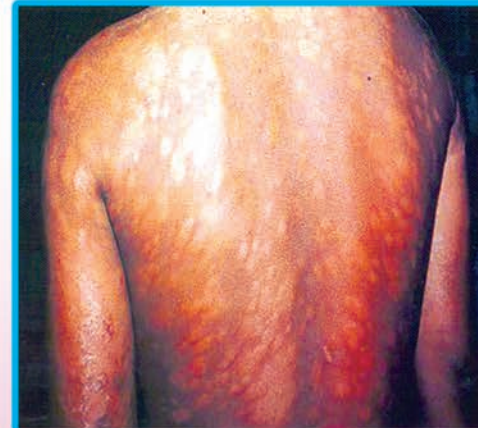




THE CATHOLIC HEALTH ASSOCIATION OF INDIA

MISEREOR
IHR HILFSWERK



COMMUNICABLE DISEASES (CDs)

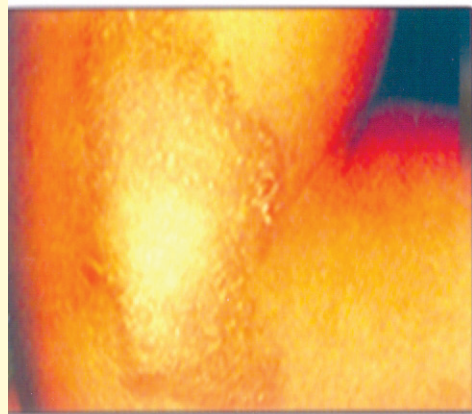
COMMUNICABLE DISEASES (CDs)

A communicable disease is one that is spread from one person to another through a variety of ways that include: contact with blood and bodily fluids; breathing in an airborne virus; or by having contact with animal and insects. For the most part, communicable diseases are spread through viruses and bacteria that live in blood and body fluids. For instance, hepatitis and Human Immunodeficiency Virus (HIV) are examples of infections that are carried through blood and bodily fluids. On the other hand, tuberculosis is an airborne disease. A person with Tuberculosis (TB) can spread tiny germs that float in the air if they cough or sneeze without covering their nose or mouth. Diseases like Malaria and Filariasis get transmitted from a patient to a healthy person through mosquito bite.

Communicable diseases occur only when the causative agent comes into contact with a susceptible host in a suitable environment. Prevention and control efforts of communicable diseases may be directed to any of these three elements. Communicable diseases affect both individuals and communities, so prevention and control efforts may be directed at both. Treatment of persons with communicable diseases with antibiotics typically kills the agent and renders them non-infectious. Thus, treatment is also prevention.

This flipbook will help you to know about the causes, symptoms, diagnosis and treatment of HIV/AIDS, Tuberculosis, Leprosy, Malaria and Filariasis. Hope this flipbook helps you and your family to protect yourself from communicable diseases through early diagnosis and treatment.

LEPROSY



Paucibacillary



Multibacillary

WHAT IS LEPROSY?

- Leprosy is one of the ancient diseases in human history
- It is not a hereditary disease
- It is a common disease that spreads through bacteria
- It mainly affects the skin and nerves of the human body
- Poorly pigmented, red or copper-coloured numb skin patches on the body as well as numb legs and hands are the primary symptoms of leprosy
- Leprosy can be treated completely through medication
- If identified in the early stage, the deformities can be prevented.
- Delay in identification or treatment may lead to deformities.

Leprosy is of two types Paucibacillary and Multibacillary.

Items	Symptoms of paucibacillary	Symptoms of multibacillary
Patches	This type of leprosy has one to five patches, which are numb and prominent in nature. It does not spread from one to another.	It has more than 6 patches. Skin looks shiny and oily.
Nerves	It may or may not affect any major nerve. The affected area of skin may feel numb because of nerve damage underneath.	It may affect more than one major nerve
Numbness in palms and toes		Sometimes causes numbness, and muscle weakness without patches
Smear (blood) test	Negative at all sites	Positive at all sites

LEPROSY – CONFIRMATORY TEST



The patch is touched with a nib/tip of a ball-point pen

CONFIRMATORY TEST FOR LEPROSY

How Is Leprosy Diagnosed?

Leprosy is diagnosed with the help of skin touch. This is a very easy method of testing

Step1 : The patch is touched with the tip of a ball-point pen

Step 2 : If there is no sensation on that patch, then he/or she can be referred to a hospital or service-provider for further investigations.

