



A Pocket Guide: HIV Nursing Care

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STRESS MANAGEMENT

- Find or establish a support group of peers
- Rely on your religious faith
- Find positive aspects of your work. Remember what you enjoy most about your work
- Learn from your patients and co-workers
- Keep inspirational sayings or pictures in your work space
- Manage your time, plan ahead whenever possible, keep reasonable hours
- Make time for yourself and family
- Keep a boundary between work and home
- Eat properly and get enough rest
- Take time off; go on holiday/vacation
- Develop a relaxation strategy that works for you



STRESS REDUCER

Smell the Flower, Cool the Soup

- Sit quietly, Inhale deeply. Exhale completely. Inhale deeply. Exhale completely.
- Imagine you have a favorite flower in one hand and a hot bowl of soup in your other hand.
- Now inhale deeply and smell the flower. Exhale completely and cool the soup.
- Inhale deeply and smell the flower. Exhale completely and cool the soup.
- Repeat until you feel relaxed.



INSPIRATION

Courage

As the old man walked along the beach at dawn,

He noticed a young woman ahead of him picking up starfish and flinging them into the sea.

Finally catching up to her, he asked why she was doing this,

She answered that the stranded starfish would die if left until the morning sun.

“But the beach goes on miles and there are millions of starfish” countered the old man.

“How can your effort make any difference?”

The young woman looked at the starfish in her hand and threw it to safety in the waves.

“It makes a difference to this one,” she said.



COUNSELLING SKILLS AND TECHNIQUES CHECKLIST

Skills and Techniques	Strategies, Statements, Behaviors
Establishing a relationship	<ul style="list-style-type: none"> ▪ Lean forward when talking ▪ Make eye contact ▪ Show interest
Listening	<ul style="list-style-type: none"> ▪ Look at client ▪ Body language should indicate attentiveness to speaker ▪ Facial expression should indicate care and interest ▪ Use encouragers such as “yes”, “okay”, etc. ▪ Check with client to be sure you understand ▪ Occasionally sum up client’s statements
Empathy	<ul style="list-style-type: none"> ▪ Comment on client’s challenges while also indicating client’s strengths ▪ Reflect statements back to client to let the client know you understand
Questioning	<ul style="list-style-type: none"> ▪ Use closed ended questions only to get basic information such as demographic data. Avoid overuse of closed-ended questions ▪ Use open ended questions to get more in-depth information from client; “Tell me about...” “Describe....” ▪ Style of questioning should reflect interest, care and concern rather than interrogation
Clarifying	<ul style="list-style-type: none"> ▪ Check understanding of what the client is saying ▪ Use phrases such as: “Are you saying that..?” “Did I get you right when you said...?” or “Correct me if I’m wrong...?”
Commenting on the Process	<ul style="list-style-type: none"> ▪ Comment on client’s mood changes or emotional reactions to assist client in expressing their feelings ▪ Make client aware of discrepancies between verbal and non-verbal behavior
Summarizing	<ul style="list-style-type: none"> ▪ Take time to summarize information the client shares
Use of silence	<ul style="list-style-type: none"> ▪ Wait after posing questions to clients—give the client time ▪ Allow the client space to consider questions and formulate answers
Widening the system	<ul style="list-style-type: none"> ▪ Identify people in client’s support system
Taking one down	<ul style="list-style-type: none"> ▪ Inquire how client has handled similar issues in the past ▪ Assess client’s problem solving skills
Enactment	<ul style="list-style-type: none"> ▪ Give client an opportunity to demonstrate problems ▪ Get client to practice (role-play) potential solutions
Empty Chair	<ul style="list-style-type: none"> ▪ Use the “empty chair” technique to help client verbalize their thoughts about what significant others may say ▪ Use this technique to help the client role-play a solution
Blocking	<ul style="list-style-type: none"> ▪ Keep the session balanced, ensure that all parties are heard
Shifting alliance	<ul style="list-style-type: none"> ▪ Demonstrate interest and understanding in each person’s position if more than one person is part of the conversation

