Chronic HIV Care with ARV Therapy and Prevention

INTEGRATED MANAGEMENT OF ADOLESCENT AND ADULT ILLNESS

INTERIM GUIDELINES FOR HEALTH WORKERS AT
Health Centre or Clinic at District Hospital Outpatient

World Health Organization
This is one of 5 IMAI modules relevant for HIV care:

- **Acute Care**
- **Chronic HIV Care with ARV Therapy**
- **General Principles of Good Chronic Care**
- **Palliative Care: Symptom Management and End-of-Life Care**
- **TB Care with TB-HIV Co-management**

These are interim guidelines released for country adaptation and use to help with the emergency scale-up of antiretroviral therapy (ART) in resource-limited settings. These interim guidelines are revised periodically to reflect implementation experience and new data.

The IMAI guidelines are aimed at first-level facility health workers and lay providers in low-resource settings. These health workers and lay providers may be working in a health centre or as part of a clinical team at the district outpatient clinic. The clinical guidelines have been simplified and systematized so that they can be used by nurses, clinical aids, and other multipurpose health workers, working in good communication with a supervising MD/MO at the district clinic. The adherence, education and psychosocial support guidelines are aimed at delivery by lay providers or health workers after training in counselling skills. This module is designed to be used both as learning aid (during training) and as a job aid.

This module cross-references the IMAI **Acute Care** guidelines (which includes management of opportunistic infections and when to suspect TB and HIV) and **Palliative Care: Symptom Management and End-of-Life Care** (page references to Palliative Care guideline module are preceded by a capital P), not in the list of modules. If these are not available, national guidelines for the acute care of adults and palliative care can be substituted.

Integrated Management of Adolescent and Adult Illness (IMAI) is a multi-departmental project in WHO producing guidelines and training materials for first-level facility health workers in low-resource settings.

For more information about IMAI, please see [http://www.who.int/hiv/capacity/](http://www.who.int/hiv/capacity/) or contact the WHO country office or imaimail@who.int.

WHO HIV Department—IMAI Project
Chronic care based at the primary care facility near the patient’s home

CLINICAL TEAM ROLES AND RELATIONSHIPS

Consult/refer for certain patients according to guidelines
Refer back for scheduled follow-up for certain patients; for poor control on treatment plan; for severe toxicity or illness

First-level facility health workers at health centre or outpatient clinic at district hospital
- Suspect HIV, test and counsel.
- Begin HIV chronic care including education, support, prophylaxis.
- Clinical review.
- HIV clinical staging.
- Check TB status.
- Check pregnancy status.
- Assess eligibility for ART.
- Treat OIs, other complications.
- Adherence preparation and support.
- Health worker recommends or initiates first-line ART regimen in patient without complicating conditions with supervision of doctor or medical officer, or follows treatment plan.
- Clinical monitoring.
- Respond to new signs and symptoms on ART.
- Dispense medications.
- Arrange follow-up.
- Preventive interventions.
  - Basic prevention.
  - Positive prevention (for PLHA).

Doctors/medical officers at district outpatient clinic/hospital
- Develop treatment plan for certain patients.
- Initiate ART in patients with complications.
- Supervise clinical team(s) at first-level facility.
- Supervise ART delivered at first-level facility.
- Supervise chronic HIV care and prevention.
- Manage severe side effects and toxicity.
- Follow-up with lab, monitoring when needed.
- Evaluate for treatment failure.
- Manage severe illness.
- Hospital care as needed.

Good communication

Treatment plan for complicated patients
Back-referral
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* Sections 1, 2, 8.7–8.11 and Annex A can be done by a lay provider or nurse or other health worker, using communication aids.
HIV Care Entry Points

Self-referral

Outreach
- IDU
- Adolescents
- Sex workers

Family
- Partners
- Children

Community-based organizations
- Peer groups
- Home-based care
- PLHA organizations
- Orphans and vulnerable children projects

Traditional healers
Sequence of care after positive HIV test

1 Triage
- Patient returns for follow-up.
- Register.
- Interval history.

2 Education and support
- Give post-test, ongoing support.
- Discuss disclosure and partner testing.
- Explain treatment, follow-up care.
- Support chronic HIV care.
- Assess and support adherence to care, prophylaxis, ARV therapy.

3 Education & Support Guidelines (See Annex A)

Patient continues with home-based care and treatment support.

Family and friends, peer support, community health workers, other community-based caregivers, traditional practitioners, CBOs/NGOs/FBOs, OVC projects.

4 Prevention for PLHA’s
- Prevention of HIV transmission:
  - Safer sex, condoms
  - Disclosure support
  - Partner testing
  - Risk reduction plan
  - Counsel discordant couples
  - Household and caregiver precautions
  - Reproductive choice, PMTCT, family planning
- Positive living.
- For IDU, harm reduction interventions.

5 Patient self-management booklet

Caregiver booklet

6 Palliative Care: Symptom management and end-of-life care

7 Triage
- Patient returns for follow-up.
- Register.
- Interval history.

8 Education and support
- Give post-test, ongoing support.
- Discuss disclosure and partner testing.
- Explain treatment, follow-up care.
- Support chronic HIV care.
- Assess and support adherence to care, prophylaxis, ARV therapy.

9 Education & Support Guidelines (See Annex A)

Patient continues with home-based care and treatment support.

Family and friends, peer support, community health workers, other community-based caregivers, traditional practitioners, CBOs/NGOs/FBOs, OVC projects.

10 Arrange
- Dispense and record medications.
- Schedule follow-up.
- Link with community services.
- Record data on card.

11 Prevention for PLHA’s
- Prevention of HIV transmission:
  - Safer sex, condoms
  - Disclosure support
  - Partner testing
  - Risk reduction plan
  - Counsel discordant couples
  - Household and caregiver precautions
  - Reproductive choice, PMTCT, family planning
- Positive living.
- For IDU, harm reduction interventions.
3 Assess
- Do clinical review of symptoms and signs, medication use, side effects.
- Determine HIV clinical stage and functional status.
- Assess adherence to medications. (Use counsellor’s assessment and your own.)

4 Assess family status including pregnancy, family planning, and HIV status of children

5 Review TB status in all patients on each visit

6 Provide clinical care
- Provide acute care: IMAI Acute Care guideline module or IMCI if age below 5 years.
- For all, manage symptoms

7 Give prophylaxis if indicated

8 ARV therapy:
- Decide if eligible and where to initiate.
- Consult/refer to district clinician per guidelines.
- Do clinical monitoring of ARV therapy.
- Support adherence.

9 Manage chronic problems
Triage

- Greet the patient
- Register if new patient
- If follow-up, retrieve records
- Weigh
- Determine reason for visit
- Take interval history
- Decide if patient needs to see health worker on this visit

  Patient should see the health worker if:
  - scheduled for clinical visit
  - any new symptoms except for simple nausea

- If coughing, advise to cover mouth and have patient wait in a separate, well-ventilated area
2 Educate and support the patient on each visit

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When an HIV-positive patient returns for follow-up care, greet the patient and give education and support. Support to adherence is of key importance in chronic HIV care. These tasks can be done by a lay provider or nurse.

Detailed *Education and Support* guidelines are provided in Annex A at the end of this module and are also supported by communication aids.
Assess: Clinical review of symptoms and signs, medication use, side effects, complications

3.1 Ask

If this is first visit:
- Review history. Check record for TB, other opportunistic infections, chronic problems.

For all visits:
- How have you been?
- What problems have you developed?
- Have you had any of the following? If yes, ask for how long and use Acute Care guidelines:
  - Cough?
  - Night sweats?
  - Fever?
  - STI signs? (Use locally-adapted screening question.)
  - Diarrhoea?
  - Mouth sores?
  - New skin rash?
  - Headache?
  - Fatigue?
  - Nausea or vomiting?
  - Poor appetite?
  - Tingling, numb or painful feet/legs?
  - Any other pain? If yes, where?
  - Problems sleeping at night?
  - Sexual problems?
- Have you been feeling sad or unhappy or have you lost interest in your normal activities recently?
- Have you been feeling scared or frightened recently?
- Have you been worried about drinking too much alcohol or taking drugs recently?
- Have you needed urgent medical care? If yes, ask for record/diagnosis.
- Which medications are you taking and how often?
- Assess adherence (If on ART, see 8.9.)
- What problems have you had taking the medicines/how taken?
- Taking any other drugs (traditional remedies, TB, ARVs, illicit drugs, etc)?
- How are things at home?
- What usual physical activities are you doing?
- What else do you want to talk about?

3.2 Look

In all patients:
- Look for pallor. If pallor, check haemoglobin.
- Look at whites of the eye—yellow?
- Look for thrush.
- Weigh. Calculate weight gain or loss. Record. If weight loss, ask about food intake.
- Count pills to estimate adherence.
- If patient is sad or has lost interest, assess for depression.

If any new symptoms:
- Measure temperature.
- Check for nodes. If >2 cm, use Acute Care guideline module.
- Look for rash.
- Look for evidence of violence.
- Do further assessment of symptoms. (See pp. 15-52 of IMAI Acute Care guideline module or other adult guidelines.)

If first visit (also check every 6 months; skip if known problem):
- Tell patient you want to check his memory.
  - Name 3 unrelated objects, clearly and slowly. Ask patient to repeat them:
  - Can he or she repeat them? (registration problem?)
- If yes, wait 5 minutes and again ask, “Can you recall the 3 objects?” (recall problem?)
3.3 Lab:

*If first visit and tests available:*
- Do hgb and RPR if none in last year.
- Do CD4 if available. **Absence of lab should not delay ART.**

*For returning patients,* check for results of TB sputums and any other laboratory tests sent last visit.
- For patients on ZDV, check hgb before starting and at 2, 4 weeks.

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**If CD4 testing available but limited, priorities for CD4 within a public health approach to ART**

*Highest priority:*
- Pregnant women: stage 1, 2 or 3- to decide whether to start ART
- Other patients: stage 3
- Suspect treatment failure (decide whether to switch, after checking adherence)
- Clinical diagnosis in some severely ill patients (for example, to determine if Pneumocystis pneumonia or CMV retinitis likely)

*Middle priority:*
- Baseline CD4 in all patients (to decide whether to start ART)

*Low priority (skip if CD4 very limited):*
- CD4 at 6 months on ART then yearly

Note: ARV drug substitutions (as opposed to -switch of regimens) do not require CD4. Substitutions are in response to toxicity or idiosyncratic reactions.
3.4 Determine HIV clinical stage (3.6), then record

3.5 Determine functional status.

Decide (record) whether:

- Able to work, go to school, do housework, or harvest or play (in child) (WORK)
- Ambulatory but not able to work (AMB)
- Bedridden (BED)

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**Laboratory Request**

**Form for CD4**

Name of Health Centre______________________________Date________________

Name of Patient______________________________Age______Sex_______

Address______________________________________________________________

Patient’s ID Number (unique)_________________________

Reason:                                             ART:

- [ ] Staging                                         - [ ] Started_____________month/year
- [ ] Baseline                                        - [ ] Planned
- [ ] 6 months                                        - [ ] Uncertain eligibility
- [ ] 12 months
- [ ] 24 months
- [ ] Suspect treatment failure
- [ ] Other________________________________________

Signature of Person Requesting Examination_______________________________

Result Communicated to Health Centre—Date______________________________
### 3.6 WHO Adult HIV Clinical Staging

<table>
<thead>
<tr>
<th></th>
<th><strong>WHO Clinical Stage 1 Asymptomatic</strong></th>
<th><strong>WHO Clinical Stage 2 Mild Disease</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptoms</strong></td>
<td>No symptoms or only:</td>
<td>Weight loss 5-10 %</td>
</tr>
<tr>
<td></td>
<td>Persistent generalized lymphadenopathy</td>
<td>Sores or cracks around lips (angular cheilitis)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Itching rash (seborrhoea or prurigo)</td>
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<tr>
<td></td>
<td></td>
<td>Herpes zoster</td>
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<tr>
<td></td>
<td></td>
<td>Recurrent upper respiratory infections such as sinusitis or otitis</td>
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<tr>
<td></td>
<td></td>
<td>Recurrent mouth ulcers</td>
</tr>
<tr>
<td><strong>Prophylaxis</strong></td>
<td></td>
<td>Cotrimoxazole prophylaxis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>INH prophylaxis</td>
</tr>
<tr>
<td><strong>ARV therapy</strong></td>
<td>Only if CD4 &lt; 200</td>
<td>Only if CD4 &lt; 200 or TLC &lt; 1200/mm³</td>
</tr>
<tr>
<td></td>
<td>Consider ART if CD4 between 200-350*</td>
<td>Consider ART if CD4 between 200-350*</td>
</tr>
</tbody>
</table>

*When initiating nevirapine-containing ART in a woman with CD4 > 250, carefully monitor clinical symptoms and liver function tests (transaminase) if available, due to increased risk of severe NVP-related rash and liver toxicity.

TLC = Total lymphocyte count
### WHO Clinical Stage 3
#### Advanced Disease
- Weight loss >10%
- Oral thrush (or hairy leukoplakia)
- More than 1 month:
  - Diarrhoea or
  - Unexplained fever
- Severe bacterial infections (pneumonia, muscle infection, etc.)
- Pulmonary TB
- Acute necrotizing ulcerative gingivitis/periodontitis

### WHO Clinical Stage 4
#### Severe Disease (AIDS)
- HIV wasting syndrome
- Oesophageal thrush
- More than 1 month:
  - Herpes simplex ulcerations
- Lymphoma*
- Kaposi sarcoma
- Invasive cervical cancer*
- CMV retinitis*
- *Pneumocystis* pneumonia*
- Extrapulmonary TB°
- Toxoplasma brain abscess*
- Cryptococcal meningitis
- Visceral leishmaniasis*
- HIV encephalopathy
  (Significant neurological impairment interfering with independent functioning and not due to other cause, will often improve on ARV treatment.)

Conditions marked with an asterisk require a clinician diagnosis—this can be from records of a previous hospitalization. Muscle infection, *Pneumocystis* or any other severe pneumonia, toxoplasma, cryptococcal meningitis, and extrapulmonary TB, etc., are all infections which should be referred for hospital diagnosis and treatment.

<table>
<thead>
<tr>
<th>Cotrimoxazole prophylaxis</th>
<th>Cotrimoxazole prophylaxis</th>
</tr>
</thead>
<tbody>
<tr>
<td>INH prophylaxis</td>
<td>INH prophylaxis</td>
</tr>
<tr>
<td>Other prophylaxis in Treatment Plan</td>
<td>Other prophylaxis in Treatment Plan</td>
</tr>
</tbody>
</table>

- Treat if more than one sign or repeated/chronic stage 3 problems or below CD4 200.
- Consider ART if CD4 between 200 to 350*
- Evaluate for ART (8.1).
- Prepare for adherence (8.9).

- All in stage 4 are medically eligible.
- Evaluate for ART (8.1).
- Prepare for adherence (8.9).

° Except TB lymphadenopathy
Assess family status including pregnancy, family planning and HIV status of partner(s) and children

- Women of child-bearing age?
- Sexually active?
- Determine pregnancy status.
- Using contraception?
- Breastfeeding?

If pregnancy status uncertain and she is taking efavirenz (EFV), perform pregnancy test if possible. See 8.6.

If pregnant:
- If on ART, see 8.6.
- If not on ART, consider her eligibility for ART. See 8.6.
- Provide or refer for antenatal or post-partum care and PMTCT interventions: See 8.6. ARV prophylaxis, safer labour and delivery, and safer infant feeding.

If not pregnant:
- If using family planning, ask if she is satisfied or has any problems.
- If not using family planning and wishes to, discuss and offer. See 11.1.
- If considering pregnancy, counsel on reproductive choices. See 11.1. *Use the Reproductive Choices and Family Planning for People Living with HIV* flipchart to provide further information.

Encourage and actively facilitate HIV testing of partner(s)
- See section 11.1
- Record results on HIV care/ART card.