TREATMENT FOR LEPROSY

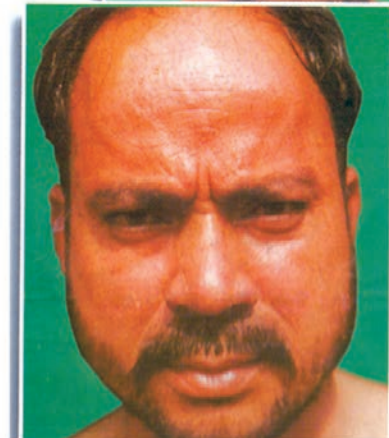
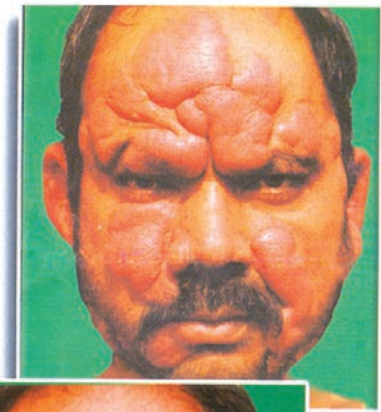
Leprosy can be cured completely with Multi-Drug Therapy (MDT) Treatment



**MDT medicines are available
Freely at Govt Hospitals**



Before treatment



After treatment

TREATMENT FOR LEPROSY

Leprosy (at any stage) can be completely cured with Multi-Drug Therapy (MDT)

- These medicines are available free of cost in all Government Hospitals, PHCs and CHCs
- The treatment duration is 6-12 months
- Any stage of leprosy is completely curable
- Early detection and treatment for leprosy can prevent deformities completely
- The deformities caused due to leprosy can be corrected/reduced through surgeries in DPMR centres free of cost.

Important Points to Remember and Follow

- Leprosy is common disease caused due to bacteria
- The patches formed on the skin with white, red and copper colour without sensation could be because of leprosy disease. If such patches are found on the body, approach a doctor for advice immediately.
- Leprosy can be cured completely with MDT treatment
- It can be cured completely at any stage. However, if it is detected and treated in the initial stage, then deformities can be prevented
- The treatment for leprosy is available free of cost in all government hospitals
- Government is providing pensions and MCR foot care to leprosy affected persons.
- People affected with leprosy should not be stigmatized or discriminated
- People affected with leprosy need to be included in the Self Help Group (SHG) to help them to avail benefit of government schemes

MALARIA

Patient suffering with Malaria



Healthy Person



Malaria spreads from Malaria-infected person to a healthy person *through bite of Anopheles (female) mosquitoes*

WHAT IS MALARIA ?

What is malaria? How does it spread?

- Malaria is a vector-borne disease.
- It is *transmitted* among humans *by mosquitoes* of the genus *Anopheles*.
- Malaria spreads from an infected person to a healthy person *through the bite of the mosquito*.
- It can also be transmitted through blood transfusion, organ transplant, or shared use of needles or syringes contaminated with blood.
- Parasites are carried by blood to the brain (cerebral malaria) and to other vital organs.
- Malaria in pregnancy poses a substantial risk to the mother, the fetus and the newborn infant. Pregnant women are less capable of coping with and clearing malaria infections, adversely affecting the unborn fetus.

SYMPTOMS OF MALARIA



Diagnosis & Treatment

WHAT ARE THE SYMPTOMS OF MALARIA?

A case of fever daily or every alternate day accompanied with any of the following can be suspected as Malaria:

- Chills and rigors
- Headache
- Nausea and vomiting
- Bodyache

Blood Test and Treatment

- If Malaria symptoms are found, the person should undergo a malaria confirmatory blood test
- It is available in all Government Hospitals free of cost
- Treatment also is available at Govt Hospitals free of cost