TALKING WITH CHILDREN UNDER SIX ABOUT HIV

GENERAL CONSIDERATIONS

- Most children ≤ 6 will not understand HIV and will not be able to keep it private
- It's possible to give simple, honest explanations about illness without naming the illness or saying the words HIV or AIDS
- It's best to be truthful
- It's important children don't think that it is their fault that they are sick, or that it's their fault their parent is sick

SUGGESTIONS FOR EXPLAINING HIV

- You have a germ that lives in your blood
- That germ can make you sick because it hurts the healthy parts of your blood
- When all your healthy cells are hurt by this germ, your body has difficulty staying healthy and you can get sick with a bad cough, diarrhoea, or other things that make you feel bad
- The medicine that you take kills this bad germ in your blood so your blood can be healthy again
- If you take your medicine every single day, you can stay healthy and stop this germ from growing back and making you sick
- It's very important that you only talk to your family and your doctor about being sick; children can be mean to other children and make fun of them and we don't want anyone being mean to you

SAMPLE QUESTIONS CHILDREN UNDER SIX MAY ASK:

- *How did I get this germ in my blood?*
You were born with it; you've had it since you were a baby
- *Can you get rid of this germ?*
The medicine can get rid of most of it so you can stay healthy, but we can't get rid of all of it
- *When can I stop taking my medicine?*
You have to take your medicine every single day so you won't get sick. Hopefully one day the doctors will be able to get rid of this germ so you won't have to take your medicine anymore, but for now, you have to take your medicine every day

TALKING WITH OLDER CHILDREN ABOUT HIV

GENERAL CONSIDERATIONS

- It's possible to give simple, honest explanations to a child about their infection without saying "HIV" or "AIDS". If you feel the child is not ready to hear those words, you can still give honest information about their illness
- Some children want a lot of information and some children seek very little information. When you give the child information, follow the child's lead in deciding how much detail to provide. Keep information simple if the child asks no questions, but answer questions as honestly as possible
- Always let the family answer sensitive questions about how parents became infected. If a parent is not present, defer the conversation until they are available
- It is important to tell children that it is not their fault that they are sick and not their fault that their parent is sick

SUGGESTIONS FOR EXPLAINING HIV TO AN OLDER CHILD

- You have to come to the doctor because you have an illness - that means that you may get sick sometimes
- The kind of illness that you have is a germ that lives in your blood. Another name for a germ is a virus. (Ask: "What do you know about germs and illness?" in order to correct any misinformation the child has)
- If the child is ready to learn about "HIV", add here: "The name of the virus you have is HIV". Then ask the child: "What have you heard about HIV?" or "What do you know about HIV?" Asking these questions gives you the opportunity to correct any misinformation
- Viruses can make a person very sick, and the doctor visits and the medicine are necessary to keep you healthy
- The virus (HIV) that you have in your blood can harm the healthy cells in your body. You need your healthy cells because they help to protect you from sicknesses
- The healthy cells are called "T Cells". The virus you have can damage your T-cells
- When all your healthy T-cells are damaged by the virus (HIV), your body has trouble staying healthy. Without your healthy "T cells" you can get sick with a bad cough, diarrhea, or other things that make you feel bad
- The medicine that you take kills this bad virus (HIV) in your blood
- If you take your medicine every day, your healthy T-cells can grow back and you can stay healthy
- If you stop taking your medicine, the virus (HIV) will get stronger in your blood and damage all your healthy T-cells and if that happens, you can get sick.
- If you don't take your medicine every day, the virus can get stronger and stronger, and the medicine you take might not be able to fight it anymore. If that happens, your doctor calls it "resistant virus". Resistant virus is much harder to treat
- When the doctors examine your blood, they find out how much virus is in your blood - called your "viral load" - and how many healthy T-cells you have
- You want very little virus (a low viral load) and lots of healthy T-cells to keep you healthy
- If you take your medicine every single day, you will have a low viral load, and high T-cells, which will help you to stay healthy and avoid serious sickness

