



SECOND S.I.T. KNOWLEDGE MANAGEMENT CONFERENCE

THEME: TOWARDS A SUSTAINABLE TVET INSTITUTION

23rd February 2022

NON – COMMUNICABLE DISEASES

(NCDs)

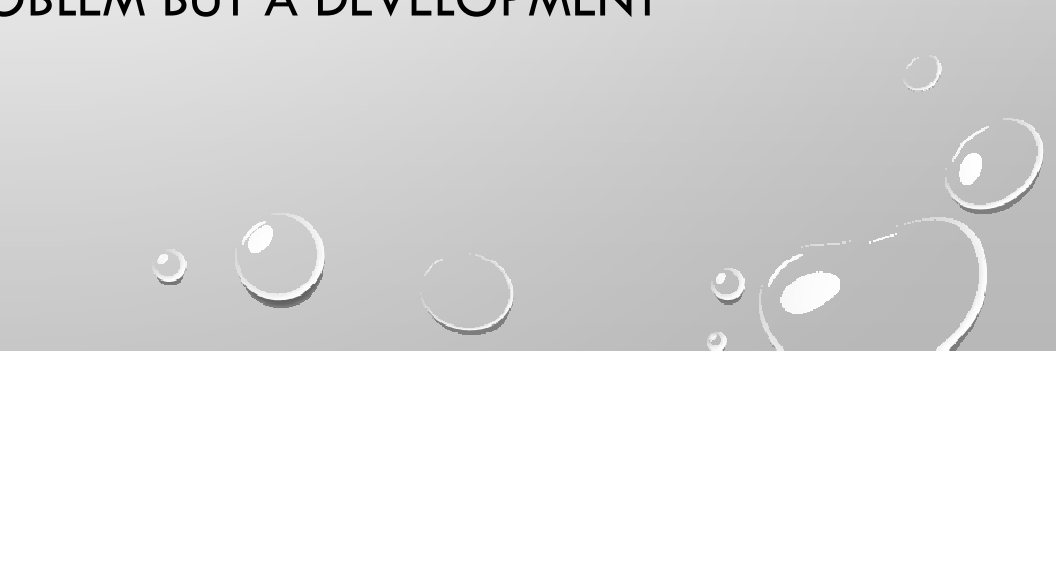
PRESENTED BY MRS SALOME LUANGA

INTRODUCTION

- NCDS ACCOUNT FOR A LARGE AND INCREASING BURDEN OF DISEASE WORLDWIDE. IT IS CURRENTLY ESTIMATED TO ACCOUNT FOR 60% GLOBAL DEATHS AND IS PROJECTED TO INCREASE TO 73% DEATHS
- THEY ARE THE LEADING KILLER DISEASES AND ARE ON THE INCREASE
- NEARLY 80 % OF THOSE DEATHS ARE FROM MIDDLE AND LOW INCOME COUNTRIES
- MAJORITY OF THESE DEATHS ARE ATTRIBUTED TO CORONARY HEART DISEASES, CANCER, STROKE AND CHRONIC RESPIRATORY DISEASES

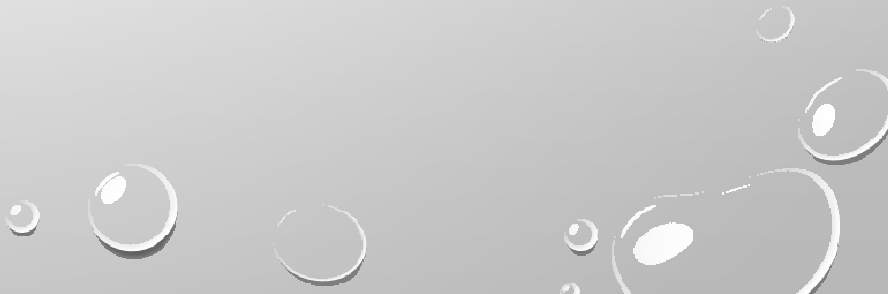


INTRODUCTION CONT'D

- NCDS ARE LARGELY PREVENTABLE BY MEANS OF EFFECTIVE INTERVENTIONS THAT TACKLE RISK FACTORS LIKE TOBACCO USE, UNHEALTHY DIET, PHYSICAL INACTIVITY AND HARMFUL USE OF ALCOHOL
 - 80% OF PREMATURE HEART DISEASES IS PREVENTABLE
 - NCDS ARE NOT ONLY A HEALTH PROBLEM BUT A DEVELOPMENT PROBLEM AS WELL
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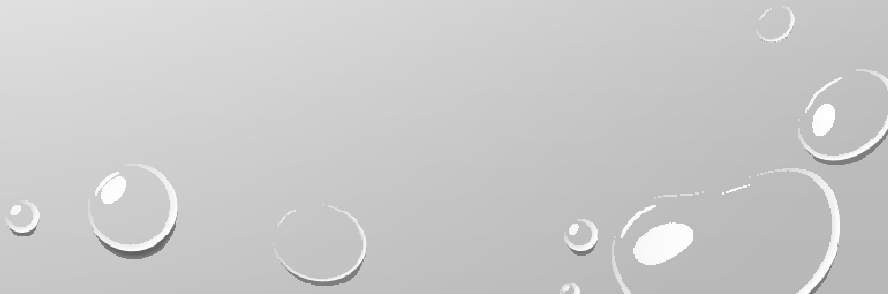