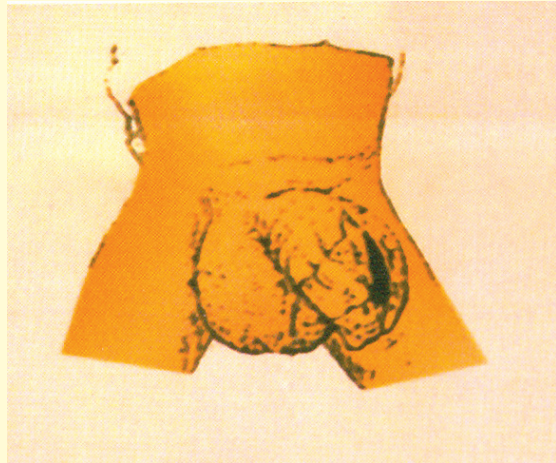
TAKE-HOME MESSAGES

- Malaria spreads through the bite of mosquito
- If symptoms like fever and chills appear, then the person should consult a doctor
- Malaria diagnosis, test and treatment are available free of cost at all Government Health Facilities
- Malaria can be cured completely with medicines
- Water pots and tubs at home shall be kept covered
- Mosquito coils or mosquito nets etc are to be used at home to get protection from mosquito bite
- Communities and Panchayats should make a collective effort to eradicate growth of mosquitoes

FILARIASIS



Hydrocele



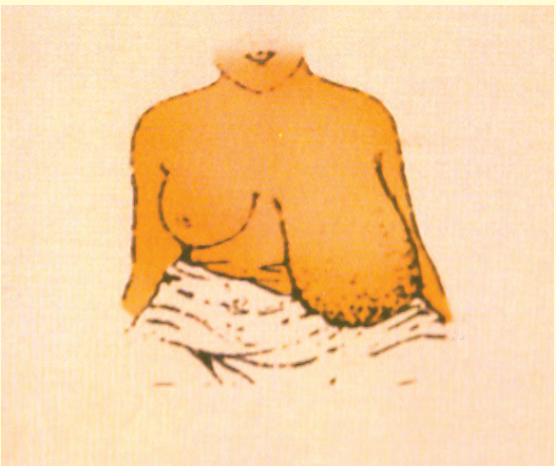
Penis



Hand



Vazina



Breast



Leg



FILARIASIS ?

What is Filariasis?

- Filariasis is another disease which comes through mosquito bite.. It is also called Lymphatic Filariasis.
- The disease is caused by a parasite through mosquito bite, which goes to blood vessels and distroy them
- The disease spreads to various parts of the human body.
- Swelling in the legs, or genitals are the symptoms of the final stage
- If disease is identified at an early stage, it can be cured with medicines.
- If it gets detected at the final stage, surgery, exercise etc may be needed.

How to diagonse:

Persons suspected of filariasis should go for a blood test. Since the filaria bacteria is active during the night, the blood sample will be drawn during night.

How to prevent filariasis:

Govt is distributing Allbendozol tablets on November 11, every year as a preventive measure. All people should take the medicine under the supervision of the doctor as per the prescribed dosage according to age. (Note: Children below 2 years, pregnant women and chronic patients should not take the tablets)

Precautions like using bednet or mosquito repellents to protect from mosquito bite need to be taken.

Suggestions for Filariasis patients:

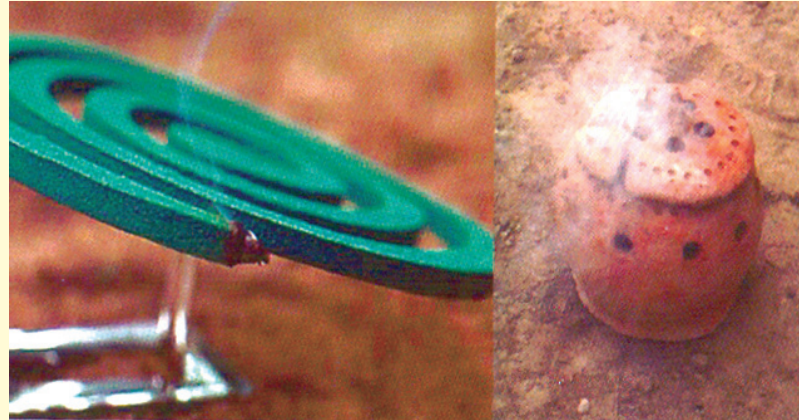
Should wash the affected parts with water and wipe with dry cloth. Apply any ointment on the doctor's advice

