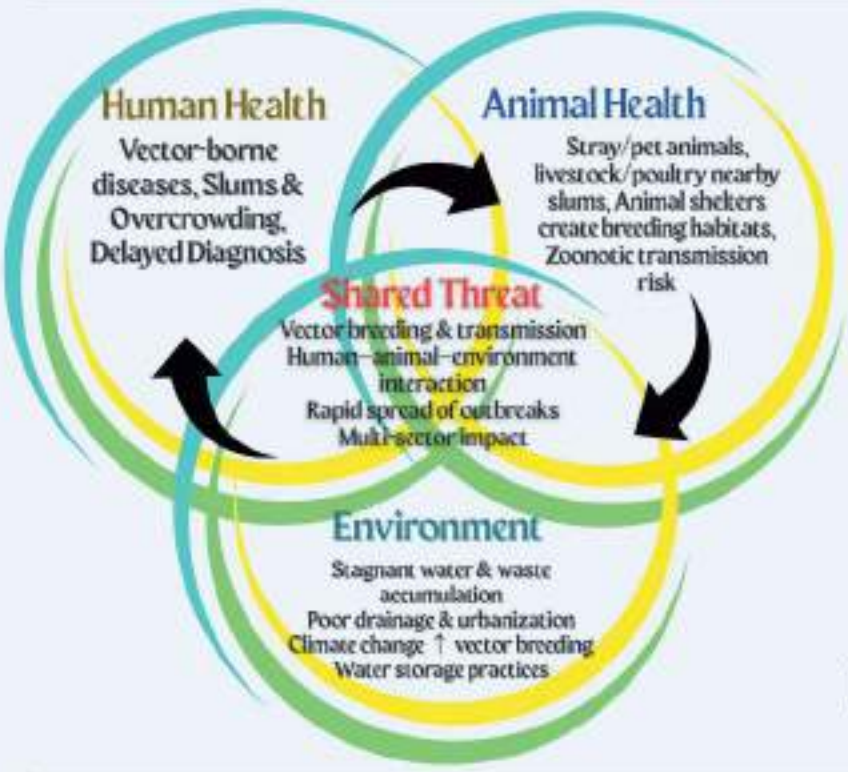
NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME

ONE HEALTH & IVM SHIELD APPROACH

PROTECTING HUMANS • ANIMALS • ENVIRONMENT

WHY INTEGRATED & ONE HEALTH APPROACH MATTERS?

- >17% OF INFECTIOUS DISEASES ARE VECTOR-BORNE GLOBALLY
- VECTOR-BORNE DISEASES ACCOUNT FOR >7,00,000 DEATHS ANNUALLY
- IVM REDUCES VECTOR DENSITY THROUGH COMBINED ENVIRONMENTAL, BIOLOGICAL & CHEMICAL METHODS
- HUMAN–ANIMAL–ENVIRONMENT INTERACTION DRIVES DISEASE TRANSMISSION



ONE SYSTEM. MULTIPLE RISKS!

CONTROLLING ONE SECTOR ALONE IS NOT ENOUGH AS VECTOR-BORNE DISEASES SPREAD ACROSS INTERCONNECTED SYSTEMS.

INTEGRATED VECTOR MANAGEMENT

1 EVIDENCE BASED DECISION MAKING
LOCAL DATA GUIDES THE INTERVENTIONS

2 THE IVM DECISION-MAKING CYCLE
ASSESS → PLAN → IMPLEMENT → MONITOR & REPEAT

3 MULTI-DISEASE APPROACH
MALARIA, LYMPHATIC FILARIASIS, KALA-AZAR, DENGUE, CHIKUNGUNYA, JAPANESE ENCEPHALITIS, AND ZIKA

4 STAKEHOLDER COLLABORATION
SUCCESS IS BUILT ON CLOSE MULTI-SECTOR COLLABORATION TO PREPARE AND IMPLEMENT VECTOR CONTROL PLAN

5 MULTI-METHOD INTERVENTION APPROACH
ENVIRONMENTAL
BIOLOGICAL
&
CHEMICAL
METHODS OF VECTOR CONTROL

EVIDENCE-BASED • MULTI-METHOD • MULTI-SECTOR APPROACH

ACT TO PROTECT EVERY SYSTEM

PROTECT PEOPLE, MANAGE ENVIRONMENTS, AND CONTROL VECTORS.