CHARACTERISTICS OF NCDS

- NOT CAUSED BY ACUTE INFECTION
 - HAVE COMMON RISK FACTORS
 - CAUSE LONG TERM HARM
 - NEED A LONG TERM (LIFE-LONG) TREATMENT/MANAGEMENT
 - AFFECT BOTH MEN AND WOMEN EQUALLY
 - CAN SOMETIMES CAUSE DISABILITY
- 




NCD IS A DISEASE OR MEDICAL CONDITION WHICH

- ❖ IS NOT INFECTIOUS
 - ❖ HAS LONG DURATION
 - ❖ RELATIVELY SLOW IN PROGRESS
 - ❖ WHICH A PERSON IS UNAWARE OF THE DISEASE UNLESS OR OTHERWISE EXAMINED
 - ❖ IS A SILENT KILLER OF PEOPLE
- 




EXAMPLES OF NCDS

- HYPERTENSION
 - DIABETES
 - CORONARY HEART DISEASES (HEART ATTACKS AND STROKE)
 - OBESITY
 - BLINDNESS
 - PSYCHIATRIC DISORDERS
 - CANCER
 - CHRONIC RESPIRATORY DISEASES (ASTHMA)
- 



RISK FACTORS FOR NCDS

- ALCOHOL CONSUMPTION
 - TOBACCO USE
 - RAISED BLOOD PRESSURE
 - OBESITY
 - DIET
 - PHYSICAL INACTIVITY
 - DIABETES MELLITUS
 - HIGH SERUM CHOLESTEROL
 - GENETICS
 - ENVIRONMENTAL FACTORS
- 

CLASSIFICATION OF RISK FACTORS

1. BACKGROUND RISK FACTORS:- AGE, SEX, LEVEL OF EDUCATION, GENETIC COMPOSITION

CANNOT BE CHANGED

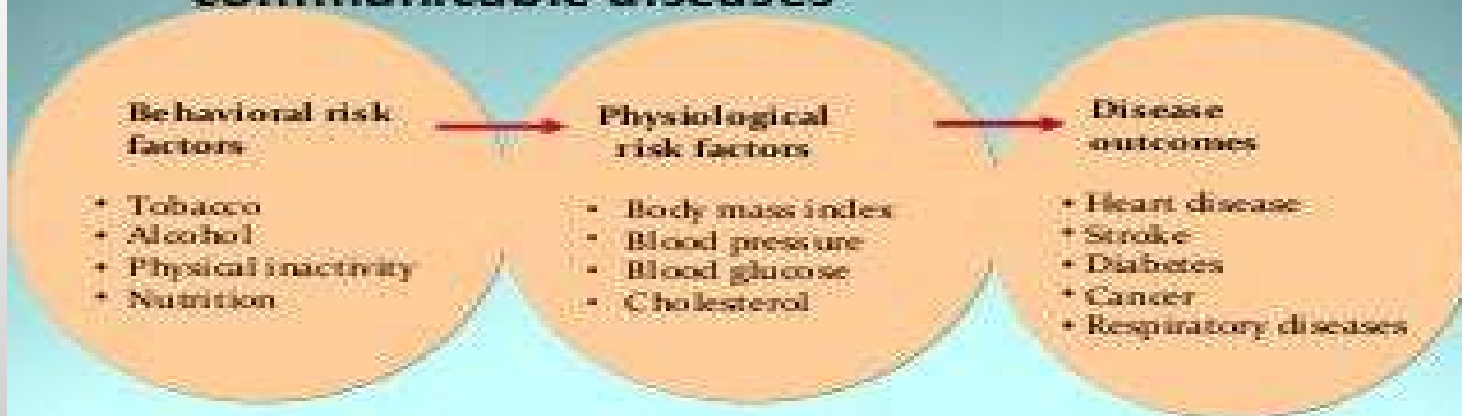
2. BEHAVIORAL RISK FACTORS:- TOBACCO AND ALCOHOL USE, UNHEALTHY DIET, PHYSICAL INACTIVITY