Should exercise regularly based on the advice of the doctor

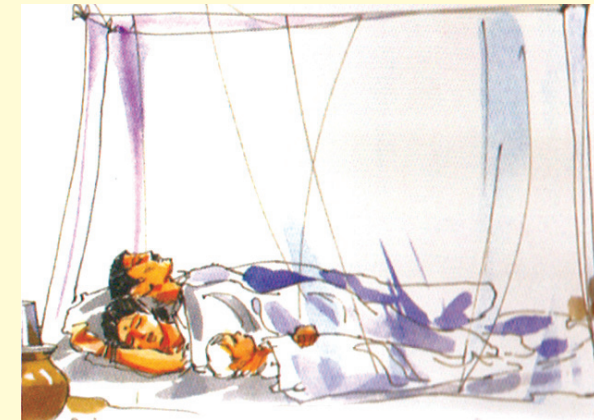
PREVENTION OF MALARIA & FILARIASIS BY CONTROLLING & ERADICATING MOSQUITOES



Keeping vessels covered



Using mosquito coils to produce smoke



Using mosquito nets



Pour kerosene in water ponds to prevent breeding of mosquitoes



Growing Gambusia fish in the lake to prevent mosquitoes



Spraying DDT to keep surroundings clean

WHAT ARE THE MEASURES TO BE TAKEN TO PREVENT MALARIA & FILARIA THROUGH ERADICATING MOSQUITOES?

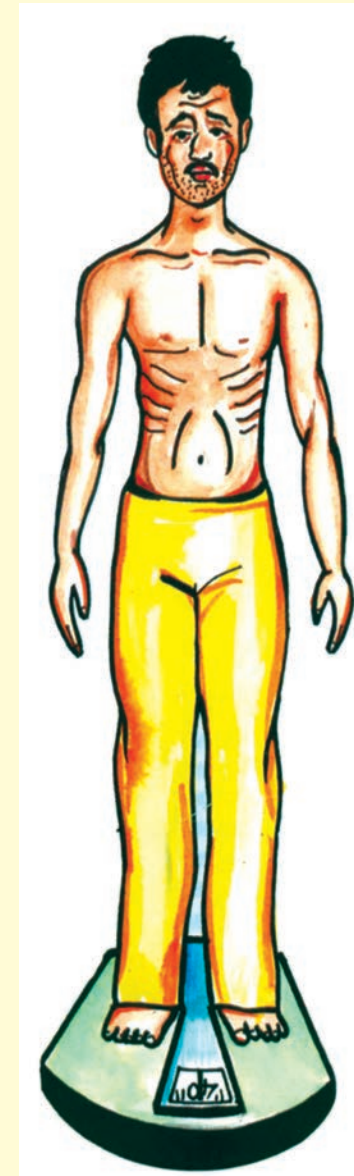
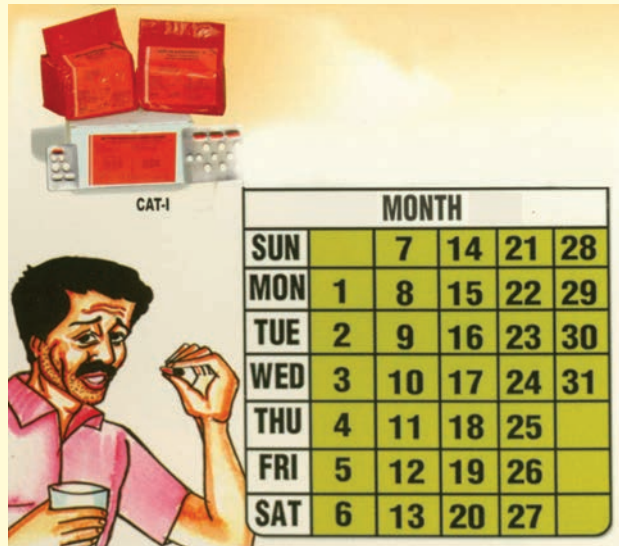
Steps to be taken for controlling Breeding of Mosquitoes:

- Don't allow water to get stagnated at one place
- Sewage systems have to be improved
- Garbage and other used material should not obstruct the flow of sewage systems
- Regular & consistent cleaning of sewage systems
- Fix the meshes to the lavatory air pipes
- Water pits, ditches and wells must be covered properly
- Useless plants growing in lakes, streams and ponds must be removed
- Do not allow water to get accumulated in any material, vessel or sunshade, especially in the rainy season
- Empty all the tubs/tins/containers where water gets collected once in a week and dry them. Please observe the DRY DAY.
- Have percolation pit in order to soak water
- Regular fogging to be done on mosquito-breeding points
- Grow Gambujia, Gappi fishes in lakes, ponds and other water sources
- Pour kerosene and other oils in water-stagnating areas like waste water pits, ditches etc., to control the growth of the larva