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**How to be reasonably sure a woman is NOT pregnant**—Ask her the following questions:

- Did your last menstrual period start within the past 7 days?
- Have you given birth in the last 4 weeks?
- Are you fully or nearly fully breastfeeding AND gave birth less than 6 months ago AND had no menstrual period since then?
- Have you had a miscarriage or abortion in the past 7 days?
- Have you had no sexual intercourse since your last menstrual period?
- Have you been using a reliable contraceptive method consistently and correctly?

If she answers **YES** to any **ONE** of the questions, and has no signs or symptoms of pregnancy, you can be reasonably sure she is NOT pregnant.
Encourage HIV testing for all children/siblings
Follow up all children below 5 years using IMCI guidelines. Refer for testing all children, particularly if any symptoms or signs suggestive of HIV infection (See IMCI-HIV Chart Booklet and complementary training course).
Offer follow up for all children born to an HIV infected mother and give:
• Cotrimoxazole prophylaxis
• Counseling and support on feeding and nutrition
• Immunization
• Regular monitoring of growth and development

<table>
<thead>
<tr>
<th>Age</th>
<th>HIV testing</th>
<th>What results mean</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 18 months</td>
<td>HIV antibody test (usually rapid test)*</td>
<td>If negative and no longer breastfed = usually not infected</td>
<td>Negative test usually rules out infection acquired during pregnancy and delivery. Child can still be infected by breastfeeding.</td>
</tr>
<tr>
<td></td>
<td>By the age of 12 months positive antibody testing is most likely due to the child being HIV infected. In a child with signs or symptoms of HIV infection HIV infection is likely</td>
<td>If negative and still breastfed – repeat test once breastfeeding discontinued for 6 or more weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If positive, test does not reliably indicate HIV infection = HIV exposed and/or infected. Repeat test at 18 months or do virological test</td>
<td>Confirms child has been exposed to HIV as passive transfer of maternal antibodies can cause positive test results.</td>
</tr>
<tr>
<td></td>
<td>HIV virological test (PCR can be done using DNA or RNA and detects the virus itself, or p24 antigen )</td>
<td>Positive virological test results from 4-6 weeks of age = child is infected.</td>
<td>Can be done from 48 hours to identify infection acquired during pregnancy and delivery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative virological test and no longer breast fed = child is not infected</td>
<td>Negative results if still breast feeding need to be confirmed 6 weeks or more after breast feeding discontinued. If mother or baby have had ARV drugs for prevention of MTCT, RNA and p24 antigen testing may not be reliable, suggested to wait until at least 4 weeks after ARVs are discontinued.</td>
</tr>
<tr>
<td>≥ 18 months</td>
<td>HIV antibody test (rapid test or EIA)</td>
<td>Valid results as for adults. Negative = the child is not infected; Positive = the child is infected.</td>
<td>If negative and breastfed – repeat test once breastfeeding discontinued for 6-12 weeks.</td>
</tr>
</tbody>
</table>
5 Review TB status in all patients on each visit

In what section does the patient fit? (Every patient should be assigned to one segment.)

Take the necessary action, then record on HIV Care/ART Card.

Start TB treatment unless already on ARV therapy—these patients need to be referred to district clinician.

See 8.4 for how and when to refer TB patients for ARV therapy (in those not already on treatment). Start TB treatment.

If INH prophylaxis is available, refer to district clinic if:
- All sputum smears negative
- No jaundice or known liver problems or heavy alcohol use
- Willing to take 6 months of INH

Patient will need assessment by clinician and may need negative chest xray (follow national guidelines) before receiving INH prophylaxis to exclude active TB.

If Suspect TB on prior visit—check register for results and respond per guidelines.

If positive sputums

If negative and still symptomatic, see Acute Care p. 63

If all negative and no signs

TB suspected persistent fever, unexplained weight loss, severe undernutrition, suspicious nodes, sweats or cough > 2 weeks

New positive sputums or treatment plan from district—start TB treatment

On TB treatment

No signs or symptoms of TB or on INH prophylaxis

No suspicion of TB

Send 3 sputums. Refer if not producing sputums or nodes
6 Provide clinical care

6.1 Respond to problems according to Treatment Plan and new signs/symptoms:

<table>
<thead>
<tr>
<th>If</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>If pain or other new signs or symptoms (new or first presentation)</td>
<td>Use the <em>Acute Care</em> guideline module and, if on ART, the side effects table (8.12). For all patients, assure adequate pain and symptom management. (See <em>Palliative Care</em> module.)</td>
</tr>
<tr>
<td>If new signs of clinical stage 3 or 4 or CD4 &lt; 200</td>
<td>Start cotrimoxazole prophylaxis. Evaluate for ART (8.1). Prepare patient for ART adherence (8.9). If on ART, this may represent failure or immune reconstitution syndrome. See 8.12. Consult/refer.</td>
</tr>
<tr>
<td>If clinical stage 2</td>
<td>Start cotrimoxazole prophylaxis.</td>
</tr>
<tr>
<td>If recently received treatment in hospital</td>
<td>Follow Treatment Plan sent by district clinician. Re-evaluate before initiating ART if patient is eligible.</td>
</tr>
<tr>
<td>If persistent diarrhoea</td>
<td>Manage according to 9.1 and P27.</td>
</tr>
<tr>
<td>If weight loss or wasting</td>
<td>Advise on nutrition (9.4 and P23).</td>
</tr>
<tr>
<td>If hazardous alcohol use or depression or drug use (injecting drug use or other illicit drug use)</td>
<td>Use brief interventions to reduce alcohol use. Treat depression according to <em>Acute Care</em>. Manage substance use (9.5). All can interfere with prophylaxis and treatment adherence. Special adherence support will often be needed. See 8.11.</td>
</tr>
<tr>
<td>If on ART</td>
<td>Monitor and support adherence (8.9) and respond to side effects (8.12).</td>
</tr>
<tr>
<td>If pregnant</td>
<td>Arrange for PMTCT interventions. Review medications. In first trimester, switch from efavirenz to a safer ARV drug (8.6).</td>
</tr>
<tr>
<td>If not pregnant</td>
<td>Give reproductive choice and family planning counselling. See 11.1.</td>
</tr>
</tbody>
</table>
6.2 **Advise**/discuss updated recommendations

6.3 **Agree** on treatment plan

6.4 **Assist** to follow revised plan

6.5 **Arrange** follow-up (see 10.3)

**See General Principles of Good Chronic Care**

---

**Use the General Principles of Good Chronic Care**

*See IMAI module with this title for more detail.*

1. Develop a treatment partnership with your patient.
2. Focus on your patient’s concerns and priorities.
3. Use the 5 A’s—Assess, Advise, Agree, Assist, Arrange.
5. Organize proactive follow-up.
6. Involve “expert patients”, peer educators and support staff in your health facility. (These are referred to in these guidelines as lay providers.)
7. Link the patient to community-based resources and support.
8. Use written information—registers, Treatment Plan, patient calendars, treatment cards—to document, monitor, and remind.
9. Work as a clinical team (and hold team meetings). Each team must include a district ART clinician.
10. Assure continuity of care.
7 Prophylaxis

7.1 INH prophylaxis to prevent TB (when active TB has been excluded)

Before starting prophylaxis, ensure adequate supply of INH and patient desire to take daily treatment for 6 months.

**Adults:**

- Give 5 mg/kg isoniazid (INH=H) daily for 6 months—up to maximum dose 300 mg daily. Also give pyridoxine 50 mg/day.
- Explain treatment to patient and need to continue for 6 months.
- Explain common side effects and when to seek care.
- If patient drinks alcohol, advise to stop or reduce to low risk levels.

**Monitor INH prophylaxis:**

- Check adherence.
- Assess for side effects and respond as needed.
- Assess for any symptoms or signs suggestive of TB. (Consult or investigate if any suspicion.)
- Schedule monthly visits as needed to complete 6 months treatment.
- Dispense a month’s supply of INH at each visit.
- Follow-up if patient does not return.

<table>
<thead>
<tr>
<th>Respond to side effects</th>
<th>Continue INH and:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minor Side Effects</strong></td>
<td></td>
</tr>
<tr>
<td>• Anorexia, nausea, abdominal pain</td>
<td>Give INH at bedtime</td>
</tr>
<tr>
<td>• Joint pains</td>
<td>Give aspirin</td>
</tr>
<tr>
<td>• Burning sensation in the feet</td>
<td>Give pyridoxine 100 mg daily</td>
</tr>
<tr>
<td><strong>Major Side Effects</strong></td>
<td>Stop INH</td>
</tr>
<tr>
<td>• New itching of skin or skin rash</td>
<td></td>
</tr>
<tr>
<td>• Dizziness (vertigo &amp; nystagmus)</td>
<td></td>
</tr>
<tr>
<td>• Jaundice</td>
<td></td>
</tr>
<tr>
<td>• Vomiting</td>
<td></td>
</tr>
<tr>
<td>• Confusion</td>
<td></td>
</tr>
<tr>
<td>• Convulsions</td>
<td></td>
</tr>
</tbody>
</table>
7.2 Cotrimoxazole prophylaxis

Advise patient on advantages of cotrimoxazole prophylaxis.

Initiate

- Ask about previous history of sulpha allergy (to cotrimoxazole/Seprin®, S-P/Fansidar®)

Dispense a month’s supply

- Schedule follow-up visit 2 days before the supply runs out.
- Give one double strength (960 mg) or two single-strength (480 mg) tablets daily.

Monitor

- Ask about symptoms.
- Check for rash and pallor.
- Assess adherence—ask; count pills left in bottle. Record on card.

<table>
<thead>
<tr>
<th>Response to side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
</tr>
<tr>
<td>Continue drug and take with food. If severe or persistent vomiting, consult or refer.</td>
</tr>
<tr>
<td>Rash</td>
</tr>
<tr>
<td>If generalized rash or fixed drug reaction, or peeling or eye or mouth involvement, stop the drug and refer urgently to hospital. (See Acute Care guideline module p. 43.)</td>
</tr>
<tr>
<td>Pallor or hæmoglobin &lt; 8 gm or bleeding gums</td>
</tr>
<tr>
<td>Stop the drug. Call for advice or refer.</td>
</tr>
<tr>
<td>New jaundice</td>
</tr>
<tr>
<td>Stop the drug. Call for advice or refer.</td>
</tr>
</tbody>
</table>

7.3 Fluconazole prophylaxis

Give after full treatment for cryptococcal meningitis (secondary prophylaxis)—fluconazole 200 mg/day for rest of life or until immune status reconstituted from ARV therapy.

When on ART, stop fluconazole prophylaxis when CD4 has been greater than 100 for 6 months, after at least 6 months treatment.

Discuss risks and benefits if pregnant or planning pregnancy.
Initiate first-line regimen for patients without complications: **d4T-3TC-NVP**

Seven requirements to initiate ARV therapy at the health centre (working under supervision of MD/MO). d4T-3TC-NVP requires no lab to start besides an HIV test. (CD4 is desirable.)

1. HIV infection confirmed by written documentation.

2. Medical eligibility—see clinical staging pages.
   If not medically eligible, do not start ART. Repeat CD4 in 6 months if available.

3. Patient fits criteria to be started on ART at the first-level facility.

<table>
<thead>
<tr>
<th>1. Does the patient have a condition requiring referral to district clinician:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• severe illness</td>
</tr>
<tr>
<td>• any condition in stage 4 with 2 exceptions: non-severe oesophageal thrush or chronic Herpes simplex ulcerations?</td>
</tr>
<tr>
<td>• persistent fever</td>
</tr>
<tr>
<td>2. Is the patient currently on TB treatment?</td>
</tr>
<tr>
<td>3. Is there peripheral neuropathy?</td>
</tr>
<tr>
<td>4. Is there jaundice or known liver problem?</td>
</tr>
<tr>
<td>5. Chronic illness such as diabetes mellitus, heart or kidney disease, etc.?</td>
</tr>
<tr>
<td>6. Is patient a child?</td>
</tr>
<tr>
<td>7. Prior ARV use except nevirapine for PMTCT?</td>
</tr>
</tbody>
</table>

**NO to all**
Give d4T-3TC-NVP
This regimen can be initiated at the first-level facility.
Instructions are on 8.5.

**YES to any question**
Do not start first-line regimen at health centre—consult or refer to district ARV clinician for ARV therapy plan.

If patient is on treatment for TB, see 8.4 for when to refer or start treatment.
If patient is pregnant, see 8.6.
These generic guidelines assume d4T-3TC-NVP is the preferred first-line ARV regimen. Other first-line regimens (ZDV-3TC-NVP, d4T-3TC-EFV, ZDV-3TC-EFV) could be substituted or added during country adaptation. For operational reasons, WHO recommends d4T-3TC-NVP in fixed dose combination as the most suitable regimen for rapid scale-up in resource limited settings.

4 Any opportunistic infection has been treated/stabilized (at health centre or if severe at district clinic/hospital). See summary on next page.

5 Patient is ready for ARV therapy—after using sections 8.3 and 8.7
   • Patient understands ARV therapy, possible side effects, limitations, adherence schedule, etc and wants treatment.
   • Patient ready for treatment adherence.
   • Patient actively involved in own care.
   • Family and/or social support available.
   • Treatment supporter if possible.
   • No recent non-adherence to care or medication. (Several visits are required before treatment initiation.)
   • Barriers to adherence have been addressed such as highly unstable social situation, heavy alcohol dependence or serious psychiatric illness.

6 Supportive clinical team prepared for chronic care

7 Reliable drug supply

Remember: ARV therapy for the individual patient is rarely an emergency!

The public health emergency is to get large numbers of the right patients on treatment with good adherence and good overall HIV chronic care.