HUMAN	COMMUNITY	SYSTEM
REDUCE EXPOSURE	STOP BREEDING	CONTROL TRANSMISSION
USE NETS	REMOVE WATER	EARLY DIAGNOSIS
APPLY REPELLENT	CLEAN SURROUNDINGS	TIMELY TREATMENT
WEAR PROTECTION	SOURCE CONTROL	ACTIVE SURVEILLANCE
AVOID BITES	WEEKLY DRY DAY	RAPID RESPONSE

STRONGER & COORDINATED SYSTEMS LEAD TO SAFER COMMUNITIES.

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SCAN TO ACCESS NCVBDC IVM INDIA MANUAL 2022

SOURCES

- WORLD HEALTH ORGANIZATION (WHO). VECTOR-BORNE DISEASES: FACTSHEET. (HTTPS://WWW.WHO.INT/NEWS-ROOM/FACT-SHEETS/DETAIL/VECTOR-BORNE-DISEASES)
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- NVBDCP OPERATIONAL GUIDELINES & IEC MATERIALS, MOHFW, GOVERNMENT OF INDIA

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OUTSMART THE OUTBREAK

Shattering myths, Saving lives

Myths

- ✗ Mosquitoes only breed in dirty drains and gutters.
- ✗ If I empty the water, the breeding is stopped.
- ✗ Mosquitoes only bite at night.

Facts

- ✓ Aedes (Dengue/Chiknyungya) prefers fresh, clean, stagnant water
- ✓ Eggs can survive drying! Emptying isn't enough.
- ✓ Aedes is a Day-Biter, most active 2 hours after sunrise and before sunset.

Unsealed Tanks: Even a tiny gap allows mosquitoes to enter and lay eggs.

Blocked Gutters: Debris traps rainwater—the perfect hidden nursery.

AC Drip Pipes: Constant moisture creates a 24/7 breeding ground.

Vases: Aedes loves clean, stagnant water inside your home.

Every Sunday is a dry day

DETECT

Find the "invisible" 1 tsp of water.

DESTROY

Don't just pour the water, scrub the container

DEFEND

Beyond nets— wear full sleeves & use repellents.

Do you know?

Ades egg can survive drying for upto 1 year and hatch immediatly when they touch water again.

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https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue
https://ncvbdc.mohfw.gov.in/index1.php?lang=1&level=1&sublinkid=5899&lid=3686

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Dr. Nidhi Patel

Surveillance Is The Silent Shield: From Detection To Protection

Diseases

Malaria, dengue fever, chikungunya, lymphatic filariasis, Japanese encephalitis, and kala-azar are some diseases that spread from vector organisms.

1

Vectors

Mosquitoes, sandflies, and ticks are vector organisms that spread diseases.

2

Program

In India, there is a specific institutional response in the form of NVBDCP (National Vector Borne Disease Control Programme).