Safety measures to avoid mosquito bite

- Use mosquito nets
- Cover doors & windows with mesh
- Burn neem leaves in order to produce the smoke
- Use mats, liquids, coils, sprays & repellents etc.,
- Keep pets, milch animals and other animals away from home
- Have good ventilation at home
- Wear clothes that cover the whole body during night time

TUBERCULOSIS (TB)



Prolonged cough for 2 weeks or more. Remittent fever with night sweats. Loss of appetite and weight

WHAT IS TUBERCULOSIS (TB)

How TB infects people:

TB infects people through bacteria called *Mycobacterium tuberculosis*, which transmits from a patient to others through droplets in the air. People who have less immunity are at risk for infection, irrespective of age and gender.

Hence patients affected with TB should cover their mouth and nose while coughing and sneezing.

They should not spit in the house or in public places. They should spit in a box or in a sink which should be burnt/flushed away respectively.

Children below 5 years should be given chemoprophylaxis (Isoniazid) in the homes where TB patients are residing, based on doctor's advice.

Symptoms of TB:

- Persistent cough for more than two weeks.
- Remittent fever with night sweats.
- Loss of appetite and body weight
- Pain in the chest
- Fatigue

Types of Tuberculosis:

There are two types of Tuberculosis. 1. Pulmonary TB and 2. Extra Pulmonary TB.

- Pulmonary TB affects lungs. It spreads through patients, droplets of patients' to others when he/she coughs or sneezes.
- Extra Pulmonary TB may affect any part/organ of the body. Eg: underarms, neck, uterus, bones, skin etc. It does not spread from a patient to others.

Remittent fever with night sweats, loss of appetite and weight are common symptoms for both types of TB.

TB-DIAGNOSIS & TREATMENT



Sputum-Collection Centre



Sputum-Testing at DMC (Designated Microscopy Centre)



Treatment



CAT-I



CAT-II

DOTS treatment for TB is free

What is Tuberculosis?

- TB is a contagious disease. It spreads from one to another through droplet infection.
- Persons who have less immunity are more at risk for infection.
- If a person coughs for more than two weeks, then he/she should be sent for testing.
- TB patients should cover nose/mouth while coughing or sneezing.
- TB patients should take full course of treatment
- TB can be cured completely with DOTs treatment.
- TB Diagnosis and treatment is completely free at government facilities
- Nutritious food is very important for TB patients.

How is TB diagnosed?

TB suspects should go for a sputum confirmatory test at any Govt. Health Facility and should give two samples (early morning & spot sample at the lab). The early morning sputum should be collected in a container given by lab technician and handed over to the lab.

Once the sputum is tested or diagnosed, a complete course of TB Medicines (DOTS) should be taken.

What is DOTS?

Directly Observed Treatment (DOTS), Short course. During DOTS treatment, the patient has to take treatment in the presence of DOTS-provider.

DOTS medicines are of two categories:

CAT-1: This medication is given to patients who get infected with TB for the first time. Duration of treatment is 6 months.

CAT-2: This medication is given for relapse/or default TB patients. Treatment duration is 9 months.

DOTS medication is completely free. It is available at all Govt hospitals/ PHCs.

During the treatment course, once in two months, sputum test has to be conducted to know the treatment progress.

TB can be cured completely with DOTS medicines. Intake of nutritious food is very important during DOTS treatment