For the individual patient, management of life-threatening opportunistic infections can be an emergency.
8.2 Treat opportunistic infections before starting ART

<table>
<thead>
<tr>
<th>If patient has this opportunistic infection or other clinical problem:</th>
<th>Follow these instructions (using <em>Acute Care</em> guideline module):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe illness or any severe (pink) classification in <em>Acute Care</em> guideline module.</td>
<td>Refer to district clinic/hospital for OI management and to decide on ARV regimen. Follow Treatment Plan when patient returns.</td>
</tr>
<tr>
<td>Non-severe pneumonia and is being treated with antibiotics.</td>
<td>Wait for 2 weeks after completing antibiotics (to be sure this was not TB) before starting ART.</td>
</tr>
<tr>
<td>Malaria, on antimalarial treatment, or mouth/throat infection, STI, UTI, reactive lymphadenopathy or other condition requiring antibiotics.</td>
<td>Treat as in <em>Acute Care</em> guideline module. Do not start ART until treatment completed and no longer febrile. Refer if persistent fever.</td>
</tr>
<tr>
<td>Drug reaction.</td>
<td>Do not start ART during an acute reaction. (If already on ART, see section 8.12.)</td>
</tr>
<tr>
<td>Prurigo or other known chronic skin problem.</td>
<td>Do not delay ART. Manage skin problems. (See <em>Acute Care</em> guideline module.)</td>
</tr>
<tr>
<td>Oesophageal thrush and able to swallow fluconazole. (If severe oesophageal thrush, refer.)</td>
<td>Start ART after fluconazol treatment if patient can swallow.</td>
</tr>
<tr>
<td>Persistent diarrhoea and has already had empirical treatment, and clinician evaluation and symptoms are controlled.</td>
<td>Do not delay ART waiting for resolution.</td>
</tr>
<tr>
<td>Non-severe anaemia has not responded to treatment.</td>
<td>Do not delay ART (is often anaemia of chronic disease due to HIV).</td>
</tr>
<tr>
<td>Old diagnosis (after hospitalization and full treatment) of cryptococcal meningitis, toxoplasma brain abscess, HIV encephalopathy AND now stable (no new signs).</td>
<td>Start ART or refer to district clinician for treatment plan.</td>
</tr>
<tr>
<td>Persistent fever without explanation.</td>
<td>Refer for evaluation by district clinician.</td>
</tr>
</tbody>
</table>
8.3 Treat mental health problems/substance use before starting ART*:

<table>
<thead>
<tr>
<th>If patient has this disorder:</th>
<th>Follow these instructions (using Acute Care guideline module and other guidelines)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delirium</td>
<td>Refer for treatment of underlying cause (p. 48 Acute Care) before starting ARV therapy.</td>
</tr>
<tr>
<td>Dementia</td>
<td>If HIV-related, consider ART (p. 48 Acute Care) with additional adherence support.</td>
</tr>
<tr>
<td>Suicide risk</td>
<td>Ensure patient safety, stabilise before starting ART (p. 51 Acute Care). Refer if high risk of suicide.</td>
</tr>
<tr>
<td>Major depression</td>
<td>Treat depression first and start ART when person well enough to participate in treatment.</td>
</tr>
<tr>
<td>Minor depression/complicated bereavement</td>
<td>No reason to postpone ART.</td>
</tr>
<tr>
<td>Psychosis</td>
<td>Treat psychosis (p. 51 Acute Care) and start ART when person well enough to participate in treatment.</td>
</tr>
<tr>
<td>Mental retardation</td>
<td>Do not exclude from ART but requires additional adherence support.</td>
</tr>
<tr>
<td>Anxiety disorder</td>
<td>No reason to postpone ART if indicated. May need additional adherence support.</td>
</tr>
<tr>
<td>Alcohol dependency</td>
<td>• If in acute withdrawal, treat or immediately refer to hospital for treatment.</td>
</tr>
<tr>
<td></td>
<td>• Assess capacity to adhere before starting ART.</td>
</tr>
<tr>
<td></td>
<td>• Advise on health risks and interaction with ARVs (liver damage).</td>
</tr>
<tr>
<td></td>
<td>• Refer if possible for detoxification and to peer support group.</td>
</tr>
<tr>
<td></td>
<td>• May need additional adherence support.</td>
</tr>
<tr>
<td>Harmful alcohol use</td>
<td>• Do brief interventions for harmful alcohol use.</td>
</tr>
<tr>
<td></td>
<td>• Advise on health risks and interaction with ARVs (liver damage).</td>
</tr>
<tr>
<td></td>
<td>• Assess capacity to adhere before starting ART.</td>
</tr>
<tr>
<td></td>
<td>• Refer peer support group.</td>
</tr>
<tr>
<td></td>
<td>• May need additional adherence support.</td>
</tr>
<tr>
<td>Hazardous alcohol use</td>
<td>• Do brief interventions on hazardous alcohol use.</td>
</tr>
<tr>
<td></td>
<td>• Advise on health risks and interaction with ART (liver damage).</td>
</tr>
<tr>
<td></td>
<td>• Assess capacity to adhere before starting on ART.</td>
</tr>
<tr>
<td></td>
<td>• Refer peer support group.</td>
</tr>
<tr>
<td></td>
<td>• May need additional adherence support.</td>
</tr>
<tr>
<td>IDU (injection drug use) with dependency</td>
<td><strong>In health centre/district outpatient department:</strong></td>
</tr>
<tr>
<td></td>
<td>• Advise on prevention for IDU (9.5).</td>
</tr>
<tr>
<td></td>
<td>• Refer to drug substitution programme if available. If not refer to detoxification programme if available.</td>
</tr>
<tr>
<td></td>
<td>• Give additional adherence support (partial or fully observed therapy).</td>
</tr>
<tr>
<td></td>
<td><strong>In drug substitution or ward or detoxification programme:</strong></td>
</tr>
<tr>
<td></td>
<td>• Start ART after 1-2 weeks, when patient is stable with fully observed therapy.</td>
</tr>
</tbody>
</table>

* If a person on ARV therapy develops a psychiatric disorder, do not stop ART. Treat the disorder. Refer if taking efavirenz.
### 8.4 First-level facility TB management in HIV patient

#### Patient already on ART*:

If patient already on ART when positive TB sputums or suspect TB, refer to district ARV clinician for treatment plan. Do not start TB treatment at first-level facility.

#### Patient not on ART and CD4 not available:

<table>
<thead>
<tr>
<th>Clinical status</th>
<th>How to manage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smear-positive pulmonary TB</strong> only (no other signs stage 3 or 4) and patient is gaining weight on treatment.</td>
<td>Start and complete TB treatment** according to TB guidelines then start first-line ART regimen.</td>
</tr>
<tr>
<td><strong>Smear-negative pulmonary TB</strong> only (no other signs 3 or 4) and patient is gaining weight on treatment.</td>
<td>Continue TB treatment** and consult/refer to district medical officer for TB/ART treatment plan. (Smear negative TB requires medical officer diagnosis.)</td>
</tr>
</tbody>
</table>
| **Pulmonary TB** and patient has or develops signs of clinical stage 4 or thrush, pyomyositis, recurrent pneumonia, persistent diarrhoea, new prolonged fever, or losing weight on treatment. | Continue TB treatment** and refer to district ART medical officer for decision on co-treatment.  
If patient has already completed TB treatment, start first-line ART after managing OIs. (See 8.2; this may require referral to district medical officer.) |
| **Extrapulmonary TB**                                                          | If current: continue TB treatment** and refer to district medical officer for decision on co-treatment.  
If completed extrapulmonary TB treatment in last year and no new complications or signs, start first-line ART. |

#### Patient not on ART and CD4 is available:

<table>
<thead>
<tr>
<th>CD4</th>
<th>How to manage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If CD4 &lt; 200/mm³</strong></td>
<td>Start TB treatment. Start ART co-treatment*** as soon as TB treatment is tolerated (between 2 weeks and 2 months).</td>
</tr>
<tr>
<td><strong>If CD4 between 200-350/mm³</strong></td>
<td>Start TB treatment Refer for assessment of need to start ART after initiation phase- ART may be delayed if good response to TB treatment.</td>
</tr>
<tr>
<td><strong>If CD4 &gt; 350/mm³</strong></td>
<td>Give TB treatment. Defer ART unless non-TB Stage 4 conditions are present.</td>
</tr>
</tbody>
</table>

---

* There is currently insufficient evidence—these guidelines suggest a format for decision making at first-level facility but need a national decision and more data, taking into account the impact of referring all smear-positive TB/HIV patients detected at first-level facility to the district clinic.

** Regimen should include pyridoxine.

*** Consult/refer to district medical officer for TB/ART plan.
8.5 First-line ARV regimen instructions
Doses for children are in section 12.

**How to give d4T-3TC-NVP:**

**Give every 12 hours**

**Usual adult and adolescent dose:**
- nevirapine (NVP) 200 mg once daily for 2 weeks then 200 mg twice daily (first 2 weeks it is necessary to use separate tablets)
- stavudine (d4T) 40 mg twice daily (30 mg twice daily if less than 60 kg)
- lamivudine (3TC) 150 mg twice daily

These are available in fixed-dose combinations for the two doses of d4T (40 mg and 30 mg).

**No diet restrictions**
**No lab requirement**

**Note that NVP requires once daily dosing for 2 weeks. Then step up to twice daily.**

**For first 2 weeks only:**
- In the morning: combined tablet with d4T-3TC-NVP
- In the evening: separate tablets for d4T and 3TC

**After this:**
- Morning and evening: combined tablet with d4T-3TC-NVP

**How to give d4T-3TC-EFV:**

**Give d4T-3TC every 12 hours plus EFV at night**

**Usual adult and adolescent dose:**
- stavudine (d4T) 40 mg twice daily (30 mg twice daily if less than 60 kg)
- lamivudine (3TC) 150 mg twice daily
- efavirenz (EFV) 600 mg once daily at night

**Do not take efavirenz with fatty meal.**

**Must exclude first-trimester pregnancy** in woman of childbearing age (pregnancy test desirable); ask about menstrual periods and possibility of pregnancy each visit; ensure reliable contraception. Defer efavirenz until second trimester.

**Avoid if serious psychiatric problems (now or by history).**

**This regimen is often used for patients also on TB treatment—see doctor or medical officer treatment plan.**
How to give ZDV-3TC-NVP:
Give every 12 hours

Usual adult and adolescent dose:
- nevirapine (NVP) 200 mg once daily for 2 weeks then 200 mg twice daily (first 2 weeks it is necessary to use separate tablets)
- lamivudine (3TC) 150 mg twice daily
- zidovudine (ZDV) 300 mg twice daily

No food restrictions
Lab: measure haemoglobin before starting ZDV and at 2 and 4 weeks of treatment.

For first 2 weeks only:
- In the morning: combined tablet with ZDV-3TC-NVP
- In the evening: separate tablets for ZDV and 3TC

After this:
- Morning and evening: combined tablet with ZDV-3TC-NVP

How to give ZDV-3TC-EFV:
Give ZDV-3TC every 12 hours plus EFV at night

Usual adult and adolescent dose:
- zidovudine (ZDV) 300 mg twice daily
- lamivudine (3TC) 150 mg twice daily
- efavirenz (EFV) 600 mg once daily at night

Do not give efavirenz with fatty meal.
Lab: measure haemoglobin before starting ZDV and at 2 and 4 weeks of treatment.

Must exclude pregnancy in woman of childbearing age (pregnancy test mandatory); ask about menstrual periods and possibility of pregnancy each visit; ensure reliable contraception.

Avoid if serious psychiatric problems (now or by history).
## Side Effects of first-line ART*

<table>
<thead>
<tr>
<th>Drug</th>
<th>Very common side effects—warn patient and suggest ways patients can manage; also be prepared to manage when patients seek care (8.9)</th>
<th>Potential serious side effects—warn patients and tell them to seek care</th>
<th>Side effects occurring later during treatment</th>
</tr>
</thead>
</table>
| d4T stavudine | Nausea Diarrhoea                                                                                                               | Seek care urgently:  
- Severe abdominal pain  
- Fatigue AND shortness of breath  
Seek advice soon: tingling, numb or painful feet or legs or hands | Changes in fat distribution: Arms, legs, buttocks, and cheek become THIN. Breasts, belly, back of neck become FAT. |
| 3TC lamivudine | Nausea Diarrhoea                                                                                                               | Seek care urgently:  
- Yellow eyes  
- Skin rash  
- Fatigue AND shortness of breath  
- Fever | — |
| NVP nevirapine | Nausea Diarrhoea                                                                                                               | Seek care urgently:  
- Yellow eyes  
- Skin rash  
- Fatigue AND shortness of breath  
- Fever | — |
| ZDV zidovudine | Nausea Diarrhoea  
Headache  
Fatigue  
Muscle pain | Seek care urgently:  
Pallor (anæmia) | — |
| EFV efavirenz | Nausea Diarrhoea  
Headache  
Strange dreams  
Difficulty sleeping  
Memory problems  
Dizziness | — | — |

* For abacavir, tenofivir and common second-line drugs, see effects tableau page 96.
8.6 Special considerations for ART and other PMTCT interventions during pregnancy, labour and childbirth, post-partum and newborn care

Special management needs:

- Good coordination between, chronic HIV care and antenatal, postpartum, and under 5 care
- Good coordination between clinic and CHW, treatment supporter, TBA
- Family-centred chronic HIV care where the woman, her infant, other children, and partner are cared for together

PMTCT interventions during pregnancy

Give ART to treat the mother and prevent MTCT or ARV prophylaxis to prevent MTCT.

**ART**

**Start ART if medically eligible**

Medical eligibility is the same as for non-pregnant adults. CD4 should be obtained if possible and consideration given to ART if CD4 less than 350.

**If already on ART, continue ART**

During first trimester only, avoid efavirenz (it can be teratogenic). Based on national guidelines - Switch EFV to nevirapine or a PI (consult) or third nucleoside.

**ARV prophylaxis if not medically eligible for ART**

Give zidovudine alone starting at 28 weeks, continuing through labour.

OR

zidovudine (AZT):
300 mg twice daily
During labour- every 3 hours
ART during pregnancy:

- Choice of ARV regimen may differ and special monitoring may be required.
  - Do not give:
    - Efavirenz (EFV) in the first trimester – it can be teratogenic
    - DDI-d4T combination – it can be very toxic
  - If ARV regimen contains ZDV, obtain haemoglobin before initiation, and 2 and 4 weeks after initiation. Do not start ZDV or substitute d4T for ZDV (in consultation with medical officer) if Hgb less than 8 grams.
  - If ARV regimen contains nevirapine (NVP) and CD4 is greater than 250, it is important to carefully monitor clinical symptoms and to measure liver function tests (transaminase) if available, due to increased risk of NVP-related rash and liver toxicity.
  - If CD4 > 250, consider using.

- Rapid preparation for ART and special adherence support are often needed

- ART in first trimester:
  - In advanced HIV disease, the benefits of ART in the first trimester outweigh the potential risk to the unborn child
  - In less advanced disease, consider delaying treatment until the second trimester. If pregnancy is identified during the first trimester, help the woman weigh risks and benefits. Discuss with the woman and consult with an HIV clinician especially if CD4 250-350.
  - If ART is temporarily discontinued during the first trimester, stop all drugs at once then restart all drugs at the same time.

- It may be necessary to substitute ARV drugs if GI side effects are made worse by pregnancy-related nausea and vomiting. Consult with the district ARV clinician.
  - Instruct woman to repeat dose if she vomits and can see pills.

- Arrange for ARV drugs during labour and to the newborn:
  - Advise the woman to give birth in a facility with a skilled provider who knows how to implement PMTCT interventions.
  - Advise the woman to go to the health facility as soon as labour starts or her waters rupture, whichever comes first.
  - If the woman cannot give birth at the facility, provide the woman with ARV drugs for herself and the newborn, and provide careful instructions about how to take them. Arrange for TBA, CHW or treatment supporter to help with ART or ARV prophylaxis in the home.
  - Provide ART or ARV prophylaxis for the woman to take at home
  - Provide ZDV and NVP syrup in small bottles and instruct carefully on how to give to the newborn. Reinforce on later visits to clinic.
  - Arrange for treatment supporter to help with ART or ARV prophylaxis
Give good antenal care - integrate with chronic HIV care

See IMPAC PCPNC guideline sections in parentheses for details (or other antenatal guidelines). The interventions in **bold and italics** also help prevent MTCT of HIV.

- Check for emergency signs (B2-B7)
- Assess pregnancy status, birth and emergency plan (C2)
- Check for pre-eclampsia (C4)
- Check for anaemia- clinical exam plus, if on zidovudine, check hgb before and at 2 and 4 weeks
- **Check syphilis status (RPR) on first visit (C5); repeat in third trimester if at risk**
- **Check HIV status- do clinical review and staging (section 3) and provide clinical care (section 6)**
- **Give co-trimoxazole prophylaxis after first trimester obtain CD4 if available**
- **Check for STI and treat**
- Respond to other observed signs or volunteered problems- assess, classify, treat (C7-11)
  - Treat acute malaria* and other acute problems
  - Differentiate between common problems of pregnancy, pregnancy complications, HIV-related illness, ARV side effects, and immune reconstitution syndrome.

Give preventive measures (C12); advise and counsel:

- Update birth/emergency plan (C14)- advise on signs of labour; pregnancy and HIV danger signs; routine and follow-up visits. **Patient should deliver in facility with skilled provider able to provide PMTCT intervention if possible**
- **Advise on safer sex and use condoms during pregnancy- to protect against STIs, infections with another strain of HIV, and to prevent transmission to partner** (G2).
- **Give infant feeding counseling** (G7-G8; see Infant feeding counseling course and summary in section 11.4)
- **In third trimester, counsel on family planning**
- Give tetanus toxoid if due
- Give iron/folate; counsel on adherence and safety
- **Give mebendazole once in second or third trimester**
- **Give malaria intermittent preventive treatment in 2nd and 3rd trimester (F4) if not on cotrimoxazole prophylaxis**
- **Encourage sleeping under insecticide-treated bednet**
- Advise and counsel on nutrition and self-care (C13, G..)
- Advise to stop smoking and avoid alcohol, drugs
- **If adolescent, provide special care.**

* If receiving cotrimoxazole prophylaxis do not give sulfadoxine-pyrimethamine intermittent presumptive treatment or use SP for malaria treatment.
PMTCT interventions during labour and childbirth
(adapt to national guidelines)

ARV prophylaxis or ART during labour (intrapartum)

Ensure that woman takes the ARV drugs as soon as labour starts
Adherence to good standard practices for labour and childbirth procedures that reduce fetal contact with maternal blood and secretions, (section D in IMPAC PCPNC) and using universal precautions for all patient care (B.1) can reduce risk of MTCT, and protect healthworkers.