3

Disease	Malaria	Dengue	Chikungunya	Lymphatic Filariasis	Kala-azar (VL)	Japanese Encephalitis (JE)
Estimated Annual Burden (India)	~1.5–2 lakh cases (declining trend)	~2–2.5 lakh cases (increasing trend)	~50,000–1 lakh cases	~23 million at risk	1,000 cases (near elimination)	~1,000–1,500 cases

INNOVATIONS UNDER NVBDCP
(National Vector Borne Disease Control Programme)

1. INTRODUCTION OF RDTs (Rapid Diagnostic Tests)

FAST, ACCURATE MALARIA DIAGNOSIS

- On-site testing: Results in ~15-20 minutes
- Enables immediate treatment, reducing transmission
- Effective for *Plasmodium falciparum* and other species
- Reduces dependence on microscopy in resource-poor areas

2. LLINs (Long-Lasting Insecticide-treated Nets)

PERSONAL PROTECTION & VECTOR CONTROL

- Continuous distribution to high-risk populations
- Mosquitoes are killed or repelled on contact
- Protection lasts for 3+ years and multiple washes
- Key strategy for malaria and JE reduction

3. JE VACCINATION under UIP (Universal Immunization Programme)

IMMUNIZATION AGAINST JAPANESE ENCEPHALITIS

- Included is routine immunization for children
- Administered in endemic districts and high-burden states
- Significantly reduces JE cases and related neurological issues
- Two doses (usually 9 months and 16-24 months)

4. DIGITAL MALARIA SURVEILLANCE SYSTEM

REAL-TIME DATA FOR PRECISION RESPONSE

- Real-time data collection from all levels (village to national)
- Early warning and prompt outbreak response
- Mapping of disease 'hotspots' and vector distribution
- Evidence-based planning and resource allocation

Identify potential disease threats → Prevent the spread of disease → Protect citizens from illness

- **Disease Outbreaks** — **Anticipate Dangers**
- **Halt Transmissions** — **Safeguard Communities**

Reference: National Center for Vector Borne Diseases Control (NCVBDC). Innovations Under NVBDCP New Delhi: Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India; [Available from: https://nvbdcp.gov.in/]

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IPHI
PUBLIC HEALTH INFOGRAPHICS
Visualising Health for All

IAPSM
INDIAN ASSOCIATION OF PREVENTIVE & SOCIAL MEDICINE

BEAT THE BITE

MOSQUITO-BORNE DISEASE PREVENTION

Small bite. Big threat.
Your action, Their protection.

THE THREAT IN INDIA

Mosquito-borne diseases continue to impact millions of people across the country.

DENGUE	MALARIA	CHIKUNGUNYA	JAPANESE ENCEPHALITIS (JE)
2,85,922 CASES	1,67,890 CASES	22,410 CASES	1,764 CASES

TOTAL CASES IN INDIA (APR 2025 – MAR 2026)

Source: National Vector Borne Disease Control Programme (NVBDCP), Ministry of Health & Family Welfare, Government of India
(*Data as per Annual Report 2025-26)

Mosquito-borne diseases are preventable.

Protect yourself. Protect your family. Protect your community.

Working together for a mosquito-free India.

India's climate, rapid urbanization and water storage practices create ideal conditions for mosquitoes to breed and spread diseases.
Every bite counts. Every action matters.

KNOW THE MOSQUITO-BORNE DISEASES

Know the diseases. Know the symptoms.

DENGUE
Symptoms: High fever, severe headache, pain behind the eyes, muscle & joint pain, rash, nausea, vomiting.

MALARIA
Symptoms: High fever with chills, sweating, headache, body ache, nausea, vomiting, fatigue, anemia.

CHIKUNGUNYA
Symptoms: Sudden fever, severe joint pain, headache, muscle pain, rash, fatigue.

JAPANESE ENCEPHALITIS (JE)
Symptoms: Sudden high fever, headache, vomiting, altered mental status, fits, may lead to brain inflammation.

If symptoms appear, seek medical care early. Early diagnosis saves lives.

PREVENT TODAY. PROTECT TOMORROW.

Follow the 5-STEP PROTECTION PLAN

1. **ELIMINATE BREEDING SITES**
Remove or empty all stagnant water from coolers, buckets, tyres, flower pots, trays, drains and containers at least once a week.

2. **PROTECT YOURSELF**
Use mosquito repellent, wear full-sleeve clothes, especially during early morning and evening.