CAN BE MODIFIED

3. INTERMEDIATE RISK FACTORS:- ELEVATED BLOOD LIPIDS, DIABETES, HIGH BLOOD PRESSURE AND OVERWEIGHT/OBESITY

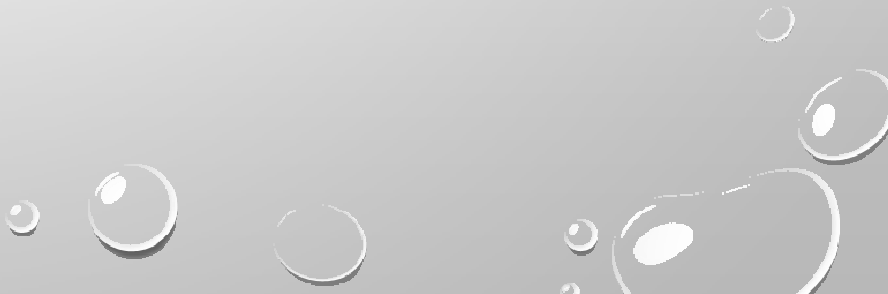
CAN BE CONTROLLED

The causal chain explains the risk factor approach for surveillance of non communicable diseases





HOW TO MINIMIZE THE RISKS

- ✓ HEALTHY DIET
 - ✓ REGULAR EXERCISE
 - ✓ CHANGE THE ENVIRONMENT
 - ✓ MODIFY HABITS
 - ✓ REGULAR MEDICAL CHECK - UPS
- 

CONCLUSION

➤ NCDS MAY NOT BE ABLE TO CURE COMPLETELY

BUT

➤ CAN BE CONTROLLED

AND

➤ ARE PREVENTABLE THROUGH EFFECTIVE INTERVENTIONS THAT
TACKLE RISK FACTORS

THANK YOU





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HIV/AIDS

PRESENTED BY: MRS SALOME LUANGA



HUMAN IMMUNODEFICIENCY SYNDROME

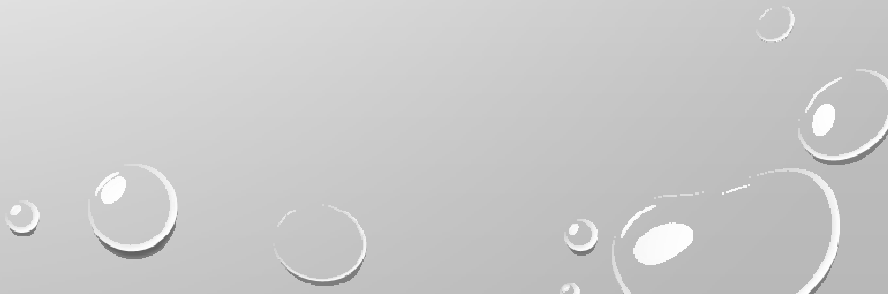
- **H** = **H**UMAN
 - **I** = **I**MMUNODEFICIENCY
 - **V** = **V**IRUS
- 

ACQUIRED IMMUNO-DEFICIENCY SYNDROME

- **A** = ACQUIRED - NOT INHERITED
- **I** = IMMUNE SYSTEM
- **D** = DEFICIENCY - INABILITY TO PROTECT AGAINST ILLNESS
- **S** = SYNDROME, A GROUP OF SYMPTOMS OR ILLNESSES THAT OCCUR AS A RESULT OF INFECTION