TRANSMISSION

- You got this germ/virus (HIV) in your blood when you were born. Your mom has the same virus in her blood and you got it from your mom
- You cannot get this virus or give it to anyone else just by being around them or by being close to them. It is ok to play, go to school, and to hug your friends and family. They will not get the virus just because you are close to them
- It is important not to let other people touch your blood. If you fall and hurt yourself and are bleeding, don't let others touch your blood

PRIVACY

- We are telling you why you come to the doctor and why you take medicine so you will know how to take better care of yourself
- It is important to keep information about your body and your illness to yourself. This is private information and should only be talked about with your doctors and your family
- Kids can be really mean and make fun of you or treat you badly if they find out private things about you. It's important to keep information about your body, your illness and your medicine private
- Explain to child who they may safely speak to about their illness

SAMPLE QUESTIONS CHILDREN 7-11 YEARS OLD MAY ASK:

Can you get rid of this germ/virus (HIV)?

The medicine can get rid of most of the virus so you can stay healthy, but the medicine can't get rid of all of it. We don't have a cure for this illness and can't make it go away completely

When can I stop taking my medicine?

You have to take your medicine every single day so you won't get sick. Hopefully one day the doctors will be able to get rid of this virus (HIV) so you won't have to take your medicine anymore, but for now, you have to take your medicine every day

How did my mom get this?

Defer to mom. If mom is not present, answer "I don't know how your mom got it"

Who else in the family has this?

Defer to parent. If parent is not present, answer "I don't know who else in your family has this"

If I got it from my mom, how come my brother(s) and sister(s) don't have it?

That's a good question but one we don't have the answer to. We know that not all children get the virus from their mom, but we don't know why some children get it and others do not. What we do know is that it is very unfair and hard for the child who did get it, because you have to take medicine and have to deal with getting sick and that's very hard for a kid

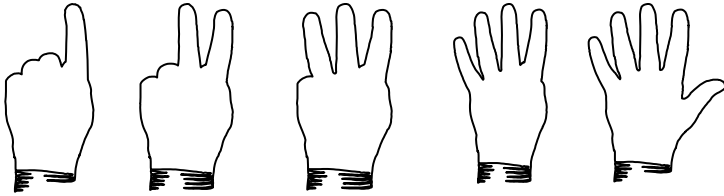
Am I going to die?

The medicines that we have to treat this virus are very good. If you take your medicine, you can stay healthy for a very long time

PAIN MANAGEMENT

ASSESSING SEVERITY OF PAIN IN ADULTS AND ADOLESCENTS

Adolescent and adult patients grade the pain severity with a hand

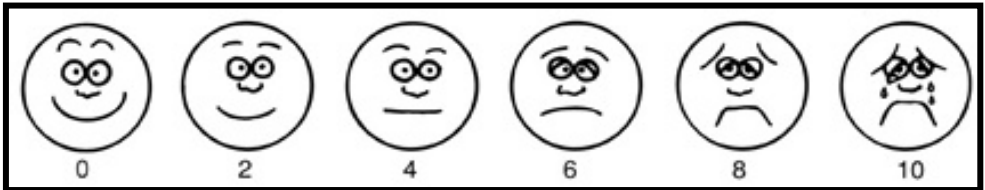


(0 fingers = no pain, 1 finger= very mild pain, 2 fingers= a little more, 3 fingers= pretty bad, 4 fingers= very bad, 5 fingers= the very worst pain)

ASSESSMENT SEVERITY OF PAIN IN CHILDREN

Children need adults to recognize and respond to their pain. They often do not complain.