3. **KEEP DOORS & WINDOWS SECURE**
Use mosquito nets, screens or closing windows and doors to keep mosquitoes outside.

4. **SLEEP UNDER A MOSQUITO NET**
Use insecticide-treated nets, especially for children, elderly and in high-risk areas.

5. **JOIN COMMUNITY ACTION**
Participate in cleanliness drives, support fogging and larval control activities, and spread awareness.

DO YOUR PART. STOP THE START.

The mosquito life cycle can be completed in as little as 7–10 days.
Break the cycle. Stop the bite.

LIFE CYCLE OF MOSQUITO

Laid on the surface of water. Lives in water. Feeds on algae. Lives in water. Transforms. Emerges and flies to survive and reproduce.

PLACES TO CHECK EVERY WEEK

SEE A MOSQUITO BREEDING SITE? REPORT IT TO YOUR LOCAL HEALTH AUTHORITY.

YOUR ACTIONS. THEIR PROTECTION.

- Do not let water collect anywhere.
- Clean and cover water storage containers.
- Change water in pet bowls and plant saucers regularly.
- Dispose of waste items like tyres, bottles, cans.
- Wear protective clothing and use mosquito repellents.
- Cooperate with local health authorities for spraying and larval control.

ONE BITE CAN CHANGE EVERYTHING.

TOGETHER, WE CAN BEAT THE BITE.

Protect yourself. Protect your family. Protect your community.

STAY INFORMED STAY UPDATED

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SOURCES

1. National Vector Borne Disease Control Programme (NVBDCP), Ministry of Health & Family Welfare, Government of India. https://nvbdcp.gov.in
2. Annual Report 2025-26, National Vector Borne Disease Control Programme (NVBDCP). https://nvbdcp.gov.in/WriteReadData/892s/Annual-Report-2025-26.pdf
3. World Health Organization (WHO) – Vector-borne diseases fact sheets. https://www.who.int/health-topics/vector-borne-diseases
4. National Centre for Disease Control (NCDC), Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India. https://ncdc.mohfw.gov.in

EVERY DROP BREEDS A BITE

Household water sources as hidden mosquito breeding sites

Hidden Breeding Sites at Home

Common Household Water Traps

Plant Saucers - Water collects under pots
AC Drip, refrigerator Trays - Accumulated drip water
Clogged Gutters - Blocked drainage causes pooling
Old tyres & coconut shells

Prevention: Simple Actions

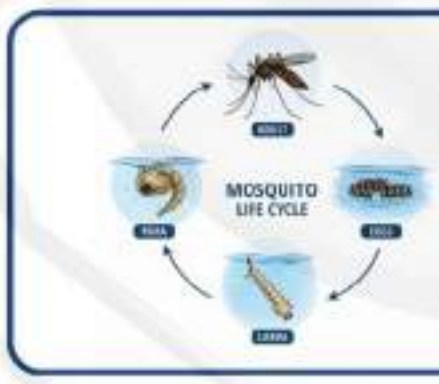
Big Impact for Your Community

Empty & Scrub Weekly - Remove standing water
Cover Stored Water - Keep containers covered
Clean Drains & Gutters - Ensure proper flow

The Mosquito Life Cycle

Completed within 7-10 days

Day 1-2: Egg - Laid on water surface
Day 3-4: Larva - Feeds and grows in water
Day 5-6: Pupa - Active, does not feed
DAY 7+: ADULT - Emerges, mates and bites.



Stay Aware, Stay Protected

Inspect Surroundings Weekly
Community Action Matters - Dispose waste properly
Stay aware, Stay protected

Preventable Breeding. Preventable Disease.

A CLEAN ENVIRONMENT TODAY, A HEALTHY TOMORROW.

Sources:

1.World Health Organization(WHO): https://www.who.int
2.National Center for Vector Borne Disease Control (NCVBDC), Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India: https://ncvbdc.mohfw.gov.in

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World Health Organization

WHO Theme 2026 (World Health Day)

Together for health. Stand with science

7th April 2026

Collective action and reliance on scientific evidence to improve global health outcomes and combat misinformation.