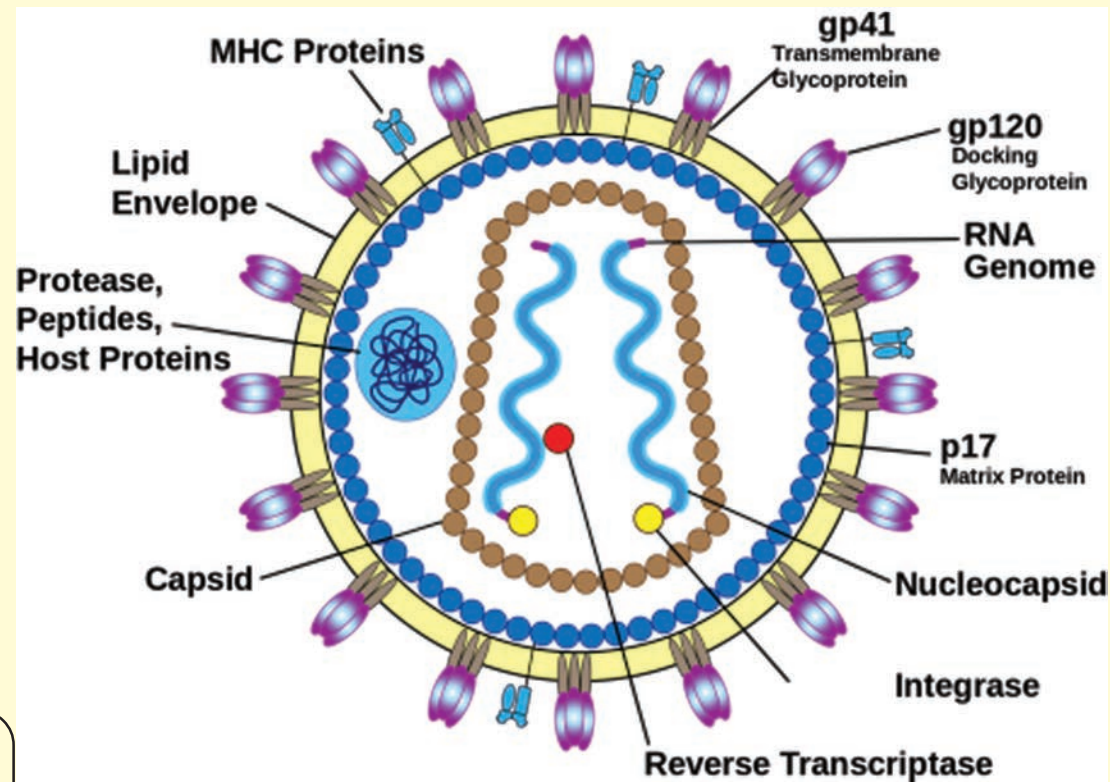
What is MDR TB? (If TB is not treated by taking complete course of CAT/DOTs medication, then it may turn into Multi-Drug Resistant TB, which cannot be cured with medicines. Hence taking full course of TB medication is essential.

HIV-TB Co-infection: As stated above, TB affects people with low immunity. As immunity comes down in the people living with HIV (PLHIV), TB infects them easily. Hence PLHIV should undergo TB test periodically.

Take-Home Messages

- TB is a contagious disease. It spreads from one to another through drop-let infection.
- Persons who have less immunity are more at risk for infection.
- If a person coughs for more than two weeks, then he/she should be sent for testing.
- TB patients should cover nose/mouth while coughing or sneezing.
- TB patients should take full course of treatment
- TB can be cured completely with DOTs treatment.
- TB Diagnosis and treatment is completely free at government facilities
- Nutritious food is very important for TB patients.

HIV/AIDS



HIV

H - Human
I - Immunodeficiency
V - Virus

AIDS

A - Acquired
I - Immuno
D - Deficiency
S - Syndrome

What is HIV?

HIV stands for the Human Immunodeficiency Virus. It attacks the immune system of the body. The immune system is a collection of mechanisms within the body that protects against infections. It does this by identifying and killing pathogens or 'foreign invaders' such as viruses, bacteria, etc.

HIV is a virus that invades and breaks down the immune system, specifically the CD4 cells. CD4 cells are those cells that help the body to fight different diseases.

What is AIDS?

AIDS stands for Acquired Immunodeficiency Syndrome. It is a condition characterized by a group of diseases that an HIV-infected person may get as her/his body's immunity decreases gradually over a period of time.

How are HIV and AIDS different?

HIV is the *name* of the virus. AIDS is the *condition* caused by this virus. It usually takes 8-10 years for HIV to progress to AIDS. HIV and AIDS can be diagnosed through blood tests.

MODES OF TRANSMISSION



Unprotected sex



Sharing of needles



Infected mother to child



Unsafe blood transfusion

Only through the above-said 4 ways HIV/AIDS infects human beings. Through no other means like mosquito bite, playing/eating together etc, people will get infected.

Preventive Methods



Using condoms during sex



Use only disposable/sterilized needles and syringes



Get tested for HIV during pregnancy



Use only HIV-screened blood

Modes of Transmission and Prevention

How does HIV spread? HIV spreads through four main routes:

1. Unprotected sex
2. Using unsterilized needles/syringes/lancets
3. From HIV-infected mother to her baby
4. Receiving HIV-contaminated blood

How does HIV not spread?