- Brief pain: crying and distressed facial expression
- Persistent pain: look for behavioural signs of pain such as irritability, not wanting to move, lack of interest, decreased ability to concentrate, sleeping problems, changes in how child moves, restlessness, and increased breathing rate.
- Consider a trial of analgesia to help determine whether a child is experiencing pain.
- Nurses and physicians should ask themselves, "Would I have pain if I had this condition?"
- Older child (5 years +) can grade pain by pointing at faces such as these:



0= "this face is happy and does not hurt at all"; 2= "This face hurts just a little bit"; 4= "This face hurts a little more"; 6= "This face hurts even more"; 8= "This face hurts a whole lot"; 10= "This face hurts as much as you can imagine, but you don't have to be crying to feel this bad"

ANALGESIC LADDER

STEP 1: Non opioid (paracetamol or ibuprofen or aspirin (no aspirin for children under 12)

STEP 2: Opioid for mild to moderate pain (e.g. codeine) with or without a non-opioid (aspirin or paracetamol or ibuprofen)

STEP 3: Opioid for moderate to severe pain (oral morphine) with or without a non-opioid

SPECIAL PAIN PROBLEMS

There are nerve injury pains and pains from special conditions which can be helped by specific medication. Provide specific treatment in combination with drugs from analgesic ladder.

ADJUVANT MEDICATION	USES
Steroids	For reducing swelling and inflammatory responses and therefore easing pressure on surrounding structures
Muscle relaxants	For muscle spasms that can be caused by nerve involvement and may make pain worse.
Central Nervous System	Anxiolytics for anxiety Antidepressants for depression and/or for nerve pain (burning, aching, neuropathy) Anticonvulsants for nerve pain (shooting pains)

CHRONIC PAIN MANAGEMENT

If possible, give analgesics by mouth (avoid intramuscular)

- Give analgesics at fixed time intervals for chronic or persistent pain (not "as needed")
- Start with small dose and then titrate dose against patient's pain, until the patient is comfortable
- Next dose should happen before the effect of previous dose wears off
- For breakthrough pain, give an extra "rescue" dose in addition to the regular schedule
- Give by the "analgesic ladder" (see other side)
- Appropriate use of opioids does not hasten death

THINGS TO REMEMBER IN PAEDIATRIC PAIN MANAGEMENT

- Never lie about painful procedures
- Avoid intramuscular injections
- Use cognitive methods with analgesics, such as age-appropriate active distraction, games, conversations, stories, music
- Use physical comforting measures: swaddling, carrying, warmth, breastfeeding, feeding, stroking, rocking, massage
- Note that appropriate use of opioids does not hasten death
- Prevent and treat side effects of pain medications like constipation or nausea

SOUTH AFRICA MODIFIED PAEDIATRIC WHO STAGING FOR HIV INFECTION

WHO CLINICAL STAGE I

- Asymptomatic
- Generalized Lymphadenopathy
- Hepatomegaly
- Splenomegaly
- Parotomegaly
- Chronic suppurative OM
- Eczema or Seborrhoeic Dermatitis

WHO CLINICAL STAGE II

- Unexplained chronic diarrhoea (≥ 2 weeks)
- Failure to thrive (60-80% expected body weight; Not responding to nutritional rehabilitation or anti-TB therapy (if indicated) and no correctable causes)
- Recurrent or severe bacterial infection (≥ 2 episodes pneumonia or 1 episode meningitis)
- Oral candidiasis beyond neonatal period (severe, persistent, recurrent, not responding to topical treatment)
- Haematological (Thrombocytopenia not responding to prednisone; Neutropenia not responding to switch from Cotrimoxazole to Dapsone)
- Severe lymphoid interstitial pneumonitis
- ≥ 2 episodes Zoster or severe herpetic disease

WHO CLINICAL STAGE III

- AIDS-defining opportunistic infection
- Severe failure to thrive ($< 60\%$ expected body weight; not responding to nutritional rehabilitation or TB therapy if clinically indicated;
- Progressive encephalopathy
- Recurrent septicaemia (≥ 2 episodes)
- Bronchiectasis
- Cardiomyopathy
- Progressive nephropathy
- Candidiasis (oesophageal or pulmonary)
- Disseminated fungal infection
- Disseminated mycobacterial infection
- *Pneumocystis carinii* pneumonia (PCP)
- Progressive Multifocal Leukoencephalopathy
- Cerebral toxoplasmosis with onset > 1 month of age
- Recurrent/persistent *Salmonella* ESBL
- Malignancies