COMPONENT	ROLE	RESPONSIBILITIES
Government	Policy & system support	Health policies, funding, infrastructure development
Health Workers	Service delivery	Diagnosis, treatment, prevention, health education
Communities	Participation & awareness	Promoting healthy practices, supporting programs
Individuals	Personal responsibility	Healthy lifestyle, hygiene, seeking timely care

COMPONENT	DESCRIPTION	APPLICATION
Research & Data	Decisions based on scientific studies and data	Clinical trials, epidemiological studies
Guidelines	Following standard protocols	WHO guidelines, national health programs
Avoid misinformation	Reject myths and pseudoscience	Vaccine myths, unproven therapies

Ask. Share. Stand with science.

Commit to science-based policy and One Health action

Activate. Explain. Lead.

Be ambassadors of science

Research → Evidence → Policy → Implementation → Health improvement

RESEARCH IS THE KEY

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References :

- World Health Day 2026: Together for health. Stand with science [Internet]. Geneva: World Health Organization; 2026 [cited 2026 Mar 26]. Available from: WHO World Health Day 2026 Page

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ADULT IMMUNIZATION

THE NEED FOR A NATIONAL ADULT IMMUNIZATION PROGRAMME IN INDIA

WORLD IMMUNIZATION WEEK: 24TH TO 30TH APRIL

2026 Theme: "For every generation, vaccines work"

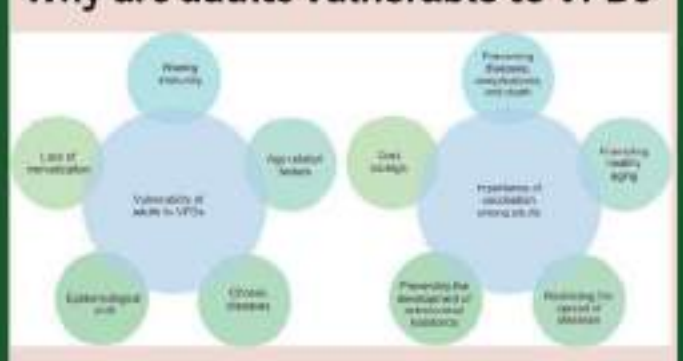
- **India's immunization success story primarily focused on children through the Universal Immunization Programme (UIP) since 1978**
- **The burden of vaccine-preventable diseases (VPDs) has now shifted significantly to the adult population, in particular, the elderly.**
- **Over 2/3 of Indian adults are unaware that adult vaccination exists, with many believing vaccines are only for children**
- **Currently, there are no nationally adopted adult immunization guidelines or systematic structured programs in place**
- **Life course or Adult immunization is not part of any policy in India**

Rationale for Adult Immunization

Source:Dash R, et al. Towards adult vaccination in India: a narrative literature review. Hum Vaccin Immunother. 2019;16(4):991-1001

Barriers to Adult Immunization

Why are adults vulnerable to VPDs



Source: Ramasubramanian V et al. Establishing Adult Immunization clinics in India. JAPI 2025; 73(5)

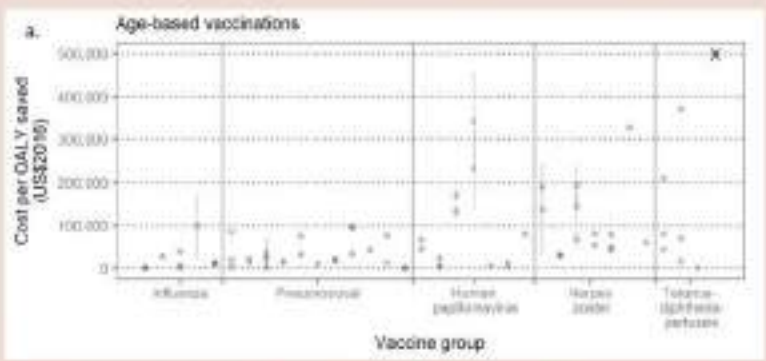
Table 1: Summary of key challenges in adult vaccination and potential approach to overcome the barriers