- Living with an HIV-infected person
- Sharing food with an HIV-infected person
- By mosquito bite.
- Touching or shaking hands with an HIV-infected person
- By sharing bathrooms and toilet facilities with infected person

How to protect from HIV/AIDS:

- Abstaining from casual sex and being faithful to your partner
- Using condoms during sex. (They are easily available in government health facilities, chemist's shop and general stores. Check expiry date and use them correctly and consistently.)

Using needles/syringes/lancets:

- Insisting that disposable/sterilised needles and syringes used when you undergo blood test or treatment.
- Avoiding injecting drugs, and not sharing needles & syringes.
- Ensuring needles and syringes are destroyed after use.
- Getting tested for HIV during pregnancy.
- In case of an infected mother, taking timely medication will prevent transmission of HIV from mother to child. (A single dose of medicine (Nevirapine) administered to the mother during labour and to the baby immediately after birth, can save the baby from acquiring HIV. This is available free of cost at medical colleges, district hospitals and community health centres.)

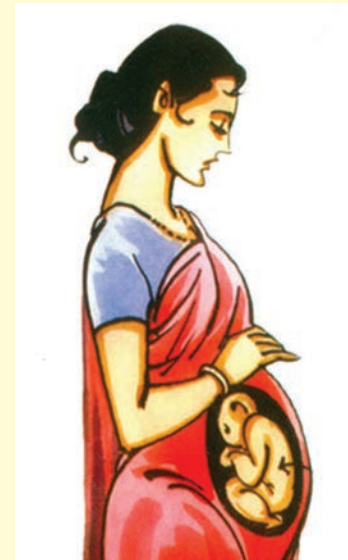
HIV infected blood or blood products

- Ensuring that blood is taken from a licensed blood bank if you or any family member is in need of blood.
- Checking with the blood bank to ensure that the blood has been screened for HIV. (Ensure your blood bag carries the sticker of mandatory testing for Transfusion Transmitted Infections, including HIV.)

HIV-RELATED HEALTH FACILITIES IN YOUR NEIGHBOURHOOD



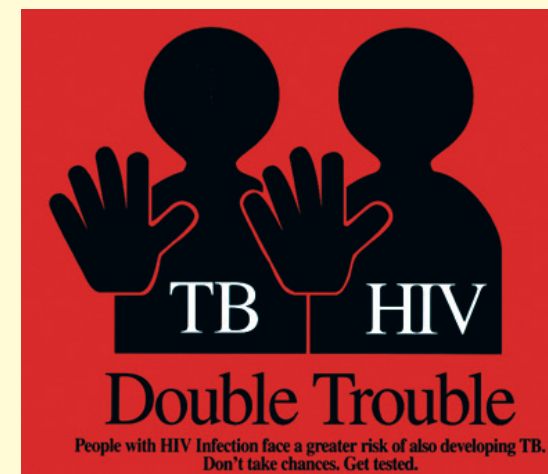
HIV Testing Centre



Mandatory HIV Screening /Testing



ART Centre



HIV – TB Cross Referrals

Integrated Counselling and Testing Centre (ICTC)

HIV-testing is done free of cost at the ICTCs which are located in all the district hospitals, sub-district hospitals, community health centres and medical colleges. At ICTCs, counselling is provided by trained counsellors before and after the test. Results of the test are kept confidential.

HIV Screening / Testing is Mandatory for Pregnant Women – It helps to detect HIV at an early stage and prevent its transmission from Mother to Child. (If mother is found HIV-Positive, a CHV has to refer her to the nearest PPTCT/ICTC/ART Centre for ARV medicines).

CD4 Testing:

A CD4 count is a lab test that measures the number of CD4 T lymphocytes (CD4 Cells) in a sample of your blood. In people affected with HIV, it is the most important laboratory indicator of how well their immune systems are working and the strongest predictor of HIV progression. CD4 Cells (often called T-Cells or T-Helper Cells) are a type of white blood cells that play a major role in protecting the human body from infection. They send signals to activate the body's immune response when they detect "intruders," like virus or bacteria.

Anti-Retroviral Therapy (ART)

ART is a combination of three different medicines. It is given to people living with HIV whose capacity to fight diseases has reduced considerably. This facility is available at select District Hospitals and Medical Colleges.

HIV – TB Cross Referrals

TB disease is the most common opportunistic infection (OI), the most common cause of morbidity and leading cause of death in PLHIV.