If she was on ART before becoming pregnant or pregnant woman who was started on ART:

- Continue ART

If NOT yet eligible for ART and has been taking zidovudine twice daily:

- Continue zidovudine plus give single dose nevirapine at onset labour
  (if has had > 4 weeks of ZDV, can leave out the maternal NVP dose)

If she presents in labour with no antenatal ART or ARV prophylaxis (whether eligible for ART or not):

Option 1: give single dose nevirapine plus single dose zidovudine
Option 2: give single dose ZDV plus single dose 3TC
Option 3: if capacity for combination regimen does not exit, single dose nevirapine

Give good care during labour and childbirth

- Ensure presence of a skilled birth attendant at all births.
- **Use partograph** to measure the progress of labour and identify unsatisfactory progress of labour in a timely manner.
- **Minimize use of cervical examination**
- **Avoid**
  - Prolonged labour
  - Routine rupture of membranes
  - Unnecessary trauma such as episiotomies or foetal scalp monitoring
- **Minimize risk of postpartum haemorrhage - use active management of third stage.**
- Ensure safe transfusion practices
PMTCT interventions during post-partum and newborn care

**ART or ARV prophylaxis**

**If she was on ART before becoming pregnant or pregnant woman who was started on ART:**

- For mother: continue ART
- For newborn:
  - if less than 4 weeks maternal ART, give newborn 4 weeks zidovudine twice daily
  - if 4 weeks or more maternal ART, give newborn 1 week zidovudine twice daily

**If mother NOT yet eligible for ART and has been taking zidovudine twice daily:**

- For mother: reconsider eligibility for ART- start when eligible and prepared for adherence. Consider giving zidovudine plus 3TC for one week
- For newborn: Give single dose nevirapine plus zidovudine:
  - If less than 4 weeks maternal ARV prophylaxis, give 4 weeks zidovudine.
  - If 4 weeks or more maternal ARV prophylaxis, prophylaxis give 1 week zidovudine.

**If she presented in labour or after birth with no antenatal ART or ARV prophylaxis (whether eligible for ART or not):**

- For mother: reconsider eligibility for ART- start when eligible and prepared for adherence.
- For newborn within 72 hours of birth:
  - Option 1: give single dose nevirapine plus zidovudine for 4 weeks
  - Option 2: give zidovudine plus 3TC for 1 week
- if capacity to deliver combination regimen does not exit, give single dose NVP to mother and newborn.

**Oder ARV prophylaxis options**

- Zidovudine dose for newborn: 4 mg/kg twice daily
- Nevirapine dose for newborn: 2 mg/kg within 72 hours of birth
Provide integrated postpartum and newborn care – integrate with chronic HIV care

See IMPAC / PCPNC guidelines sections for details (or other postpartum and newborn guidelines). The postpartum interventions in bold and italics also help prevent MTCT of HIV if the woman is breastfeeding. The newborn interventions in bold and italics also help to prevent MTCT.

Postpartum Care

- Check for emergency signs
- Perform postpartum examination of the woman (E2)
- Check for elevated blood pressure (E3)
- Check for anaemia (E4) - clinical exam plus, if on zidovudine, do hgb at 2 and 4 weeks
- Provide chronic HIV care: - do clinical review and staging (section 3) and provide clinical care (section 6)
- Respond to other observed signs or volunteered problems – assess, classify, and treat
  - Treat breast and breastfeeding problems and other acute problems
  - If on ARVs, differentiate between complications/common problems in the postpartum and HIV-related illness, ARV side effects and immune reconstitution syndrome
  - Provide acute care for OIs, malaria, and other HIV-related complications
- Provide psychosocial support
Give preventive measures (F1-F4); advise and counsel (M4):

- Develop emergency plan (M4)- advise on postpartum and HIV danger signs; routine and follow-up visits.
- *Advise on safer sex and use condoms during lactation*
- *Provide condoms and instruct on use*
- Give tetanus toxoid if due
- Give iron/folate; counsel on adherence and safety
- Give mebendazole once every six months
- Encourage sleeping under insecticide-treated bednet
- Advise her that lochia can cause infection in other people and therefore she should dispose of blood stained pads/cloths safely
- *Provide infant feeding support according to the mother’s choice*

Support feeding according to her choice: exclusive breastfeeding or replacement feeding.

- *Advise on breast care and advise the woman to return immediately if she has breast or breastfeeding problems*
- *Counsel on and provide family planning methods*
- Advise and counsel for disclosure of HIV status and partner counselling and testing
- Advise and counsel on nutrition and self-care
- Advise to stop smoking and avoid alcohol

❖ Newborn care

- Explain and agree plan and timing of HIV testing for the newborn (see section 4)
- Provide care as per IMCI/HIV Chart Booklet and section 12
- Start cotrimoxazole from 6 weeks
- Regular assessment and early identification of HIV-related symptoms are key to ensuring growth and development.
- Evaluate at 1 week postpartum and again at 6 weeks.
8.7 Patient/treatment supporter education card

Now you are on ART

<table>
<thead>
<tr>
<th>d4T - 3TC - NVP</th>
</tr>
</thead>
<tbody>
<tr>
<td>stavudine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 1-2</th>
<th>Week 3 and after</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning: d4T-3TC-NVP (combined tablet)</td>
<td>Morning: combined tablet</td>
</tr>
<tr>
<td>Evening: d4T and 3TC (2 separate tablets)</td>
<td>Evening: combined tablet</td>
</tr>
</tbody>
</table>

Remember that

- If you miss doses (even 3 doses in a month) **DRUG RESISTANCE** can develop. This is bad for you and your community. (These drugs will stop working.)

- Drugs must be taken twice daily, and **miss no doses**. This is very important to maintain blood levels so ART can work.

- If you forget a dose, do not take a double dose.

- If you stop you will become ill within months or year.

- Drugs **MUST NOT** be shared with family and friends.

- **If you find it difficult taking your pills twice daily**, **DISCUSS with health workers.** **ASK for support from your treatment supporter, family or friends.**

It is common to have side effects. They usually go away in 2-3 weeks.

<table>
<thead>
<tr>
<th>If you have:</th>
<th>Do the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>Take the pill with food.</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Keep drinking and eating.</td>
</tr>
</tbody>
</table>

If nausea or diarrhoea persist or get worse, or you have any of the following, report to the health worker **AT THE NEXT VISIT**.

- Tingling, numb or painful feet or legs or hands.
- Arms, legs, buttock, and cheeks become THIN.
- Breasts, belly, back of neck become FAT.

**SEEK CARE URGENTLY if:**

- Severe abdominal pain
- Yellow eyes
- Skin rash
- Fatigue AND shortness of breath
Now you are on ART

### ZDV - 3TC - NVP

<table>
<thead>
<tr>
<th></th>
<th>zidovudine</th>
<th>lamivudine</th>
<th>nevirapine</th>
</tr>
</thead>
</table>

**Week 1-2**
- Morning: ZDV-3TC-NVP (combined tablet)
- Evening: ZDV and 3TC (2 separate tablets)

**Week 3 and after**
- Morning: combined tablet
- Evening: combined tablet

Remember that
- If you miss doses (even 3 doses in a month) **DRUG RESISTANCE** can develop. This is bad for you and your community. (These drugs will stop working.)
- Drugs must be taken twice daily, **and miss no doses**.
- This is very important to maintain blood levels so ART can work.
- If you forget a dose, do not take a double dose.
- If you stop you will become ill within months or year.
- Drugs **MUST NOT** be shared with family and friends.
- **If you find it difficult taking your pills twice daily**, **DISCUSS** with health workers. **ASK** for support from your treatment supporter, family or friends.

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<tr>
<td>Muscle pain, fatigue</td>
<td>These will go away.</td>
</tr>
</tbody>
</table>

If nausea or diarrhoea persist or get worse, report to the health worker **AT THE NEXT VISIT**.

**SEEK CARE URGENTLY if:**
- Yellow eyes
- Skin rash
- Pale or do not have enough blood
- Fatigue AND shortness of breath
Now you are on ART

**ZDV - 3TC - EFV**

<table>
<thead>
<tr>
<th>zidovudine</th>
<th>lamivudine</th>
<th>efavirenz</th>
</tr>
</thead>
</table>

Morning: ZDV and 3TC (2 separate tablets)

Evening: ZDV and 3TC and EFV (3 separate tablets)

Remember that

- If you miss doses (even 3 doses in a month) **DRUG RESISTANCE** can develop. This is bad for you and your community. (These drugs will stop working.)
- Drugs must be taken twice daily, **and miss no doses**.
- This is very important to maintain blood levels so ART can work.
- If you forget a dose, do not take a double dose.
- If you stop you will become ill within months or year.
- Drugs **MUST NOT** be shared with family and friends.
- **If you find it difficult taking your pills twice daily**, **DISCUSS** with health workers. **ASK** for support from your treatment supporter, family or friends.

It is common to have side effects. They usually go away in 2-3 weeks.

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<td>Keep drinking and eating.</td>
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<tr>
<td>EFV can cause brain effects such as sleepiness, dizziness, bad dreams, or problems with sleep or memory</td>
<td>These side effects usually go away. Taking the efavirenz at night is important.</td>
</tr>
<tr>
<td>Muscle pain, fatigue</td>
<td>These will go away</td>
</tr>
</tbody>
</table>

If nausea or diarrhoea persist or brain effects get worse, report to the health worker **AT THE NEXT VISIT**.

**SEEK CARE URGENTLY if:**

- Bizzare thoughts/confusion
- Yellow eyes
- Pale or do not have enough blood
- Skin rash
- New pregnancy (first trimester)
Now you are on ART

<table>
<thead>
<tr>
<th>d4T - 3TC - EFV</th>
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<tbody>
<tr>
<td>stavudine</td>
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<tr>
<td>lamivudine</td>
</tr>
<tr>
<td>efavirenz</td>
</tr>
</tbody>
</table>

Morning: d4T and 3TC (2 separate tablets)

Evening: d4T and 3TC and EFV (3 separate tablets)

Remember that

- If you miss doses (even 3 doses in a month), **DRUG RESISTANCE** can develop. This is bad for you and your community. (These drugs will stop working.)
- Drugs must be taken twice daily, **and miss no doses.**
- This is very important to maintain blood levels so ART can work.
- If you forget a dose, do not take a double dose.
- If you stop you will become ill within months or year.
- Drugs **MUST NOT** be shared with family and friends.
- **If you find it difficult taking your pills twice daily,** **DISCUSS** with health workers. **ASK** for support from your treatment supporter, family or friends.

It is common to have side effects. They usually go away in 2-3 weeks.

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If nausea or diarrhoea persist or get worse, or you have any of the following, report to the health worker **AT THE NEXT VISIT.**

- Tingling, numb or painful feet or legs or hands.
- Arms, legs, buttock, and cheeks become **THIN.**
- Breasts, belly, back of neck become **FAT.**

**SEEK CARE URGENTLY if:**

- Bizarre thoughts/confusion
- Yellow eyes
- Severe abdominal pain
- Fatigue **AND** shortness of breath
- Skin rash
- New pregnancy (first trimester)
8.8 Summary of patient flow to initiate ART

**HIV+ and symptomatic**

- Determine eligibility for ART by HIV clinical stage and CD4 or TLC if available

- Treatment of opportunistic infections to stabilize; referral to district clinic as needed
- Adherence preparation (requires at least 2 visits)
- Ensure rapid adherence preparation in pregnant women.
- Education and support
- Home visit if possible
- Enlist and prepare treatment supporter

- Opportunistic infections treated
- Patient and treatment supporter ready for adherence to ART (clinical team meeting)

**Initiation of ARV therapy**

a. Patients without complications at health centre under MD/MO supervision
b. Others by MD/MO

**Follow-up sequence:**

- Monitoring
- Adherence and psychosocial support
- Prevention for PLHA (section 11)

**Not eligible now for ART**

- Prophylaxis as indicated
- Clinical monitoring and restaging
- ART when eligible and ready; if pregnant and not eligible for ART, give ARV prophylaxis
- Ongoing support and education in clinic and community
- Prevention for PLHA (11.1)
8.9 ARV therapy: adherence preparation, support and monitoring

**Prepare for ARV therapy:**

<table>
<thead>
<tr>
<th>ASSESS</th>
<th>ADVISE ON</th>
</tr>
</thead>
</table>
| ❖ Patient’s goals for today’s visit.  
❖ Understanding of ARV therapy.  
❖ Interest in receiving therapy. | ❖ HIV illness, expected progression (locally adapted).  
❖ ARV therapy.  
   • Benefits: lifesaving drugs. Your life depends on taking them every day at the right time.  
   • Very strong medicines.  
   • The pills do not cure HIV.  
   • The pills do not prevent HIV transmission to others—you must still use condoms and practice safer sex.  
❖ Need for complete adherence to daily treatment (more than other drugs you may be familiar with—essential to maintain drug levels in the blood for ARV therapy to work).  
❖ Must be taken twice daily, without interruption.  
❖ If you forget a dose, do not take a double dose.  
❖ Must be taken at right time, every 12 hours. (Adjust this if on a different regimen.)  
❖ If you stop, you will become ill (not immediately—after weeks, months or years).  
❖ Possibility of side effects and drug interactions.  
❖ Importance of disclosure of HIV+ status (Annex A.1 and A.5).  
❖ Importance of testing partner and children.  
❖ Drugs must not be shared with family or friends—patient must take full dose. |
**AGREE**

- Establish that the patient is willing and motivated and agrees to treatment, before initiating ARV therapy.
  - Has the patient demonstrated ability to keep appointments, to adhere to other medications?
  - Has the patient disclosed his or her HIV status? If not, encourage him/her to do so. Disclosure to at least 1 person who can be the treatment supporter is important (required in many programmes).
  - Does the patient want treatment and understand what treatment is?
  - Is the patient willing to come for the required clinic follow-up?

**ASSIST**

- Help the patient develop the resources/support/arrangements needed for adherence:
  - Ability to come for required schedule of follow-up. Discuss how patient will do this. *(Do you live close to here? If not, how will you manage to come for the scheduled appointments?)*
  - Home and work situation that permits taking medications every 12 hours without stigma.
  - Regular supply of free or affordable medication.
  - Supportive family or friends.
  - ARV adherence support group.
  - Treatment supporter—prepare him/her (8.10).

**ARRANGE**

- When patient is ready for ARV therapy, discuss at clinical team meeting, then make plan.
Support ARV initiation (as patient first starts on medications):

**Assess**
- Patient’s goals for today’s visit.
- Check understanding of the information given before—make sure the patient understands the illness, treatment and possible side effects.

**Advise on**
- Reinforce the information given before.
- Advise on details of first-line regimen:
  - Explain the purpose of and how to take each pill. Provide and explain card summarizing treatment (with drawing of each pill and common side effects).
  - Make sure patient understands the importance of adherence.
  - Advise on diet (insert recommendations appropriate to first-line regimen).
  - Explain limits on alcohol and drug use (counsel on low risk drinking or abstinence—see Brief Intervention module). These are important for adherence.
- Explain side effects.
  - Prepare patient and treatment supporter to handle common side effects. Most side effects can be treated symptomatically.
  - Explain which side effects are likely to be transitory (related to initiation of treatment) and their likely duration.
  - Explain which are more serious and require return to clinic.
- Explain that patient can still transmit HIV infection when on ARV therapy. It is very important to still practice safer sex and other practices to prevent transmission (11.1).
AGREE

- Make sure the patient agrees to ART and is a true partner in the treatment plan.
- Make sure patient understands that his/her life depends on taking the medicine every day.
- Agree on plan for support by treatment buddy and support groups.