WHO STAGING FOR ADULT AND ADOLESCENT HIV INFECTION

Clinical Stage I: *Performance Scale 1: Asymptomatic, normal activity*

- Asymptomatic
- Current or past history of persistent generalized lymphadenopathy (PGL)

Clinical Stage II: *Performance Scale 2: Symptomatic, normal activity*

- Weight loss, $\leq 10\%$ of body weight
- Minor mucocutaneous manifestations (seborrheic dermatitis, prurigo, fungal nail infections, recurrent oral ulcerations, angular cheilitis)
- Herpes zoster within the last 5 years
- Recurrent upper respiratory tract infections (i.e. bacterial sinusitis)

Clinical Stage III: *Performance scale 3: Bed-ridden <50 % of the day during the past month*

- Weight loss $>10\%$ body weight
- Unexplained chronic diarrhoea > 1 month
- Unexplained prolonged fever (intermittent or constant) > 1 month
- Oral candidiasis (thrush)
- Oral hairy leukoplakia
- Pulmonary tuberculosis within the past year
- Severe bacterial infection (i.e. pneumonia, pyomyositis)

Clinical Stage IV: *Performance scale 4: Bed-ridden >50% of the day during the last month*

- HIV wasting syndrome
- *Pneumocystis carinii* pneumonia
- CNS toxoplasmosis
- Cryptosporidiosis with diarrhoea > 1 month
- Extrapulmonary Cryptococcosis
- Cytomegalovirus (CMV) disease of an organ other than the liver, spleen or lymph nodes
- Herpes simplex virus (HSV) infection, mucocutaneous > 1 month, or visceral any duration
- Progressive multifocal leukoencephalopathy (PML)
- Any disseminated endemic mycosis (i.e. Histoplasmosis, coccidioidomycosis)
- Candidiasis of the esophagus, trachea, bronchi or lungs
- Disseminated atypical mycobacterium
- Non-typhoid Salmonella septicemia
- Extrapulmonary tuberculosis
- Lymphoma
- Kaposi's sarcoma (KS)
- HIV encephalopathy

SIDE EFFECTS OF SELECTED ANTIRETROVIRAL DRUGS

Zidovudine (ZDV)	<ul style="list-style-type: none"> ▪ Generally well-tolerated ▪ Mild: Headache, nausea, fatigue (often transient and temporary but may require stopping/changing the drug if persistent), darkening of nail beds ▪ Serious: Anemia, neutropoenia (usually in first 6 months), hepatitis, lactic acidosis, myopathy (rare), myositis ▪ Take with or without food ▪ Liquid solution may be kept at room temperature
Abacavir (ABC)	<ul style="list-style-type: none"> ▪ Generally very well tolerated ▪ Mild: headache, nausea, malaise ▪ Serious: hypersensitivity reaction includes fever, rash, nausea, vomiting, diarrhoea, malaise, possible cough. Discontinue use if hypersensitivity suspected, and do not re-challenge (can be fatal). Lactic acidosis ▪ Teach patients to report signs of hypersensitivity ▪ Take with or without food
Lamivudine (3TC)	<ul style="list-style-type: none"> ▪ Generally very well tolerated ▪ Mild: headache, fatigue, rashes, diarrhoea, abdominal discomfort, nausea ▪ Uncommon but serious: Peripheral neuropathy, lactic acidosis and hepatic steatosis ▪ Take with or without food ▪ Oral solution can be kept at room temperature
Stavudine (d4T)	<ul style="list-style-type: none"> ▪ Generally well tolerated ▪ Mild: headache, stomach upset, rashes ▪ Uncommon but serious: Peripheral neuropathy , pancreatitis, lactic acidosis, elevated LFTs ▪ Take with or without food ▪ Liquid formulation must be refrigerated
Didanosine (ddl)	<ul style="list-style-type: none"> ▪ Not very palatable, but generally tolerated ▪ Tablets must be chewed or dispersed in water ▪ Tablets have a buffering agent that is chalky and somewhat bitter ▪ Mild: Nausea, vomiting, diarrhoea ▪ Serious: Pancreatitis, peripheral neuropathy, lactic acidosis ▪ Avoid combining with d4T if possible (increased risk of adverse effects) ▪ Take at least 30 minutes before and 2 hours after a meal and do not take with acidic liquids such as citrus juice