All the HIV-positives should undergo TB screening at any Designated Microscopy Centre (DMC) and All TB cases should be referred for HIV testing at (ICTC) for early detection and treatment.

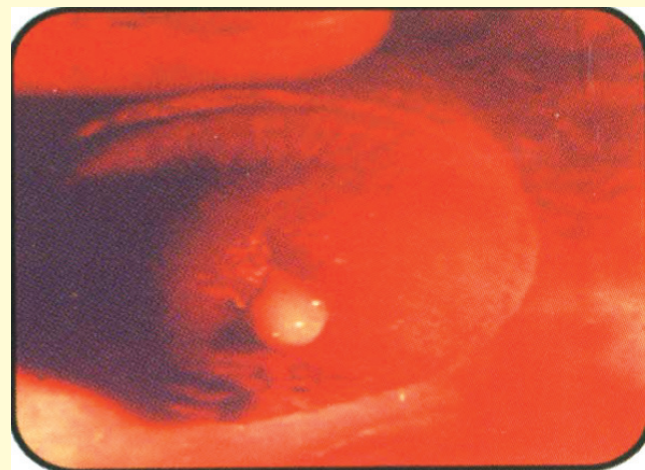
Sexually Transmitted Infections (STIs) & Reproductive Tract Infections (RTIs)



White discharge



Abdominal pain



Pus in the Penis



Blisters/wounds on Penis

STI and RTI

Sexually Transmitted Infections (STIs) are caused by infections that are passed from one person to another during sexual contact. These infections often do not cause any symptoms. Medically, infections are called diseases only when they cause symptoms.

Female Reproductive Tract Infections, (RTIs), can occur in the upper reproductive tract, which includes the fallopian tubes, ovary and uterus, or in the lower reproductive tract, which includes the vagina, cervix and vulva.

Reproductive Tract Infections (RTIs) can be cured, if treatment for STIs is taken

STI Symptoms	RTI Symptoms
<ul style="list-style-type: none">• Heavier than normal vaginal discharge• Discharge from the penis or rectum• Itching in genital or anal areas• Sores or rashes in genital or anal areas, sometimes also in the mouth• Pain during intercourse• Painful or more frequent urination• Swollen glands in the groin• Fever, headache, general feeling of illness• Pelvic pain that is not related to period	<ul style="list-style-type: none">• White discharge• Lower abdominal pain• Burning micturition (urination)• Itching in vagina• Pus discharge from vagina/urethra• Ulcer in the vagina• Inguinal lymphadenopathy (enlargement of lymph nodes)• Swelling in the vagina

People suffering with STIs are ten times more vulnerable to get HIV. Hence STIs are to be cured immediately with appropriate medication.

Free Diagnosis and Treatment are available for STIs and RTIs.

PROTECTING LIVES FROM HIV/AIDS



Important Points on HIV/AIDS

- HIV is the name of the virus. AIDS is the condition caused by this virus. It usually takes 8-10 years for HIV to progress to AIDS. HIV and AIDS can be diagnosed through blood tests.
- HIV spreads through 1. Unprotected sex 2. Sharing of needles 3. Infected mother to child 4. Unsafe blood transfusion
- Taking timely test and medication prevents transmission of HIV from mother to child. A single dose of medicine (Nevirapine) administered to the mother during labour and to the baby immediately after birth, can save the baby from acquiring HIV. This is available free of cost at medical colleges, district hospitals and community health centres.
- People with STIs are more vulnerable and has 10 times higher chances to get HIV/AIDS
- HIV-testing is available free of cost at ICTCs which are located in all the district hospitals, sub-district hospitals, community health centres and medical colleges. At ICTCs, counselling is provided by trained counsellors before and after the test. Results of the test kept confidential.
- ART medicines are free and available at select District Hospitals and Medical Colleges.
- HIV – TB Cross Referrals are mandatory
- Free diagnoses and treatment available for STIs and RTIs at Govt. Primary Health Centres and it can be cured.

Take-Home Messages:

- HIV can affect anyone.
- There is no cure for AIDS and it is the responsibility of each individual to prevent and stop HIV infection.
- Stay away from highrisk behaviours that put one at risk of HIV.
- One has the right to get tested without disclosing ones identity. Make use of the right.
- People infected with HIV can also lead to a positive and productive life by adopting a healthy lifestyle and by taking Anti-retroviral medicines.
- Women are more vulnerable to HIV due to biological and social factors. Women constitute 40% of all HIV-infected cases in India.