Level	Barrier	Strategy to address barrier
Patient level	Awareness and education	Implement public education campaigns to increase awareness and understanding of vaccine-preventable diseases and the importance of adult immunization
	Cultural beliefs and misconceptions	Engage community leaders and influencers to dispel myths and promote positive attitudes toward vaccines
	Accessibility and convenience	Improve vaccine access through clinics and outreach services (such as healthcare facilities and pharmacies)
	Costconcerns	Government subsidies for vaccines to reduce the financial burden on individuals
Physician level	Low perceived burden	Establish surveillance to monitor trends in vaccine-preventable diseases
	Knowledgeandtraining	Provide ongoing education and training for healthcare providers on adult immunization schedules and guidelines
	Perceived low priority	Advocate for adult immunization as a critical aspect of healthcare through guidelines, medical associations, and policy
	Vaccine availability	Enhance the vaccine supply chain and storage infrastructure to ensure consistent vaccine availability
Payer/policy maker level	Insurance coverage	Advocate for the inclusion of adult vaccines in health insurance policies
	Government policies and funding	Increase government funding and support for adult immunization programs
	Economic constraints	Integrate adult immunization into broader health initiatives to optimize resource allocation in limited-resource settings

Source: Ramasubramanian V et al. Establishing Adult Immunization clinics in India. JAPI 2025; 73(5)

Indian Consensus Guidelines for Adult Immunization 2026: A collaborative Effort by 20+ Professional Associations

Economic Justification for Adult Immunization



- **Reduced healthcare costs from prevented hospitalizations**
- **Decreased productivity losses from illness**
- **Reduced antimicrobial resistance through disease prevention**
- **Lower burden on caregivers and families**

Steps for a National Adult Immunization Programme adoption in India

- **Comprehensive Policy framework for adult immunization**
- **Adoption of a evidence based National Adult immunization schedule and target population**
- **Infrastructure for immunization clinics for adults**
- **Electronic registry based on U-WIN**
- **Integration in existing healthcare delivery system**
- **Capacity building of health providers**
- **Awareness at population level**
- **Suitable governance structures**
- **Phased implementation of the programme**

Call To Action

From Advocacy to Action

- **Action to change policy framework**
- **Action to develop required infrastructure**
- **Action to prepare implementation road map**
- **Action to make Universal Adult Immunization a reality**

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- Vora A et al. Indian Consensus guidelines on adult immunization 2026 update. Association of Physicians of India. 2026.
- Leidner A.J, et al. Cost-effectiveness of adult vaccinations: A systematic review. Vaccine 2019;37:226–34.

IAPSM - PUBLIC HEALTH INFOGRAPHICS (IPHI)

Graphic-e-Health

Highlights how infographics can educate the public about the health system and its services

Represents use of infographics to enhance collaboration and communication between public health professionals and the community

Tagline for this initiative

Represents the role of infographics in making public health data clear and simplified

Dear IAPSM Members,

"Thank you for taking the time to explore our latest Public Health Infographics Edition. It is gratifying to know that these visual resources contribute to enhancing public health knowledge within our IAPSM community.

Your continued support and engagement with the Public Health Infographics initiative are truly appreciated. Our aim is to consistently improve the quality and relevance of our content, ensuring it serves as a useful resource for all. If you have any suggestions, feedback, or ideas for future infographic topics, we encourage you to reach out to us at iapsminfographics.iphi@gmail.com. We welcome your insights and are eager to incorporate changes that can enrich your experience.

Together, let's make this initiative even more impactful for our community."

Best Regards,
Team IAPSM Public Health Infographics

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