SIDE EFFECTS OF SELECTED ANTIRETROVIRAL DRUGS CONTINUED

Nevirapine (NVP)	<ul style="list-style-type: none"> ▪ Generally well tolerated ▪ Mild: Rash is usually mild to moderate, but can be serious ▪ Serious: Rash, Stevens-Johnson's Syndrome, hepatic toxicity ▪ Usually prescribed as an induction dose (1/2 usual dose) for 2 weeks before starting maintenance dose to reduce risk of rash ▪ Cannot be used with estrogen-based contraceptives ▪ May be taken with or without food ▪ Liquid formulation may be kept at room temperature
Efavirenz (EFV)	<ul style="list-style-type: none"> ▪ Generally very well tolerated ▪ Use only if at least 3 years of age and 10 kg ▪ Mild: CNS disturbances, insomnia, vivid dreams. CNS issues usually resolve in 2–4 weeks. Rash can be mild or serious. ▪ Serious: Rash can range from mild to serious. Serious psychiatric disturbance is rare ▪ Take with or without food ▪ Suggest bedtime dosing to avoid CNS side effects
Lopinavir/ritonavir (LPV/r)	<ul style="list-style-type: none"> ▪ Liquid solution not very palatable; suggest measures to improve ▪ RTV employed in low dose as a pharmaco-enhancer ▪ Not indicated under 6 months of age ▪ Mild (usually): Nausea, vomiting, abdominal pain, headache, diarrhoea, rashes ▪ Serious: Lipid abnormalities, diabetes, hepatitis, pancreatitis, ketoacidosis ▪ Should not use with Rifampin ▪ Take with food
Ritonavir (RTV)	<ul style="list-style-type: none"> ▪ Liquid solution not very palatable; suggest measures to improve ▪ Mild: Nausea, vomiting, abdominal pain, headache, diarrhoea (less commonly, these symptoms may persist and be intolerable), numbness around lips ▪ Serious: Severe nausea, vomiting, diarrhoea, abnormal fat distribution, lipid abnormalities, hepatitis, pancreatitis ▪ Usually start drug at lower doses and increase over 7 days to the desired dose in order to lessen GI side effects ▪ Oral solution: May keep at RT, but preferably in fridge ▪ Take with food