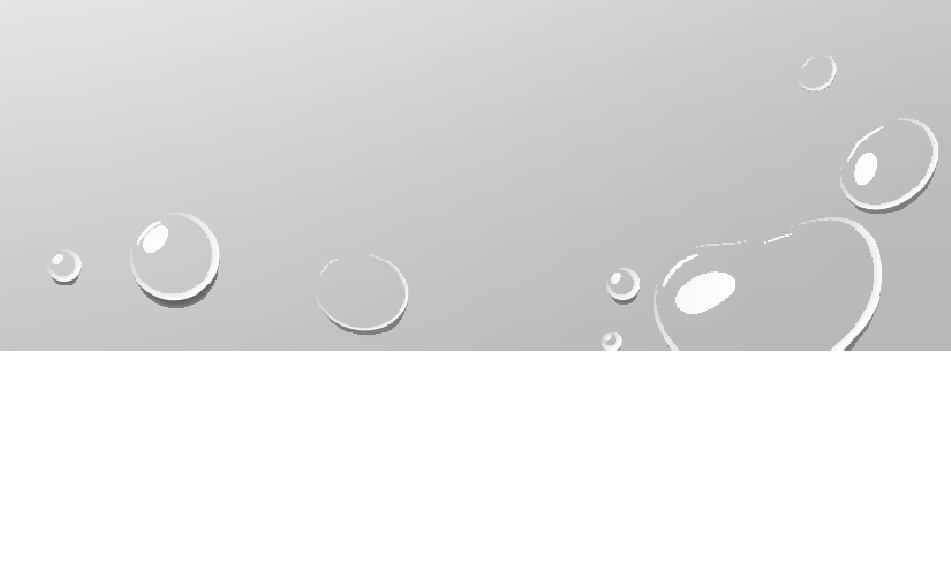


IMPACTS OF GLOBAL HIV

1. NEGATIVE ECONOMIC IMPACT ON COUNTRIES
 2. OVERWHELMED HEALTHCARE SYSTEMS
 3. DECREASING LIFE EXPECTANCY
 4. DETERIORATING CHILD SURVIVAL RATES
 5. INCREASING NUMBER OF ORPHANS
- 



AIDS

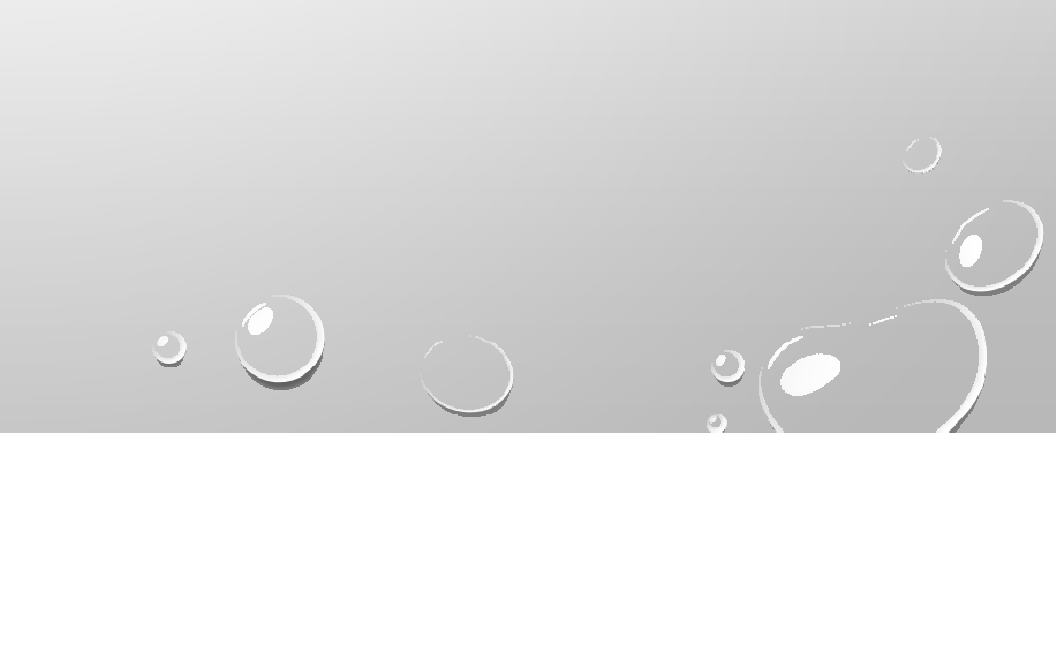
- IS A FATAL ILLNESS
 - CAUSED BY A RETROVIRUS HIV
 - IT BREAKS DOWN THE BODY'S IMMUNE SYSTEM, LEAVING THE PATIENT VULNERABLE TO A HOST OF LIFE-THREATENING:-
 - ✓ OPPORTUNISTIC INFECTIONS
 - ✓ NEUROLOGICAL DISORDERS
 - ✓ UNUSUAL MALIGNANCIES
- 

HIV - AGENT

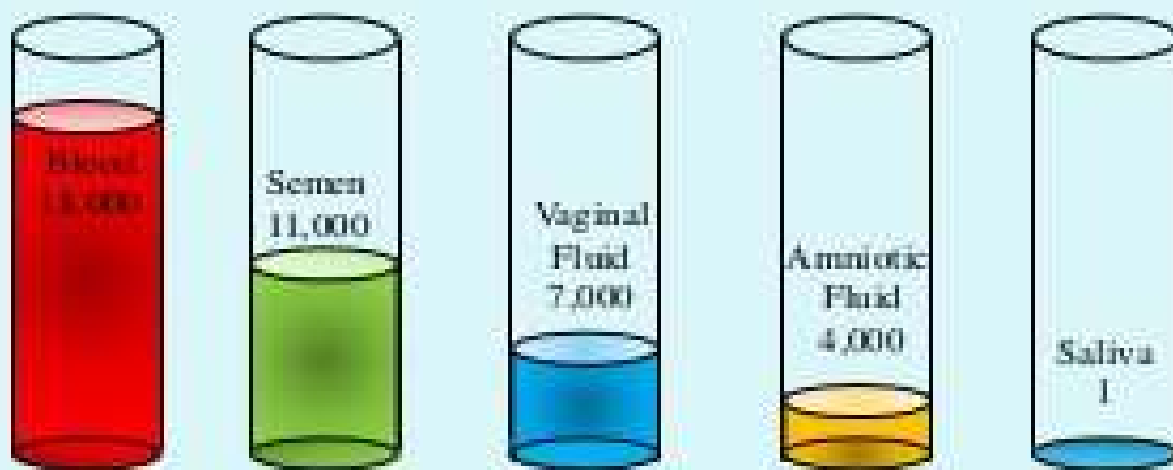
- IT IS A VIRUS
- IT REPLICATES BY ACTIVELY DIVIDING THE T4LYMPHOCYTES
- IT HAS A UNIQUE ABILITY OF DESTROYING THE T4 HELPER CELLS
- RESERVOIR – ONCE A PERSON GETS INFECTED THE VIRUS REMAINS IN HIS BODY LIFELONG. THE PERSON IS A SYMPTOMLESS CARRIER FOR YEARS BEFORE THE SYMPTOMS ACTUALLY APPEAR