ASSIST

- Develop (then reinforce on each visit) a concrete plan for the specific ARV regimen.
  - When to take/times for every 12 hour dosing/how to make it a habit.
  - Explain step-up dose of nevirapine.
  - How to remember—provide and explain written schedule, pillbox, pill chart, other aids.
- Prepare patient and treatment buddy for adherence, possible common side effects, what to do if they occur and when to seek care. (Give education card.)
- Provide psychosocial support (Annex A.4).
- Encourage patient to join ART adherence support group.
- Arrange home visit, if feasible.

ARRANGE

- Next follow-up visit in clinic, home visit if feasible, and next visit with district clinician (if required).
- Agree on best way to access help between visits.
- Make sure patient understands where/when s/he will see health worker. (See follow-up 10.3)
Monitor and support adherence

**Assess**

For health worker—do clinical review (section 3.1 to 3.2) and respond to any problems or change in status (use side effects table in 8.5). For non-clinicians, use section 1 Triage—take interval history and decide if patient needs to see health worker on this visit.

- Review the medications with the patient and their treatment supporter. Determine whether there is an adherence problem.
- Ask questions in a respectful and non-judgmental way. Ask in a way that makes it easier for patients to be truthful:
  - "Many patients have trouble taking their medications. What trouble are you having?"
  - "Can you tell me when and how you take each pill?"
  - "When is it most difficult for you to take the pills?"
  - "It is sometimes difficult to take the pills every day and on time. How many have you missed in the last 4 days (insert agreed time period)?"
- Ask about the common and locally important factors that may interfere with adherence.
- Ask about stigma related to taking the pills.
- Count pills.
- How many pills forgotten yesterday, last 3 days, last month?

If poor adherence: Determine what the problem is:

- Side effects?
- Simply forgot?
- Ran out of pills?
- Which dose missed: morning or evening? Why?
- Cost?
- Reminds you of HIV?
- Misunderstood? (explain, use aids).
- Changed work situation?
- Not comfortable taking medication around others?
- Stigma?
- Different timing when away from home or holiday, travel, weekend?
- Seldom at home and disorganized?
- Transport problems
- Problems with diet (food availability)?
- Another medical problem?
- Screen for excess alcohol use and depression, and treat, if present.

Other locally common constraints:
**ADVISE**
- Reinforce the information given before.
- Give additional information that may help with adherence problem.
- Advise on any suggested changes in the regimen (after consulting with clinician). (If treatment needs to be stopped, or if patient decides to stop a drug, stop all medications at once and consult with clinician. Usually side effects require only changing one drug, not stopping—consult with clinician if this is necessary).

**AGREE**
- Agree on any changes in Treatment Plan and solutions to adherence problems (if present).
- Discuss the agreements you have reached and check for their commitment.

**ASSIST**
- Provide adherence support.
- Reinforce interventions which match the patient’s needs and adherence problems, if present. (See Assist in 8.9.)
- Make sure that the patient has:
  - Plan to link taking medications with daily events such as meals.
  - Any device or skills (e.g. how to use a diary) that s/he needs.
- Make sure patient has the support s/he needs:
  - Get help from treatment buddy, other family and friends or peers.
  - Help patient and treatment supporter to find solutions.
- If adherence problem:
  - Get help! Call for advice or refer back sooner but do not "just refer".
  - Link with home-based care for help and home visits.
  - Seek help from district clinic adherence staff if regimen is too complicated or not tolerated or low adherence.
- If repeated missed doses, use special interventions (home visit, etc).

**ARRANGE**
- Record adherence estimate on patient’s card.
- Arrange for refills.
- Arrange for next follow-up visits:
  - in clinic
  - home visits
- Make sure that the patient and supporter understand the follow-up plan and how to contact the clinic team if there is a problem.
8.10 Prepare a treatment supporter (guardian/buddy)

Help the patient choose an ART or ART/TB Treatment Supporter. He or she should be someone who:

- Is chosen by the patient
- Has accepted the patient’s HIV+ status
- Is committed to support the patient with ART for a long time
- Has gained the patient’s trust over time
- Is available to go to the preparatory visits and to be educated on HIV, ART and TB issues
- Is available twice daily especially in the first months of therapy and after that as necessary to support adherence
- Is somebody who will treat all information as confidential
- Examples: partner, parent, son/daughter, someone from support group, friend, neighbour, teacher, spiritual guide, etc.

How to prepare the treatment supporter:

- Have a meeting with the supporter before getting commitment to explain what is required (commitment, confidentiality, knowledge on HIV, ART and TB related needs and also emergency resource needs such as money, help with household, children, which can arise while on treatment)
- Educate on what “being confidential” means.
- Educate the treatment supporter with the Patient Education Flipchart, Patient Education Card, Patient Self-Management Booklet and Caregiver Booklet. Also use the TB Treatment Supporter material if patient is on TB treatment.
- Educate on how to remind the patient to:
  - take the medicine (and to work out with the patient how best to do so),
  - be present at the follow-up appointments,
  - remember (and if patient not capable to keep track of) all important test results and clinic history over time, and
  - to accompany patient to support group meeting if possible.
- Educate to prevent his/her burn-out (see Annex B.5).
- Prepare to provide psychosocial support.
- Request his/her presence at the three preparatory visits prior ART initiation.
What health worker can do in addition:

- Hold treatment supporter meetings at facilities every two weeks to deal with issues facing treatment supporter (burn out, patient not being adherent, barriers to treatment and adherence, etc.)

- Explain how the clinical team can be reached by phone or any other quick way of consultation if urgent problems with the patient arise

- Mobilize people living with HIV to know who to contact for as treatment supporters and to enlist people to be Treatment Supporters

8.11 Special adherence support
8.12 Respond to new signs and symptoms/possible side effects in patient on ART

These may be:

- A side effect of the ARV therapy.
- A new opportunistic infection.
- Immune reconstitution syndrome.
  (The stronger immune system reacting to an infection that had been invisible; usually within 2 to 3 months of starting treatment.)
- A common infections or other problems (not related to HIV) or
- If pregnant or postpartum, a pregnancy-related problem or complication.

Clinical monitoring at the first-level facility requires the ability to consult with the district clinician on your clinical team. This will require support for cell phone or radio telephone communications.
<table>
<thead>
<tr>
<th>Signs or symptoms</th>
<th>Response:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>Take with food (except for DDI or IDV). If on zidovudine, reassure that this is common, usually self-limited. Treat symptomatically <em>(see Palliative care p. 23)</em>. If persists for more than 2 weeks or worsens, call for advice or refer.</td>
</tr>
<tr>
<td>Headache</td>
<td>Give paracetamol. Assess for meningitis. <em>(See Acute Care guideline module).</em> If on zidovudine or EFV, reassure that this is common and usually self-limited. If persists more than 2 weeks or worsens, call for advice or refer.</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Hydrate. Follow diarrhoea guidelines in <em>Acute Care</em> guideline module. Reassure patient that if due to ARV, will improve in a few weeks. Follow up in 2 weeks. If not improved, call for advice or refer.</td>
</tr>
<tr>
<td>Fatigue</td>
<td>Consider anaemia especially if on ZDV. Check haemoglobin. Fatigue commonly lasts 4 to 6 weeks especially when starting ZDV. If severe or longer than this, call for advice or refer.</td>
</tr>
<tr>
<td>Anxiety, nightmares, psychosis, depression</td>
<td>This may be due to efavirenz. Give at night; counsel and support (usually lasts &lt; 3 weeks). Call for advice or refer if severe depression or suicidal or psychosis. Initial difficult time can be managed with amitriptyline at bedtime.</td>
</tr>
<tr>
<td>Blue /black nails</td>
<td>Reassure. It’s common with zidovudine.</td>
</tr>
<tr>
<td>Rash</td>
<td>If on nevirapine or abacavir, assess carefully. Is it a dry or wet lesion? Call for advice. If generalized or peeling, stop drugs and refer to hospital.</td>
</tr>
<tr>
<td>Fever</td>
<td>Check for common causes of fever. <em>(See Acute Care guideline module.)</em> Call for advice or refer. <em>(This could be a side effect, an opportunistic or other new infection, or immune reconstitution syndrome.)</em></td>
</tr>
<tr>
<td>Yellow eyes (jaundice)</td>
<td>Stop drugs. Call for advice or refer. <em>(Abdominal pain may be pancreatitis from DDI or d4T.)</em> If jaundice or liver tenderness, send for ALT test and stop ART. <em>(Nevirapine is most common cause.)</em> Call for advice or refer.</td>
</tr>
<tr>
<td>Abdominal or flank pain</td>
<td>If possible, measure hemoglobin. Refer/consult (and stop ZDV /substitute d4T) if severe pallor or symptoms of anaemia or very low haemoglobin (&lt;8 grams). If non-severe anaemia, use <em>Acute Care</em> page 18. Make sure patient is given iron/folate; mebendazole if none in last 6 months; and antimalarial if at risk.</td>
</tr>
<tr>
<td>Pallor: anaemia</td>
<td>If new or worse on treatment, call for advice or refer. Patient on d4T-3TC-NVP should have the d4T discontinued—substitute ZDV if no anaemia. <em>(Check haemoglobin.)</em></td>
</tr>
<tr>
<td>Tingling, numb or painful feet/legs</td>
<td>If cough or difficult breathing. *(Stop drug and consult/refer.) Use Acute Care section on cough or difficult breathing.</td>
</tr>
<tr>
<td>Cough or difficult breathing</td>
<td>This could be immune reconstitution syndrome. Call for advice. *(Stop drug and consult/refer.) Use Acute Care section on cough or difficult breathing.</td>
</tr>
<tr>
<td>Changes in fat distribution</td>
<td>Discuss carefully with your patient—can s/he accept it?</td>
</tr>
</tbody>
</table>

*Consult with clinician if patient is taking other ARV drugs.*
Special considerations in managing side effects during pregnancy or postpartum:
Consider the possibility of problems or complications related to pregnancy- or postpartum. Use the IMPAC PCPNC guidelines (or other maternal health guidelines), in addition to the considerations in the side effect table on the previous page.

<table>
<thead>
<tr>
<th>Side Effect</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>This is a common pregnancy problem in the first 9 weeks of gestation. In no other signs or symptoms and has not responded to the dietary changes suggested in the Palliative Care guideline module, give vitamin B6 (25 mg 3-4 times daily, not to exceed 100 mg a day) for severe nausea and vomiting.</td>
</tr>
<tr>
<td>Headache</td>
<td>If diastolic BP &gt;90 mm Hg, consider pre-eclampsia- see the IMPAC PCPNC guidelines (..) If temperature &gt;38°C with or without other accompanying signs and symptoms, refer first to IMPAC guidelines</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>Diarrhoea in pregnancy can result from changing hormone levels. However, it is not a good idea to characterise this symptom as “normal” until other problems have also been ruled out.</td>
</tr>
<tr>
<td>Fatigue</td>
<td>If a pregnant or postpartum patient complains of fatigue, the underlying cause needs to be vigorously investigated before deciding that it is simply a side effect of ARVs. See anaemia</td>
</tr>
<tr>
<td>Rash</td>
<td>If the woman is on NVP, the rash is most likely due to this. In most cases, the diagnosis of pregnancy-related rashes is made clinically after excluding other, more common rashes. <em>Any pregnant woman experiencing unrelenting pruritus, which may or may not be accompanied with jaundice, should be evaluated by a district physician urgently.</em></td>
</tr>
<tr>
<td>Jaundice (yellow eyes)</td>
<td>Jaundice in pregnancy can be caused by many diseases, some of which can be fatal if not managed correctly and urgently. <em>All pregnant women with jaundice must undergo evaluation by a physician to determine the cause of their jaundice.</em></td>
</tr>
<tr>
<td>Fever</td>
<td>If temperature &gt;38°C with or without other accompanying signs and symptoms, refer first to IMPAC guidelines This could also be a pregnancy or postpartum-related infection See IMPAC PCPNC guidelines</td>
</tr>
</tbody>
</table>
9 Manage chronic problems

9.1 Manage persistent diarrhoea*

**Give empirical antimicrobial treatment if no blood in stool:**

- Treat with: cotrimoxazole + metronidazole. Follow up in 7 days.
- If no response, refer. If referral is difficult, treat with: albendazole or mebendazole.
- If good response to an antimicrobial, continue for 2 weeks total treatment.
- If diarrhoea does not stop within 2 weeks or after second treatment. Refer for management, including possibility of starting ARV therapy.

**Give supportive/palliative care:**

- Increase fluid intake.
  - This is very important to prevent dehydration.
  - Give ORS if large volume diarrhoea. (See Fluid Plan B in *Acute Care* guideline module).
- Give constipating drug unless blood in stool or fever or elderly. (See P25 in *Palliative Care* module.)
- Advise on special care of the rectal area. (See P26.)
- Advise on a supportive diet for patients with diarrhoea (P27).
- Monitor weight. (Patient can monitor change in fit of clothes.)
- Follow up regularly.

*Most of the problems in this section should improve on ART. If patient is on ART and these problems develop, make sure the patient is adherent, and consult or refer to district clinician—this may indicate toxicity from the treatment or that ART is not working. Exclude TB if fever or weight loss—this may require referral to the district clinic.*
9.2 Manage recurrent or severe candidiasis*

For recurrent candida vaginitis which does not respond to first-line antifungal (nystatin):
- Give fluconazole 200 mg on the first day, then 100 mg/day for 10 days. Do not give during pregnancy.
- Follow up in 2 weeks.
- If vaginitis persists on follow-up, or is recurrent, treat woman and partner at the same time.
- If still recurrent, consult or refer. (She may need an intermittent treatment regimen or ART.)

For oral thrush which does not respond to the first-line antifungal:
- Use miconazole gum patch if only nystatin or gentian violet was used previously.
- If still no response, give fluconazole for 10 days.
- Follow up in 2 weeks.
- If oral thrush persists on follow-up or is recurrent, consult or refer. Patient may need intermittent treatment regimen.

* Most of the problems in this section should improve on ART. If patient is on ART and these problems develop, make sure the patient is adherent, and consult or refer to district clinician—this may indicate toxicity from the treatment or that ART is not working. Exclude TB if fever or weight loss—this may require referral to the district clinic.
9.3 Manage persistent fever

Antimicrobial treatment
- Treat for malaria if:
  - result is smear-positive, or
  - result is smear-negative or unavailable, and no treatment within past month. (Adapt locally.)
- Always consider TB when persistent fever, even if there is no cough. Refer to district clinician or consult for possibility of empirical TB treatment.
- See Acute Care guideline module, p. 28, to consider common causes of fever.

Refer patient to district for consideration of ART when eligible. If on ART already, this may be immune reconstitution syndrome or a side effect—consult/refer.

Give supportive care:
- Increase fluid intake. This is very important to prevent dehydration.
- Paracetamol, but avoid excessive dose. (See P34.)
- Tepid sponging if patient likes it.
- Follow up regularly.

9.4 Manage weight loss or no weight gain in a pregnant woman*

- Assess for possible causes and treat:
  - Assess diet and give advice to increase high energy foods.
  - Make sure painful oral and oesophageal infections are not interfering with eating.
  - If persistent diarrhoea, treat.
  - If lack of appetite or nausea, see recommendations in the Palliative Care module, see P23.
  - Consider TB. (Consult or refer if necessary.)
- See recommendations in the Palliative Care module, P23.
- Start ART when eligible.

* Most of the problems in this section should improve on ART. If patient is on ART and these problems develop, make sure the patient is adherent, and consult or refer to district clinician—this may indicate toxicity from the treatment or that ART is not working. Exclude TB if fever or weight loss—this may require referral to the district clinic.
9.5 Special interventions for injecting drug users

People who inject drugs are particularly vulnerable to HIV and may have difficulties in dealing with health professionals (and vice-versa). Extra care is therefore needed to ensure they get the best service available and keep using the services.