ANTIRETROVIRAL DOSING INFORMATION

ARV DRUG	PAEDIATRIC DOSING	ADULT DOSING
Zidovudine (ZDV)	<ul style="list-style-type: none"> ▪ 180–240 mg/m²* twice per day 	<ul style="list-style-type: none"> ▪ 300 mg twice per day
Lamivudine (3TC)	<ul style="list-style-type: none"> ▪ 4 mg/kg twice per day 	<ul style="list-style-type: none"> ▪ 150 mg twice per day
Stavudine (d4T)	<ul style="list-style-type: none"> ▪ 1 mg/kg twice per day (up to weight of 30 kg) 	<ul style="list-style-type: none"> ▪ > 60 kg: 40 mg twice per day ▪ < 60 kg: 30 mg twice per day
Abacavir (ABC)	<ul style="list-style-type: none"> ▪ 8 mg/kg twice per day, maximum dose 300 mg twice per day 	<ul style="list-style-type: none"> ▪ 300 mg twice per day
Didanosine (ddl)	<ul style="list-style-type: none"> ▪ 120 mg/m²* twice per day 	<ul style="list-style-type: none"> ▪ > 60 kg: 200 mg twice per day (tablets) or 250 mg twice per day (powder) ▪ < 60 kg 125 mg twice per day (tablets) or 167 mg twice per day (powder)
Nevirapine (NVP)	<ul style="list-style-type: none"> ▪ Induction dose: 4 mg/kg once daily x 14 days ▪ Maintenance dose: < 8 years 7 mg/kg twice per day ▪ >8 years 4 mg/kg twice per day 	<ul style="list-style-type: none"> ▪ Induction dose: 200 mg once per day x 14 days ▪ Maintenance dose: 200 mg twice per day
Efavirenz (EFV)	<ul style="list-style-type: none"> ▪ 10–14.9 kg 200 mg once daily ▪ 15–19.9 kg 250 mg once daily ▪ 20–24.9 kg 300 mg once daily ▪ 25–32.9 kg 350 mg once daily ▪ 33–40 kg 400 mg once daily 	<ul style="list-style-type: none"> ▪ 600 mg once per day
Lopinavir/ritonavir (LPV/r)	<ul style="list-style-type: none"> ▪ <15 kg=12 mg lop/kg twice per day ▪ ≥ 15 kg=10 mg lop/kg twice per day ▪ > 40 kg same as adult 	400 mg lopinavir/100 mg ritonavir twice per day (3 capsules or 5 mL twice per day)
Ritonavir (RTV)	<ul style="list-style-type: none"> ▪ 400 mg/m² twice per day* Reduce risk of n/v by initiating treatment at 250 mg/m² twice per day and increasing over 5–7 days 	600 mg twice per day

To obtain Body Surface Area (BSA) for dosing
by m²: *Height (cm) x weight (kg)

3600

HIV RELATED LABORATORY TESTING

TEST	NOTES
HIV RNA PCR (viral load)	<ul style="list-style-type: none"> ▪ Directly measures the amount of HIV genetic material (RNA) in the blood of an infected person ▪ Can measure the level of virus in the blood as low as 50 copies/ml and as high as 1,000,000/ml ▪ High viral load correlates with lower CD4 cells, and more rapid disease progression. Viral load below 10,000 copies is usually considered "low" and above 10,000 considered "high" ▪ Viral load testing is one way to determine how well HIV medicines (ARVs) are working. Effective ARV treatment can reduce the viral load below detectable levels ▪ Increasing viral load while on ARVs may indicate the medicine is not effective or is not being taken correctly
HIV ELISA/Western Blot(WB)	<ul style="list-style-type: none"> ▪ Tests used to determine presence or absence of HIV antibodies in the blood ▪ ELISA is used first, and Western Blot is used to confirm if +. ▪ Positive ELISA + WB results indicate HIV infection in anyone over the age of 24 months (Infants under 2 years have maternal antibody from HIV infected mother regardless of infection status of the infant) ▪ Seroconversion to positive antibody testing may take 3 to 4 weeks post infection with HIV, but virtually all individuals seroconvert within 6 months of infection
CD4 cell count (T-cells) CD4 lymphocyte (T-cell) percentage	<ul style="list-style-type: none"> ▪ CD4 cells (T-cells) are the primary target of HIV infection. As HIV infection advances, the number of CD4 cells declines progressively ▪ CD4 (T-cell) testing is used to stage the disease, dictate therapeutic decisions about ARV treatment and prophylaxis of opportunistic disease. It is a prognostic indicator and complements the viral load assay ▪ CD4 percentage (percentage of total lymphocytes with the CD4 marker) is less subject to variation based on the CBC and differential and is preferred as a measure of the degree of immunosuppression <p><u>Adult measures:</u> No evidence of suppression: >500 cells (≥25%) Moderate suppression: 200-499 cells (15-24%) Severe suppression: <200 cells (<15%)</p> <p><u>Children 1-5 years of age</u> No evidence of suppression: ≥1,000 (≥25%) Moderate suppression: 500-999 (15-24%) Severe suppression: <500 (<15%)</p> <p><u>Children < 12 months</u> No evidence of suppression: ≥ 1,500 cells (>25%) Moderate suppression: 750-1,499 cells (15-24%) Severe suppression: <750 (<15%)</p>