SOURCE

- THE VIRUS IS FOUND IN GREAT CONCENTRATIONS IN BLOOD AND SEMEN
 - LOWER CONCENTRATIONS HAVE BEEN FOUND IN TEARS, SALIVA, BREAST MILK, URINE, CERVICAL AND VAGINAL SECRETIONS
 - HOWEVER, ONLY BLOOD AND SEMEN ARE KNOWN TO TRANSMIT THE VIRUS
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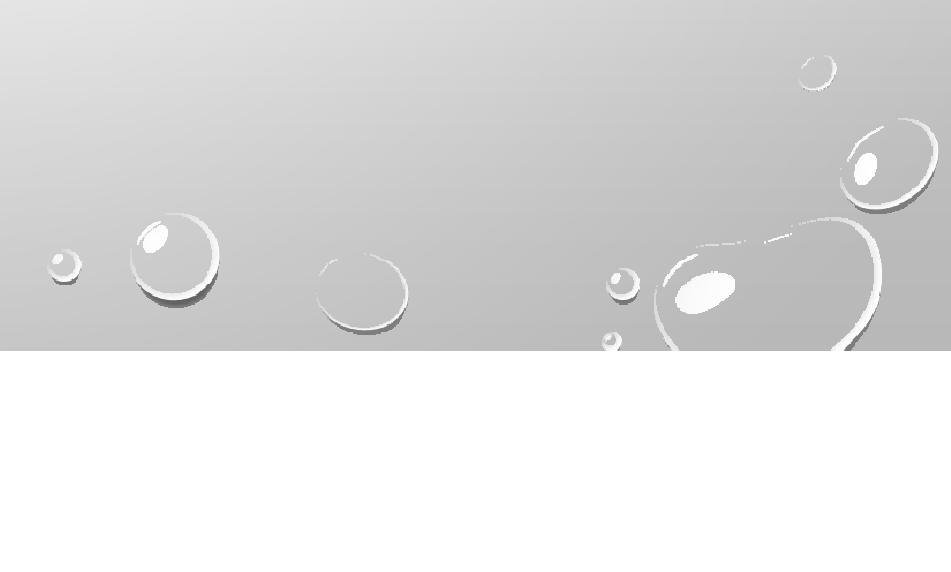
HIV in Body Fluids



Average number of HIV particles in 1 ml of these body fluids

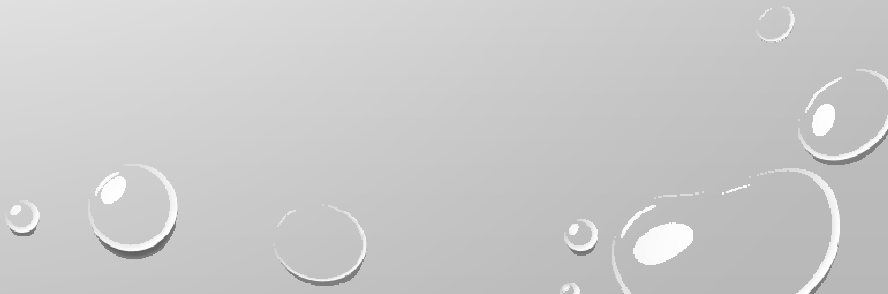


HOST

- MOST CASES ARE SEXUALLY ACTIVE PEOPLE AGED 20-49 YEARS
 - THE HIGH RISK GROUPS ARE:-
 - ✓ MALE HOMOSEXUALS
 - ✓ HETEROSEXUAL PARTNERS
 - ✓ INTRA VENOUS DRUG USERS
 - ✓ BLOOD RECIPIENTS
 - ✓ PATIENTS HAVING STDS
 - ✓ NEWBORNS OF INFECTED MOTHERS
- 