- Encourage them to:
  - Use sterile injecting equipment each time they inject.
  - Not pass on used or share needles or syringes with others.
- Make clean needles and syringes available.
- Check for common infections such as local abscesses, pneumonia, tuberculosis and hepatitis.
- Help them to stabilize their lifestyles. Integrate care with drug substitution and other drug treatment and support services.
- When methadone is used for drug substitution, be aware that some medications may induce withdrawal:
  - Rifampicin.
  - Several ARV medications: efavirenz (EFV), nevirapine (NVP), or protease inhibitors.
- Special considerations in ART:
  EFV or NVP can decrease plasma levels of methadone and lead to opiate withdrawal. Patients should be monitored for signs of withdrawal and their methadone dose increased as required to alleviate withdrawal symptoms.
10 Dispense medications, schedule follow-up, record data

10.1 Dispense medications according to Treatment Plan

- Check the Treatment Plan.
- Adherence:
  - Make sure adherence has been assessed and supported. (See 8.9).
  - Record estimate on HIV Care/ART Card.
- Make sure patient understands:
  - how to take the drugs
  - how to store the medications
  - what to do if a dose is forgotten
  - what to do if a dose is vomited
  - common side effects and how to manage them
  - when to seek care (use Patient Education Card)
  - whom to contact when there is a problem
  Explain, then ask checking questions.
- Observe patient swallowing first dose. If partial clinic-based directly observed treatment is planned, do this on each visit and mark treatment calendar.
- When on ARV medication, be careful if another drug is started for another problem, or if the patient’s condition has changed. (Use 10.2.)
- Ask patient about:
  - other drugs
  - herbal remedies
- Follow drug management supply guidelines.
- Dispense drugs (record).
- Advise to return on follow-up visit with:
  - stock of drugs
  - treatment supporter
# 10.2 First-line ARV drug interactions

<table>
<thead>
<tr>
<th>If patient is taking:</th>
<th>Do not co-administer these drugs. (Call for advice for alternative treatment.)</th>
<th>Other cautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>nevirapine (NVP)</td>
<td>❖ rifampicin ❖ ketoconazole</td>
<td>If using combined oral contraceptives, advise also to use condoms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If on methadone, will need to increase dose. Monitor for withdrawal signs.</td>
</tr>
<tr>
<td>lamivudine (3TC)</td>
<td>No major drug interactions.</td>
<td></td>
</tr>
<tr>
<td>stavudine (d4T)</td>
<td>❖ zidovudine (ZDV, AZT)</td>
<td>Higher risk of d4T neuropathy when also taking INH.</td>
</tr>
<tr>
<td>zidovudine (ZDV, AZT)</td>
<td>❖ stavudine (d4T) ❖ ganciclovir</td>
<td>Higher risk of anaemia when also taking aciclovir or sulpha drugs.</td>
</tr>
<tr>
<td>efavirenz (EFV)</td>
<td>❖ diazepam (OK for convulsions in emergency.) ❖ other benzodiazepines other than lorazepam ❖ phenobarbitol ❖ phenytoin ❖ protease inhibitor ARVs</td>
<td>Do not take with high-fat meal. If on methadone, will need to increase dose. Monitor for withdrawal signs. Do not give in first trimester pregnancy</td>
</tr>
</tbody>
</table>

Consult with clinician if patient is taking other ARV drugs. Insert local traditional medicines which interact with first-line ARV drugs.
## 10.3 Arrange follow-up visit in clinic

<table>
<thead>
<tr>
<th>Clinical Stage</th>
<th>Patient Status</th>
<th>Follow-up Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1 or 2</strong></td>
<td><strong>Pregnant woman</strong></td>
<td>Follow-up at antenatal visits - at least once in first trimester, once in second trimester, and twice in third trimester; more may be needed for adherence preparation and monitoring if eligible for ART and to provide PMTCT interventions.</td>
</tr>
<tr>
<td></td>
<td><strong>Post-partum or lactating mother</strong></td>
<td>At 6 hours, 6 days and 6 weeks post-partum and during newborn’s immunization visits, then every 3 months.</td>
</tr>
<tr>
<td></td>
<td><strong>All other adults</strong></td>
<td>Every 6 months (unless new problem arises).</td>
</tr>
<tr>
<td><strong>Stage 3 or 4</strong></td>
<td><strong>On TB treatment</strong></td>
<td>Every month—combine with follow-up visit for TB.</td>
</tr>
</tbody>
</table>
|                 | **All patients, including pregnant women** | If not on ART, every month.  
**When starting ART:**  
- Every week for 2 weeks, then every 2 weeks for 2 months, then monthly. (Adapt locally).  
- Once stable and symptom-free for 1 month, patient may only need to see health worker every 3 months.  
**For patients with complicating conditions who require close monitoring and lab by district clinician (adapt locally):**  
- District clinic initiates and checks every 1-2 weeks for 2 months.  
**If no problem, follow up at:**  
- Nurse or first-level facility at month 2 and 3.  
- District clinician at month 4.  
- Nurse or first-level facility at month 5 and 6.  
- District clinician at month 7.  
- Nurse or first-level facility at month 8 and 9.  
- Etc. |
10.4 Follow-up defaulters

- Arrange home visit.
- Consult with treatment supporter and relevant CBO/FBO.

10.5 Link to community care and arrange home visits as needed

Link and refer to community services—community health workers; CBO’s; NGO’s; FBO’s; and traditional practitioners as appropriate.

10.6 Record data

- Transfer key HIV Care/ART Card data to Pre-ART or ART registers.
- Arrange for electronic data entry from register, according to national system.
- Summarize data in monthly (or quarterly) report and cohort analysis report.

The following information will be used to determine whether the ART is working:

- Weight
- Patient’s function
- Adherence estimate
- New opportunistic infection after 6 months
- CD4 where available
11 Positive prevention for PLHA

11.1 Prevent sexual transmission

**Warn about the risks of unprotected sex and make an individual risk reduction plan**
- Educate on risk of HIV infection to sexual partners
- Help patient assess current risk of transmission and make an individual risk reduction plan
- Explain that it is possible to be re-infected with another strain of HIV or to get a sexually transmitted infection (STI)
- Explain that sexual activity need not be avoided, but precautions are necessary

**Counsel on consistent and correct use of condoms during every sexual encounter**
- Educate that it is essential to consistently use condoms even if already infected with HIV or if both partners are HIV positive
- Use condoms for vaginal, anal and oral intercourse
- Demonstrate how to use both male and female condoms
  - use model to demonstrate correct use
  - educate to put condom on before penetrative sex, not just before ejaculation
  - request client to demonstrate correct use of condoms
- Educate on advantages/disadvantages of both male and female condoms
- Advise to use water-based lubricants.

**Discuss potential barriers to consistent and correct use of condoms**
- Explore options to overcome barriers
- Provide techniques/skills for negotiating condom use according to the needs expressed by clients
- Role-play condom negotiation with client

**Provide condoms and discuss how client will assure a regular supply of condoms**
Counsel on safer sex and reducing risk of transmission
(use adapted patient flipchart)

- Counsel on partner reduction while emphasizing consistent condom usage during all sexual encounters
- Counsel on less risky sex—choose sexual activities that do not allow semen, fluid from the vagina, or blood to enter the mouth, anus or vagina of the partner
- Educate on symptoms of STIs with clients and counsel them to receive prompt treatment if they suspect a STI.
- Dispel any prevailing myths on cleansing of HIV infection through sexual intercourse with minors or others. Discuss any other local myths that may impact on positive prevention, for example, belief that condoms transmit HIV (refer to patient flipchart)
- For adult men, emphasize not having sex with teenagers or girls (or boys).
- Emphasize that even if a client is on ART, HIV transmission can still occur.
- Respond to concerns about sexual function. Encourage questions from clients. Emphasize that normal sexual activity can continue, with above stated precautions.

Discuss disclosure (See Annex A.5) and encourage partner testing

- Discuss barriers and explore benefits of disclosure
- Develop strategy for disclosure if client is ready
- Refer to PLWHA support groups or others for additional support, if required
- Strongly encourage and facilitate partner testing (Record result on HIV Care/ART Card)
- Discuss testing of children (see section 4)
- Provide ongoing counselling for discordant couples

Respond to concerns about sexual function.

11.2 Prevent transmission of HIV through non-sexual means

- Explain how sharing needles or syringes or razor blades or tattoo instruments can infect others
- Educate clients to cover any open sores or cuts
- Educate caregivers to wear protective covering, and clean up any blood or body fluids with gloves and disinfectants. Explain that this is normal procedure
11.3 Counsel on reproductive choice and family planning

If woman of childbearing age or any man, counsel on reproductive choice and family planning. (Use the Reproductive Choice and Family Planning for People Living with HIV flipchart to support providing this information and for more detail.)

If considering pregnancy:
- Advise on the risks associated with pregnancy:
  - Infections such as malaria, TB, pneumonia are more dangerous in pregnancy.
  - Greater risk of postpartum complications.
- Pregnancy does not cause faster progression of HIV/AIDS for the woman.
- Discuss risks for the baby. Possible transmission from HIV positive woman to her baby during pregnancy, delivery or breastfeeding. Also increased risk of miscarriage, stillbirth, and low birth weight.
- Discuss PMTCT interventions (insert summary of what is locally available.)
- Could infect uninfected partner.
- If man is not infected with HIV, discuss artificial insemination If not possible, advise having sex without condoms only at fertile time of month.

If pregnancy not desired; discuss family planning:
- Encourage condom use in all to protect from STIs, infection from another strain of HIV, and also to prevent transmission to sexual partners.
- Condoms are also an effective method of contraception when used correctly and consistently (offering dual protection from both pregnancy and STIs/HIV). However, if a woman desires further pregnancy protection, she may wish to use condoms with another contraceptive method.
- Further special considerations about method use for women with HIV include:

<table>
<thead>
<tr>
<th>Risk of mother-to-child transmission of HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not infected</td>
</tr>
<tr>
<td>Infected during pregnancy and delivery</td>
</tr>
<tr>
<td>Infected during breastfeeding</td>
</tr>
<tr>
<td>Method</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Male condom</td>
</tr>
<tr>
<td>Female condom</td>
</tr>
<tr>
<td>Combined oral contraceptive pills</td>
</tr>
<tr>
<td>Injectables (DMPA or NET-EN)</td>
</tr>
</tbody>
</table>

### Referral methods

- **Implant**
- **Vasectomy**
- **Female sterilization**

These methods provide long-term highly effective contraception and can be used by women with HIV. (See the following considerations.)

### Emergency contraceptive pills

Provide to all women in case condom is not used, breaks or slips or as back-up for other method.
- An IUD should not be inserted in a woman with gonorrhoea or chlamydia, or if a woman is at very high risk for these infections. Women with HIV or successfully treated AIDS can use the IUD.

- If a woman is taking rifampicin, she should not use pills, monthly injectables or implants as the contraceptive effectiveness may be lessened.

- Spermicides, or barrier methods with spermicides, should not be used by women with HIV infection or AIDS.

- Women on ART who are using hormonal methods are advised to also use condoms, as ART may reduce the contraceptive effectiveness.

If pregnant:

- Use antenatal guidelines.

- During pregnancy, condoms should be used to protect against STIs, infection from another strain of HIV, and to prevent transmission to sexual partner.

- Provide family planning counselling and services during pregnancy to enable her to prevent or delay future pregnancies.

- Discuss whether she is considering pregnancy termination. Warn about dangers of unsafe abortion. If abortion is safe and legally available and desired by the woman, discuss option of pregnancy termination. Discussion should be nondirective and nonjudgmental.
11.4 Positive living for PLHA

People with HIV can live full and healthy lives if they take care of themselves and access treatments.

❖ Advise how to prevent other infections.
- Avoid STIs and re-infection with other strains of HIV—see 11.1
- Avoid others with infections (flu, boils, impetigo, herpes zoster, chickenpox, pulmonary TB until 2 weeks on treatment).
- Use safe drinking water—drink boiled water or tea when possible. Store water in container which prevents contamination. (Use spigot; do not dip hand or used cup into water.)
- Eat well-cooked food.
- Wash fruits and vegetables (with iodine or chlorine tablets in water, especially if eating raw).
- Practice good hand washing—especially after toilet of themselves or others. Caregivers and patient should wash hands often: after using toilet; before preparing food; after sneeze or cough; after touching the genitals; after handling garbage; after touching any blood, semen, vaginal fluid, feces.
- HIV patients should have a local antiseptic (such as gentian violet or chlorhexidine) at home to apply to minor wounds after washing.
- Use insecticide-treated bednet to prevent malaria.

❖ Encourage physical activity as appropriate.
- Help patient develop his/her own programme.
- Exercise can make the person feel better and maintain muscle tone.
- Physical activity is important to prevent weight loss:
  - stimulates appetite
  - reduces nausea
  - improves functioning of the digestive system
  - strengthens muscles

❖ Advise to avoid harmful or ineffective expensive treatments or food supplements. (Adapt locally.)

❖ Support nutrition.
• Advise on nutrition: (Example from Namibia guidelines; local adaptation is essential).
  - Foods to stimulate weight gain should have high protein, fat, and carbohydrate content and include:
    Avocados, coconut, full-cream milk powder, yoghurt or sour milk, soya products, cheese, meat, fish, chicken, peanut butter, nuts and seeds, dried fruit, eggs, beans, lentils, potatoes, sweet potatoes, bananas, olives, cassava, millet, sorghum, oats, rice, barley, wheat, maize.
  - Avoid refined sugar and sweets as these increase the risk of dental and oral problems.
  - Some tips to help improve intake and digestion of food:
    Squeeze fresh lemon juice over fatty foods like meat, chicken and nuts.
    Add the grated skin of oranges and lemons to fatty foods.
    To help digest meat, eat papaya (paw-paw) with the meat.
    Eat many small meals a day and chew food well.
    Drink between meals, not with meals.
    Eat fermented or sour foods such as sour milk, sour porridge, etc.
  - Avoid excessive alcohol/drugs.

✓ **Address food security: arrange for supplements if available and needed (requires local adaptation).**
  - Give priority to patients with weight loss or wasting.
  - In certain settings, supplements may be important for treatment adherence especially in first 3 months.

✓ **Have peer demonstrate preparation of nutritious foods.**
11.5 Positive Prevention Infant feeding and HIV-positive women

❖ **Provide general information about:**
  - The risk of HIV transmission through breastfeeding
  - The risks and benefits of locally available infant feeding options

❖ **If you have not been trained to do in-depth counselling to help the mother make an infant feeding choice:**
  - refer the mother to a trained counselor
  - if a mother has already delivered and her baby is less than 6 months old, encourage her to exclusively feed her infant however she has chosen, either by breastfeeding or replacement feeding, until she has seen a counselor
  - support the mother, however she decides to feed her baby
  - if the mother has chosen to exclusively breastfeed, use the skills you learned through IMCI or other training to support her to initiate breastfeeding and to exclusively breastfeed until she is ready to make a safe transition to another feeding choice
  - similarly, use your skills to teach a breastfeeding mother to express breastmilk and feed it with a cup

❖ **If you have been trained in infant and young child feeding, including HIV and infant feeding, provide this counselling according to the flow chart, as appropriate to the woman’s situation:**

1. **If this is the mother’s first infant feeding counselling session:**
   - And she is pregnant:
     - Follow Steps 1-5.
     - If she needs time to decide which feeding option to choose, follow Steps 1-4 and ask her to return to discuss Step 5.
     - If she is early in her pregnancy, counsel her but also ask her to return again closer to her delivery date to review how to implement the feeding method.
   - If she already has a child:
     - Follow Steps 1-4. If the mother is not breastfeeding at all, however, do not discuss the advantages and disadvantages of breastfeeding.
     - Continue with Steps 5 and 6.
2. If the mother has already been counselled and has chosen a feeding method, but has not yet learned how to implement it:
   And she is pregnant:
   • Do Step 5 only.
   If she already has a child:
   • Begin with Step 5, and then continue with Step 6.