HIV TRANSMISSION

- HIV ENTERS THE BLOODSTREAM THROUGH:-
 - ✓ OPEN CUTS
 - ✓ BREAKS IN THE SKIN
 - ✓ MUCOUS MEMBRANES
 - ✓ DIRECT INJECTIONS
- 

ROUTES OF TRANSMISSION OF HIV

SEXUAL CONTACT:- MALE TO MALE

MALE TO FEMALE

FEMALE TO FEMALE

BLOOD EXPOSURE:- INJECTING DRUG USE/ NEEDLE SHARING

OCCUPATIONAL EXPOSURE

TRANSFUSION OF BLOOD PRODUCTS

PERINATAL:-

TRANSMISSION FROM MOTHER TO BABY

BREASTFEEDING

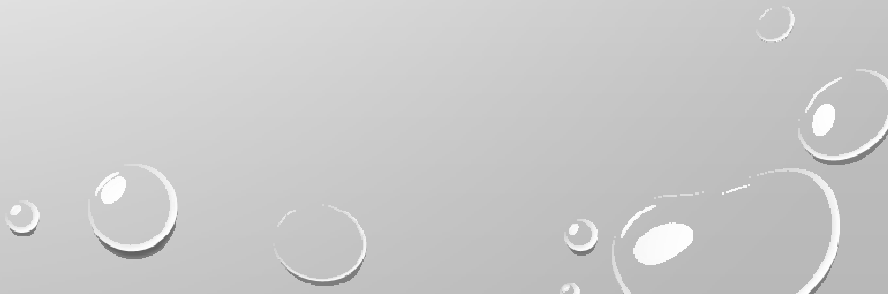
CONT'D

OCCUPATIONAL TRANSMISSION:- HEALTHCARE WORKERS/HOSPITAL STAFF
LABORATORY WORKERS

OTHER ROUTES:- ORGAN TRANSPLANTATION
ARTIFICIAL INSEMINATION
NEEDLE PRICK

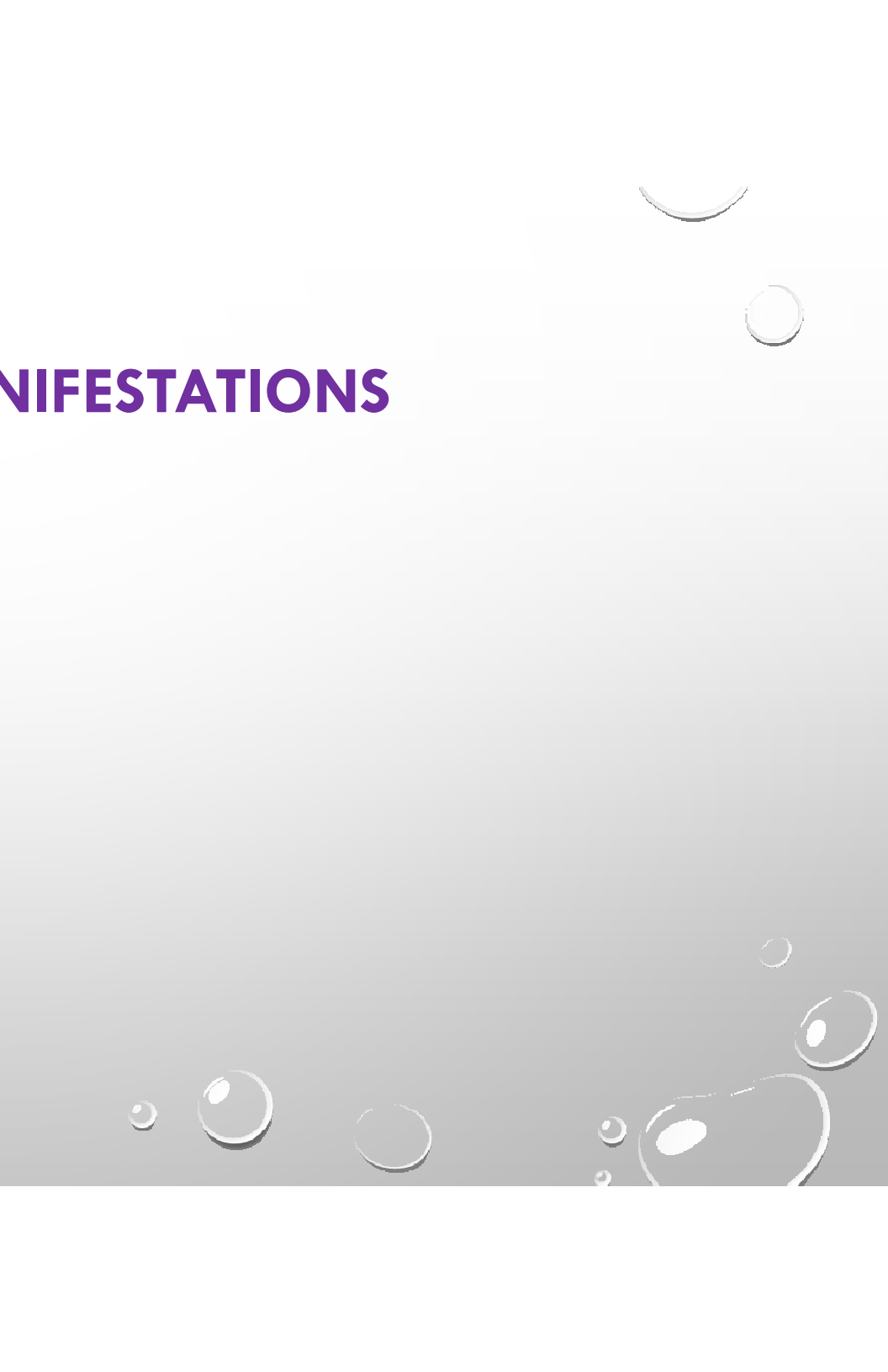


INCUBATION PERIOD

- THE INCUBATION PERIOD IS FROM HIV INFECTION TILL IT DEVELOPS AS AIDS
 - FROM FEW MONTHS TO 10 YEARS OR EVEN MORE
 - HOWEVER, IT IS ESTIMATED THAT 75% OF THE PEOPLE INFECTED WITH HIV WILL DEVELOP AIDS AT THE END OF 10 YEARS
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CLINICAL MANIFESTATIONS

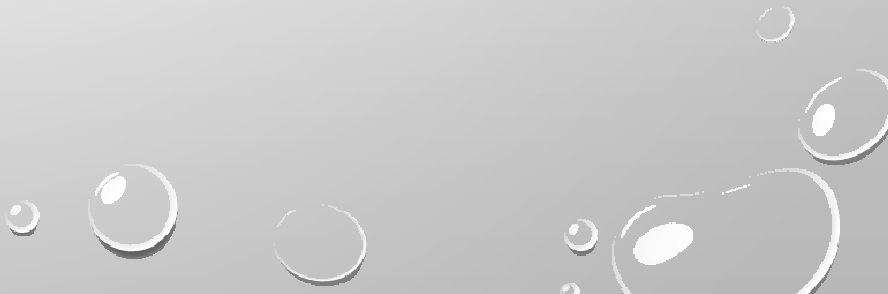
- 1. INITIAL INFECTION
 - 2. ASYMPTOMATIC CARRIER STATE
 - 3. AIDS RELATED COMPLEX (ARC)
 - 4. AIDS