3. If this is a follow-up visit:
   • Begin with Step 6.
   • Review how to implement the feeding method.
**Counselling flow chart**

**STEP 1**
Explain the risks of mother-to-child transmission

**STEP 2**
Explain the advantage and disadvantages of different feeding options, starting with the mother’s initial preference

**STEP 3**
Explore with the mother her home and family situation

**STEP 4**
Help the mother chose an appropriate feeding option

**STEP 5**
Demonstrate how to practice the chosen feeding option. Provide take-home flyer.

- how to practice exclusive breastfeeding
- how to practice other breast milk options
- how to practice replacement feeding

**STEP 6**
Provide follow-up counselling and support

- Monitor growth
- Check feeding practices and whether any change is envisaged
- Check for signs of illness

Discuss feeding for infants from 6 to 24 months
Key differences between adults and children

- Young children have immature immune systems and thus are susceptible to common infections as well as opportunistic infections.

- Maternal HIV antibodies can be passed to the child and last for at up to 18 months, so HIV antibody testing does not reliably indicate HIV infection in children under 18 months. Positive HIV antibody testing can indicate exposure to HIV or HIV infection in the child.

- Negative HIV antibody testing in a child no longer breast feeding usually indicates the child is not HIV infected.

- Children at any age who continue to breastfeed are at risk of acquiring HIV infection throughout the time they are breastfed.

- Normal CD4 counts are higher in young children than in adults and decrease with age. For children under 6 years of age, it is best to use a %CD4, not an absolute count.

- ARV drugs are handled differently in children’s bodies, affecting the doses that are needed.

- It can be difficult to communicate with children. This makes care and adherence more difficult. As children grow they need counselling and disclosure of their HIV status.

- Where one child is HIV infected in a family it is possible that some of the siblings are also infected. Make sure diagnostic counselling and testing is offered to all other siblings.
Assess: Clinical review of symptoms and signs, medication use, and side effects and complications in children (see IMCI guidelines for details of those with asterisk)

12.1 Ask

- Review clinical history and check record if available for TB, other OIs and chronic problems.
- Ask caregiver what the child’s problems are*.
- Check for general danger signs*:
  - Ask for history of convulsion.
  - Is the child able to drink or breast-feed?
  - Does the child vomit everything?
- Ask if the child has the following symptoms and, if yes, ask for how long:
  - Cough or difficult breathing*?
  - Diarrhoea*?
    - If yes, blood in stool?
  - Fever*?
  - Ear problem or ear discharge*?
  - Mouth sores?
  - Weakness?
  - Nausea or vomiting?
  - Poor feeding/reduced appetite?
  - Tingling or numbness on the feet or legs?
  - Rash or swelling?
  - Any other pain?
- Has the child needed urgent medical care? If yes, ask for record/diagnosis?
- Which medications is the child taking and how often?
- Assess adherence. (If on ART, see 8.9.)
- What problems has the child had taking medicines, or how have the medicines been taken?
- Assess for side effects of ARV drugs.
- What problems has the child had taking the medicine?
- Ask if there is anything else the child or the treatment supporter would like to talk about.
- Ask if the development of the child has been normal.
12.2 Look (see IMCI guidelines for details of those with asterix)

- Check for general danger signs:
  - See if the child is lethargic or unconscious*.

- If cough or difficult breathing*:
  - Count the breaths for one minute.
  - Look for chest indrawing.
  - Look and listen for stridor.

- If diarrhoea*:
  - Assess for dehydration.

- If hot body or high body temperature*:
  - Look or feel for stiff neck.
  - Look for signs of measles, herpes zoster or other rash conditions.

- Look for palmar pallor*.

- Look in mouth for oral thrush.

- Check for swollen glands in the neck, axillary and groin areas.

- Check for parotid enlargement.

- Assess for severe wasting. Look for increased skin folding at the buttocks? Look for the "baggy-pants" sign. Is the child "skin and bones"? If yes, this is severe wasting.

- Weigh the child. Compare it with previous weight, preferable on the weight for age chart. Is there weight loss? What %? Is the child crossing the line downwards?

- Measure the height. Plot it against the height for age curve. Is the child stunted?

- Check for developmental milestones. Regression indicates loss of a previously attained milestone, e.g. a child who was walking can no longer walk. Common developmental milestones include:
  - Child able to smile.
  - Child able to stand without support—about 12 months.
  - Child able to climb stairs—about 12 months.
  - Child has bladder control—about 24 months.
  - Child able to say 2 words—about 24 months.
  - In older children and adolescents, sexual development.

- Look for new signs. If new symptoms are present, use IMCI-HIV Chart Booklet or the national guidelines.
12.3 WHO Pædiatric HIV Clinical Staging
(any one condition in the highest staging determines stage; only perform clinical staging if HIV infection is confirmed)\(^1\)

<table>
<thead>
<tr>
<th>WHO Pædiatric Clinical Stage 1 Asymptomatic</th>
<th>WHO Pædiatric Clinical Stage 2 Mild Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Symptoms/signs</strong></td>
<td></td>
</tr>
<tr>
<td>No symptoms or only:</td>
<td>Enlarged liver and/or spleen</td>
</tr>
<tr>
<td>❖ Persistent generalized lymphadenopathy</td>
<td>Enlarged parotid</td>
</tr>
<tr>
<td>❖ Enlarged liver and/or spleen</td>
<td>Minor mucocutaneous conditions (e.g. chronic dermatitis, fungal infections or molluscum contagiosum)</td>
</tr>
<tr>
<td>❖ Enlarged parotid</td>
<td>Chronic/recurrent URTI (sinusitis, ear infections, pharyngitis, bronchitis)</td>
</tr>
<tr>
<td>❖ Minor mucocutaneous conditions (e.g. chronic dermatitis, fungal infections or molluscum contagiosum)</td>
<td>❖ Herpes zoster</td>
</tr>
<tr>
<td>❖ Chronic/recurrent URTI (sinusitis, ear infections, pharyngitis, bronchitis)</td>
<td>❖ Recurrent mouth ulcerations</td>
</tr>
<tr>
<td>ARV Therapy</td>
<td>If CD4 available as for stage 1</td>
</tr>
<tr>
<td>Indicated only if CD4 is available:</td>
<td>If CD4 not available then TLC may be used (subject to &lt;national adaptation).</td>
</tr>
<tr>
<td>&lt; 11 months %CD4 &lt; 25 (CD4&lt;1500 cells)</td>
<td>&lt; 11 months TLC &lt; 4000 cells</td>
</tr>
<tr>
<td>12-35 months %CD4 &lt; 15 (CD4&lt;750 cells)</td>
<td>12-35 months TLC &lt;3000</td>
</tr>
<tr>
<td>36-59 months %CD4&lt;10 (CD4&lt;350)</td>
<td>36-59 months TLC &lt; 2500</td>
</tr>
<tr>
<td>5 years or older as for adults (CD4 count&lt;200)</td>
<td>5-8 years TLC &lt; 2000</td>
</tr>
<tr>
<td></td>
<td>9 years or older as for adults</td>
</tr>
</tbody>
</table>

\(^1\)These are interim recommendations and may be subject to change.
<table>
<thead>
<tr>
<th>WHO Paediatric Clinical Stage 3 Advanced Disease</th>
<th>WHO Paediatric Clinical Stage 4 Severe Disease (AIDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>❖ Moderate unexplained malnutrition not adequately responding to standard therapy (Very low weight for age or Low height for age or Low weight for height)</td>
<td>❖ Severe refractory wasting or severe malnutrition unexplained and not adequately responding to standard therapy</td>
</tr>
<tr>
<td>❖ Oral thrush (outside neonatal period) or hairy leukoplakia</td>
<td>❖ Oesophageal thrush</td>
</tr>
</tbody>
</table>
| ❖ Unexplained and unresponsive to standard therapy:  
  - Diarrhoea >14 days  
  - Fever >1 month  
  - Thrombocytopenia for > 1 month*  
    (< 50,000/mm$^3$)  
  - Neutropenia for > 1 month*  
    (< 500/mm$^3$)  
  - Anaemia for > 1 month  
    (haemoglobin < 8 gm)* | ❖ More than one month of herpes simplex ulcerations |
| ❖ Recurrent severe bacterial pneumonia | ❖ Severe multiple or recurrent bacterial infections ≥ 2 episodes in a year (not including pneumonia) |
| ❖ Pulmonary TB | ❖ Pneumocystis pneumonia (PCP)* |
| ❖ TB lymphadenopathy | ❖ Kaposi’s sarcoma |
| ❖ Symptomatic LIP* | ❖ Extrapulmonary tuberculosis °* |
| ❖ Acute necrotizing ulcerative gingivitis/periodontitis | ❖ Toxoplasma brain abscess* |
| ❖ Consider ART for all children irrespective of CD4 or TLC | ❖ Cryptococcal meningitis* |
| In children ≥ 18 months, treat guided by CD4, if available, especially in LIP, oral hairy leukoplakia or low platelet count. | ❖ HIV encephalopathy* |

*Except TB lymphadenopathy

Conditions marked with an asterisk require a clinician diagnosis—this can be from records of a previous hospitalization. Pneumocystis or any other severe pneumonia, LIP, toxoplasma, cryptococcal meningitis, and extrapulmonary TB are all infections which should be referred for hospital diagnosis and treatment.

Start ART irrespective of CD4 or TLC count

If HIV infection not confirmed (section 4) presumptive diagnosis of severe HIV disease can be made (see following) and ART can be started.
**Presumptive diagnosis of severe HIV disease in a child less than 18 months**
is made if child is:

- HIV antibody positive (confirmed by EIA/rapid test)

- Symptomatic with two or more of the following:
  - oral thrush;
  - severe pneumonia
  - severe wasting/malnutrition
  - severe sepsis

- Other factors that support the diagnosis of severe HIV disease in a HIV antibody positive child include:
  - recent HIV-related maternal death
  - advanced HIV disease in the mother
  - CD4 < 25%

Confirmation of the diagnosis of HIV infection should be sought as soon as possible see section 4.
### 12.4 Provide clinical care

Respond to problems according to treatment plan and new signs and symptoms. Use IMCI guidelines to classify severity of signs.

<table>
<thead>
<tr>
<th>If</th>
<th>Then</th>
</tr>
</thead>
</table>
| If fever, pain or other new symptoms or signs | ✷ Use IMCI guidelines  
✷ If on ART, use the side effects table (8.12)  
✷ Assure adequate pain and symptom management (see palliative care module) |
| If child exposed to HIV and HIV status not yet determined | ✷ Counsel on infant feeding. Follow national PMTCT guidelines.  
✷ Follow up at 1 or 2 weeks, 6, 10, 14 weeks, then monthly until the age of 12 months, and every 3 months afterwards.  
✷ Ensure adequate nutrition, growth monitoring and immunization.  
✷ Cotrimoxazole prophylaxis from 4-6 weeks of age.  
✷ Determine HIV status as soon as possible |
| If child is HIV infected and new signs of clinical stage 2, 3 or 4 | ✷ Start or continue cotrimoxazole prophylaxis  
✷ Evaluate for ART. Prepare child for ART adherence (8.9). If on ART, this may represent failure or immune reconstitution syndrome.  
✷ Consult/refer. |
| If recently received treatment in hospital | Follow treatment plan sent by district clinician  
Reevaluate before initiating ART if patient is eligible |
| If on ART | Monitor and support adherence and respond to side effects (8.12). |
| If exposed to TB | ✷ Evaluate for TB  
✷ Consider INH prophylaxis - see TB care with TB-HIV co-management guideline module. |
12.5 Cotrimoxazole prophylaxis

- HIV-exposed child: All start at 4-6 wks or when first seen.
  - HIV exposure defined as child born to an HIV infected mother (until infection can be excluded).
  - Breastfeeding child who is breastfed by an HIV infected mother of any age.

- HIV-infected child
  - Start CTX if:
    - No CD4 testing is available:
      - Clinically symptomatic (WHO stage 2, 3, 4).
      - Note: countries may choose to recommend for children of all clinical stages (WHO stage 1, 2, 3, 4).
    - CD4 testing is available:
      - 1-5 yrs: CD4 < 25%.
      - > 6 yrs: follow national guidelines for adults (CD4 < 200, 350 or 500).

Cotrimoxazole dosages

<table>
<thead>
<tr>
<th>Age</th>
<th>5 ml syrup 40mg/200mg</th>
<th>One single strength paediatric tablet 20 mg/100mg</th>
<th>One single strength adult tablet 80 mg/400mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 6 months</td>
<td>2.5 ml</td>
<td>1 tablet</td>
<td></td>
</tr>
<tr>
<td>6 months – 5 years</td>
<td>5 ml</td>
<td>2 tablets</td>
<td>½ tablet</td>
</tr>
<tr>
<td>&gt; 6 – 14 years</td>
<td>10 ml</td>
<td>4 tablets</td>
<td>1 tablet</td>
</tr>
<tr>
<td>&gt; 15 years</td>
<td>–</td>
<td>–</td>
<td>2 tablets</td>
</tr>
</tbody>
</table>
Possible first-line ARV regimens:

— **AZT or d4T plus 3TC plus NVP or EFV**
  - AZT+3TC+NVP
  - AZT+3TC+EFV
  - d4T+3TC+NVP
  - d4T+3TC+EFV

— **ABC+3TC+NVP or EFV**
  - ABC+3TC+NVP
  - ABC+3TC+EFV

* If < 3 years or < 10 kg, use NVP. EFV cannot be used in this age group.
** d4T not recommended if child is unable to tolerate solid forms.
12.7 Treat opportunistic infections before starting ART

<table>
<thead>
<tr>
<th>If patient has this opportunistic infection or other clinical problem:</th>
<th>Follow these instructions (using IMCI-HIV Chart Booklet):</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB suspected (according to national guidelines)</td>
<td>Consult/refer.</td>
</tr>
<tr>
<td>Any severe classification in IMCI</td>
<td>Consult/refer.</td>
</tr>
<tr>
<td>Non-severe pneumonia</td>
<td>Treat as in IMCI. Do not start ART until treatment is completed. Refer if persistent cough.</td>
</tr>
<tr>
<td>Persistent diarrhoea</td>
<td>Put on nutritional management and re-hydrate with ORS as in IMCI. Do not delay ART waiting for resolution.</td>
</tr>
<tr>
<td>Oesophageal thrush and able to swallow fluconazole</td>
<td>Start ART after fluconazole treatment. If not able to swallow, refer.</td>
</tr>
<tr>
<td>Drug reactions</td>
<td>Do not start ART during an acute reaction. (If already on ART, see 10.2.)</td>
</tr>
<tr>
<td>Anæmia</td>
<td>Severe anæmia: refer.</td>
</tr>
<tr>
<td></td>
<td>Non-severe anæmia: start treatment, see IMCI. Measure haemoglobin before starting ZDV. Do not delay ART.</td>
</tr>
<tr>
<td>Persistent fever without explanation</td>
<td>Consult/refer. Do not start ART until clinician evaluation.</td>
</tr>
<tr>
<td>Skin problem</td>
<td>Treat as in IMAI-HIV chart booklet.</td>
</tr>
<tr>
<td>Mouth problem</td>
<td>Treat as in IMAI-HIV chart booklet.</td>
</tr>
</tbody>
</table>
12.8 Monitoring ARV therapy

Patients put on ART need follow-up:

- First 6 months after ART initiation or change or clinical stability at 2 and 4 weeks, then monthly
- After the first 6 months of ART
  - Clinician should see child at least every 3 months
  - Non clinician (ideally provider of ARV medication such as pharmacist or drug dispenser) should see monthly
  - For any new problem that concerns caregiver or child
- For possible side effects on d4T, ZDV, 3TC, NVP, EFV, see section 8.5. For abacavir see section 12.11

In children it is generally advisable to monitor clinical response. Where CD4 is available, it is a useful adjunct and CD4 % is more reliable for children under 6 years than CD4 counts.