- 

1. INITIAL INFECTION

- EXCEPT FOR A GENERAL MILD ILLNESS OF FEVER, SORE THROAT AND RASH, MOST HIV INFECTED PEOPLE HAVE NO SYMPTOMS FOR THE FIRST 5 YEARS
- HOWEVER, THEY CAN INFECT OTHERS: ONCE INFECTED, THE PEOPLE ARE INFECTED FOR LIFE
- ANTIBODY RESPONSE TAKES 2-12 WEEKS TO APPEAR IN THE BLOOD STREAM. THIS PERIOD IS CALLED “WINDOW PERIOD” IE TESTS NEGATIVE



2. ASYMPTOMATIC CARRIER STATE

- INFECTED PEOPLE HAVE ANTIBODIES BUT WITHOUT ANY OBSERVABLE SIGNS OR DISEASE
 - THEY HAVE PERSISTENT GENERAL SICKNESS
 - ITS NOT VERY CLEAR HOW LONG THIS STAGE LASTS
- 

3. AIDS RELATED COMPLEX

- HAVE ILLNESSES CAUSED BY DAMAGE TO THE IMMUNE SYSTEM BUT **WITHOUT** THE OPPORTUNISTIC INFECTIONS AND CANCERS ASSOCIATED WITH AIDS

SIGNS

- ✓ UNEXPLAINED DIARRHEA LASTING MORE THAN 1 MONTH
- ✓ FATIGUE
- ✓ LOSS OF BODY WEIGHT
- ✓ FEVER
- ✓ NIGHT SWEATS
- ✓ ORAL THRUSH
- ✓ ENLARGED SPLEEN

4. COMMON MANIFESTATION OF AIDS

- **LUNG INFECTION** EG PNEUMONIA
- **GASTRO INTESTINAL INFECTION** CANDIDIASIS OF THE MOUTH OR OESOPHAGUS
- **SKIN INFECTIONS**
- **CENTRAL NERVOUS SYSTEM INFECTION:-** DEMENTIA, MENINGITIS ETC



CAUSES/CONTRIBUTIONS OF HIV RISK

THREE LEVELS CONTRIBUTE TO INDIVIDUAL SUSCEPTIBILITY OF HIV

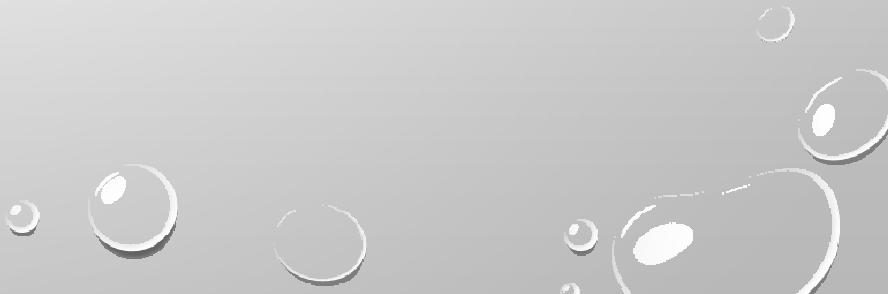
STRUCTURAL LEVEL

- RESOURCE AVAILABILITY
- PHYSICAL ENVIRONMENT
- ORGANIZATIONAL SYSTEMS
- RELATIONSHIPS

COMMUNITY LEVEL

- COMMUNITY NORMS
- SOCIAL NETWORKS
- SOCIAL CAPITAL
- RELATIONSHIPS

INDIVIDUAL LEVEL

- BEHAVIOUR
 - ATTITUDE
 - PERCEPTION
 - KNOWLEDGE
- 

PREVENTION OF HIV

PRIMARY

ACTIVITIES FOCUSED ON PREVENTING UNINFECTED PERSONS FROM BECOMING INFECTED

SECONDARY

AIMED AT ENABLING PEOPLE TO KNOW THEIR:-
STATUS

WELFARE RIGHTS


LIFESTYLE/BEHAVIOUR

TERTIARY

AIMS TO MINIMIZE THE EFFECTS OF ILL HEALTH EXPERIENCED BY ONE WHO IS SYMPTOMATIC WITH HIV DISEASE (EG USE OF DRUGS AND COMPLEMENTARY THERAPIES)



PREVENTION OF HIV CONT

1. AVOID MULTIPLE PARTNERS
 2. BE FAITHFUL TO YOUR PARTNER
 3. USE OF CONDOMS
 4. USE OF STERILE NEEDLES EACH TIME FOR INJECTION/NEVER SHARE NEEDLES
 5. AVOID UNNECESSARY BLOOD TRANSFUSION
 6. ALL PREGNANT MOTHERS SHOULD BE TESTED FOR HIV
 7. USE OF STANDARD WORK PRECAUTIONS EG HAND HYGIENE, PERSONAL PROTECTIVE GEAR ETC.
 8. PROPER DISPOSAL OF BIOMEDICAL WASTE
 9. EDUCATION
- 



DIAGNOSIS OF HIV

HIV ANTIBODY TEST:- USING DIFFERENT ANTIGEN AND/OR WITH DIFFERENT PRINCIPALS OF THE TEST

VIRAL ANTIGEN TEST:- USED FOR SCREENING BLOOD DONORS

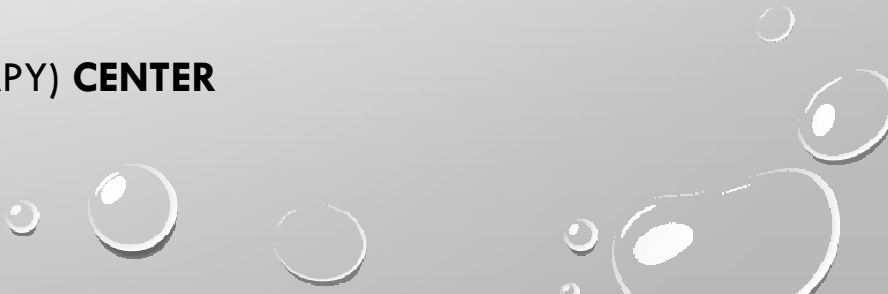
FOR DETECTION OF VIRAL NUCLEIC ACID IN BLOOD

DETERMINING THE CD4 COUNTS:- TO ASSESS THE DISEASE PROGRESSION





TESTING OF HIV

- **ICTC CENTER** INTEGRATED COUNSELING AND TESTING CENTERS
 - **FREE HIV TESTING**
 - **CONFIDENTIAL COUNSELING**
 - **REFERRAL TO NEAREST ART (ANTI RETROVIRAL THERAPY) CENTER**
- 



THANK YOU