Clinical monitoring of children should include monitoring of:

- weight and height gain using growth charts (monthly) (catch-up growth)
- developmental milestones, or onset encephalopathy (monthly)
- new or recurrent stage 3 or 4 conditions

**Using clinical staging to guide decision-making in the event of treatment failure**

<table>
<thead>
<tr>
<th>WHO Paediatric Clinical Stage</th>
<th>Management algorithm</th>
</tr>
</thead>
</table>
| T 2<sup>a</sup>               | 1. Consider adherence to treatment  
|                               | 2. Closely monitor clinical events |
| T 3<sup>a</sup> or T 4         | 1. Consider adherence to treatment  
|                               | 2. Treat and manage coinfections and/or opportunistic infections<sup>b</sup> (e.g., tuberculosis<sup>c</sup>)  
|                               | 3. Consider nutritional issues if there are signs of growth failure  
|                               | 4. Switch treatment |

<sup>a</sup> new or recurrent stage  
<sup>b</sup> differentiate opportunistic infections from immune reconstitution syndrome  
<sup>c</sup> tuberculosis may not be an indication of treatment failure, and thus not require consideration of second-line therapy
Consider adherence to treatment

Children’s adherence depends largely on the understanding, perseverance and inventiveness of the parent or caregiver. An older HIV-infected child who understands about his/her infection can be actively involved in adherence to ARV treatment, but will need constant support to maintain it.

A caregiver is a parent, or another adult providing care for the children. A caregiver may also be a sibling or young adult

| ASSESS | HIV+ parent’s own adherence to treatment if s/he is the caregiver |
|        | caregiver’s awareness of risks to the child deriving from incorrect adherence |
|        | whether the caregiver is anxious that the medication could harm the child |
|        | caregiver’s cognitive capacity to understand the nature of the treatment and importance of adherence |
|        | older child’s awareness of importance of adherence to treatment |
|        | presence of depression or “giving up” in the caregiver or older child |

| ADVISE | child’s health depends on strict regularity of pill-taking |
|        | identify strategies to facilitate child’s correct adherence (taste, association of pill-taking with regular daily occurrences or game, respect for confidentiality) |
|        | ART has possible transitory side-effects that vary in duration and severity |
|        | let the child take part in choosing the best way to take medicine regularly |

| AGREE | to develop a treatment plan which respects the child’s privacy and allows him/her to carry on with regular activities |

| ASSIST | to access a support group for caregivers and/or for older children on ART |

| ARRANGE | next follow-up visit and facilitate linkages/home visits. |
12.9 Nutrition management

Where an IMCI adaptation has been made to determine local foods for various age groups, use those recommendations with a 50-100% increase in calorie requirement for weight.

12.10 Psychosocial support for HIV-infected children

(These recommendations are also useful for HIV-affected children of HIV infected parents)

Support for families

Caregivers may not know how to provide essential care and attention to the child. Helping caregivers to strengthen their coping skills will allow them to better support the children.

A caregiver is a parent, or another adult providing care for the children. A caregiver may also be a sibling or young adult.

Support for HIV infected children

HIV-infected children have the same needs as all children. They should be encouraged and assisted to lead the life of any other child and helped to develop in a healthy.

HIV-infected child has further serious needs:
• to face her/his own infection and learn to live with HIV
• to look after his/her health
• to grow and develop without transmitting HIV to others
• to overcome discrimination/ignorance/fear in others in a positive way

The recommendations for support for children living with an HIV+ family member (see Annex A.6 Support for special circumstances, For older child with HIV-infected parents) should also be applied to children who are themselves infected. They too are likely to be living with an infected or sick family member who may die one day, be too ill to care for them. Or they may have already lost one or more family members.
**Encourage and help caregiver to:**

**ASSESS**
- family needs: psychological and social with special attention to stigma, financial needs linked to lack of income due to illness and death, practical needs particularly concerning child care, legal needs
- the child’s needs:
  - quality of care and support;
  - exposure to developmental stimuli such as communication, play, school, learning, recreational activities;
  - psychological conditions linked to fear and understanding of her/his and other family member’s HIV status;
  - understanding of HIV/AIDS and on the importance of taking treatment regularly;
  - possible risks linked to discrimination
- caregiver’s own support and guidance needs, in relation to issues such as disclosure, adherence, support for a sick or dying child, coping with stigma, accessing available services
- availability of further adult resources in family or community to ensure respite care and support to a sick child

**AGREE**
- develop a plan addressing these needs
- involve the child in planning for his/her future

**ASSIST**
- provide support or arrange
- disclose his/her HIV status gradually to the child, starting as soon as possible and in a way appropriate to his/her age (see *Support for disclosure*)

**ARRANGE**
- link with relevant support and guidance services available in the community:
  - social welfare,
  - income generation activities,
  - home care,
  - childcounselling,
  - peer support groups for caregivers/older children,
  - educational services,
  - community volunteer support,
  - spiritual support,
  - organizations of PLWHAs.
- link with relevant services for children, such as schools, day-care, educational, artistic and recreational activities, peer groups for older children, child-counselling, services providing school fees, community volunteer support services, meals for children
Support for disclosure

It is important for a child to know his/her HIV status and/or that of a family member. Open communication about the infection or illness will allow the child to express his/her fears, obtain support, understand the infection and participate in finding ways of taking treatment regularly.

A caregiver is a parent, or another adult providing care for the children. A caregiver may also be a sibling or young adult.

**Assess**
- Caregiver’s awareness of the child’s right to understand what is happening to him/her or to someone in the family and be involved in planning for the future.

**Advise**
- Protection from painful topics leaves the child to cope with his/her fears alone: fantasies may be worse than reality.
- Children become frightened when they sense fear in adults: talk naturally to the child about the infection/illness and let her/him understand the caregiver feels comfortable with this.
- Be attentive to a child’s ways of expressing anxiety (withdrawal, anger, acting out, regression, craving attention, difficulty sleeping) and encourage him/her to talk about it.
- Start disclosing HIV status as soon as possible in an age-appropriate way.
- Ideally the caregiver should be the one to disclose to the child, with a trusted relative/family friend if possible, and should provide consistent ongoing support and loving empathy throughout the process.
- Disclosure to children should be done little by little, encouraging questions, providing truthful answers, and making the child understand s/he can come back with more questions at any time.
- Provide a loving context, use child-friendly language.
- Listen to the child and encourage him/her to express fears and emotions.
- Always be truthful to gain the child’s trust.
- Involve the child in decisions concerning his/her future.
- Reassure the child that it is not his/her fault if s/he or a family member are sick.
- Tell the child whom s/he can talk to about the illness, not that it is a secret.
- Link caregiver with peer support group for caregivers of a child infected by HIV.
- Counsel caregiver for guidance on disclosure of HIV status to a child according to his/her age, as follows:
## Age-specific advice on disclosure

<table>
<thead>
<tr>
<th>Up to 2 years</th>
<th>2-3 years</th>
<th>3-5 years</th>
<th>6-9 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk to the child simply and naturally about his/her health.</td>
<td>Be aware of children’s sensitivity to adult’s feelings through body language.</td>
<td>Stimulate questions by asking the child what s/he understands about having to go to the clinic, taking medicine, being often sick, and what s/he fears.</td>
<td>Start disclosure process as soon as possible, paying attention to non-verbal expressions of anxiety and denial.</td>
</tr>
<tr>
<td>Avoid transmitting anxiety to the baby through body language or voice tone.</td>
<td>Talk openly and naturally about child’s health without transmitting anxiety.</td>
<td>Listen carefully and answer truthfully and naturally, giving little information at a time, as the child seems ready to take it in.</td>
<td>Encourage and stimulate questions by the child. If the child does not ask questions, ask him about his fears.</td>
</tr>
<tr>
<td>If the child is sick talk gently about his/her illness, and provide constant loving care.</td>
<td>Use simple language, such as “a virus (or germ) inside you that can make you sick”, “medicine will make the body stronger to fight against the virus”, “the same virus your mother has and sometimes make her sick”.</td>
<td>Provide information about the infection/illness, its name, its causes and whether it will lead to death (see 3-5yrs).</td>
<td>Talk about the illness openly and simply, giving information a little at a time, as the child seems ready to take it in.</td>
</tr>
<tr>
<td></td>
<td>Answer questions about dying: “everyone will die one day, no one knows when.”</td>
<td>Explain that medicine will fight against the infection and make him/her feel better, but that it needs to be taken very regularly.</td>
<td>Provide information about the infection/illness, its name, its causes and whether it will lead to death (see 3-5yrs).</td>
</tr>
<tr>
<td></td>
<td>Meanwhile all children need to look forward to playing, learning new skills, making friends and growing up”.</td>
<td>Reassure the child that s/he must lead a life like all children, and can go to school, play games, hold hands and hug other children without transmitting the infection.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide ongoing loving reassurance and support. Tell the child that s/he can play with, hug and hold hands with other children without giving them the virus, and that if some adults seem afraid it is because they don’t know enough about this.</td>
<td>In that case advise the child to go back to playing with her friends.</td>
<td></td>
</tr>
</tbody>
</table>
**Support development in HIV+ children**

### All ages

- Assess caregiver’s awareness of the child’s need to lead the life of any other child and for stimulation for healthy development
- Advise:
  - do not overprotect the child
  - make sure that the child leads a full life, including play, educational and recreational activities with other children
  - the child will not infect other children
  - report discriminatory episodes to relevant services and organizations working to fight against stigma
- Counsel caregiver on age-specific needs to ensure healthy development, as follows:

<table>
<thead>
<tr>
<th>Up to 4 Months of Age</th>
<th>4 Months up to 6 Months</th>
<th>6 Months up to 12 Months</th>
<th>12 Months up to 2 Years</th>
<th>2 Years and Older</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Play:</strong> Provide ways for your child to see, hear, feel, and move.</td>
<td><strong>Play:</strong> Have large colourful things for your child to reach for, and new things to see.</td>
<td><strong>Play:</strong> Give your child clean, safe household things to handle, bang and drop.</td>
<td><strong>Play:</strong> Give your child things to stack up, and to put into containers and take out.</td>
<td><strong>Play:</strong> Help your child count, name, and compare things. Make simple toys for your child.</td>
</tr>
<tr>
<td>Communicate: Look into your child’s eyes and smile at him or her. When you are breastfeeding is a good time.</td>
<td>Communicate: Talk to your child and get a conversation going with sounds or gestures.</td>
<td>Communicate: Respond to your child’s sounds and interests. Tell your child the names of things and people.</td>
<td>Communicate: Ask your child simple questions. Respond to your child’s attempts to talk. Play games like “bye.”</td>
<td>Communicate: Encourage your child to talk. Answer your child’s questions. Teach your child stories, songs and games.</td>
</tr>
</tbody>
</table>
### Care and support in illness and death*

| **ASSIST** | Assist caregiver to identify further caring respite support to ensure ongoing care during the child’s illness |
| **ADVISE** | Let the child/baby experience physical closeness and care through holding and voice contact |
|            | Encourage the child to express his/her pain and fears, and listen carefully |
|            | Encourage the child to take part in quiet play or educational activities which can take his/her mind off the illness and pain |
|            | Find inventive ways of helping to relieve pain, such as light massage, story-telling, singing, changing position |
|            | Provide spiritual support according to the family’s religious beliefs |
|            | Encourage a close sibling to spend time with the child and assist with small services |
|            | Encourage siblings to create a memory box together |
|            | Reassure the child that if s/he dies s/he will not be alone |
|            | Let a terminal child in pain understand that s/he can “let go”, not hold on to life to protect the caregiver or other family member from pain. |

* See IMAI Palliative Care guideline module. This includes a section on children.
12.11 Paediatric ARV Drug Dosages

To ensure that correct ARV doses are dispensed to children, doses should be calculated per kilogram body weight or surface area. Drug doses have to be increased as the child grows; otherwise there is a risk of under dosage and development of resistance. However, health workers may find it difficult to calculate doses from weight or surface area. Therefore, tables with drug doses that can be administered according to a “weight band” are developed as shown below.

These tables provide suggested simplified dose schedules based upon the existing formulations available in most countries. They provide the closest dosing possible using the specified formulation, and indicate where it is not possible to get a reasonable dosing range with a formulation or where the drug is usually not recommended for use in this age.

**DISCLAIMER:**
These drug dosages by weight band have not been validated against pharmacokinetic values. Whenever possible, a health professional should calculate the actual dosage using the child’s weight or surface area.

**Single ARV drugs**
The closest dosing possible using the specified formulation is suggested, and accompanied by alternatives in brackets. Not recommended (N/r) is stated where no dosing is possible with the commonly available formulations.

<table>
<thead>
<tr>
<th>efavirenz (EFV)</th>
<th>TREATMENT DOSE: 15 mg/kg/day if capsule or tablet</th>
<th>Combination of 200, 100 and 50 mg capsules</th>
<th>or 600 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>Combinations of 200, 100 and 50 mg capsules</td>
<td>or 600 mg tablet</td>
<td></td>
</tr>
<tr>
<td>10 – 13.9</td>
<td>one 200 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 – 19.9</td>
<td>one 200 mg + one 50 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 – 24.9</td>
<td>one 200 mg + one 100 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 – 29.9</td>
<td>one 200 mg + one 100 mg + one 50 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 – 39.9</td>
<td>two 200 mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 and over</td>
<td>three 200 mg</td>
<td>one</td>
<td></td>
</tr>
</tbody>
</table>

1. This is not usually recommended for use in this age or formulation
2. This is the closest dosing possible using the specified formulation
**lamivudine (3TC)**  
**TREATMENT DOSE:**  
4 mg/kg/dose (to maximum 150 mg dose) - give dose twice daily

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Syrup 10 mg/ml</th>
<th>or</th>
<th>150 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
</tr>
<tr>
<td>30 days or older:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – 6.9</td>
<td>3 ml</td>
<td>3 ml</td>
<td></td>
</tr>
<tr>
<td>7 – 9.9</td>
<td>4 ml</td>
<td>4 ml</td>
<td></td>
</tr>
<tr>
<td>10 – 11.9</td>
<td>5 ml</td>
<td>5 ml</td>
<td></td>
</tr>
<tr>
<td>12 – 13.9</td>
<td>6 ml</td>
<td>6 ml</td>
<td>0.5</td>
</tr>
<tr>
<td>14 – 19.9</td>
<td></td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>20 – 24.9</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>25 kg and over</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**lamivudine for PMTCT prophylaxis in newborns**  
**Give 2 mg/kg/dose twice daily for 1 week**

<table>
<thead>
<tr>
<th>Weight unknown</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 1.9</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>2 – 2.9</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>3 – 3.9</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>4 – 4.9</td>
<td>1.6</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**stavudine (d4T)**  
**TREATMENT DOSE:**  
1 mg/kg/dose (to maximum 30 mg dose) - give dose twice daily

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Solution 1</th>
<th>15 mg, 20 mg, 30 mg capsules</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>15 mg, 20 mg, 30 mg capsules</td>
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<td></td>
<td>PM</td>
<td>AM</td>
</tr>
<tr>
<td>5 – 5.9</td>
<td>6 ml</td>
<td>6 ml</td>
</tr>
<tr>
<td>6 – 9.9</td>
<td>0.5  20 mg capsule</td>
<td>0.5  20 mg capsule</td>
</tr>
<tr>
<td>10 – 13.9</td>
<td>one 15 mg capsule</td>
<td>one 15 mg capsule</td>
</tr>
<tr>
<td>14 – 24.9</td>
<td>one 20 mg capsule</td>
<td>one 20 mg capsule</td>
</tr>
<tr>
<td>25 and above</td>
<td>one 30 mg capsule</td>
<td>one 30 mg capsule</td>
</tr>
</tbody>
</table>
zidovudine (AZT or ZDV)
TREATMENT DOSE:
180 -240 mg/ m2 (to maximum daily dose of 360-480 mg/m2)
- give dose twice daily

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Syrup 10 mg/ml</th>
<th>100 mg, 300 mg capsules</th>
</tr>
</thead>
<tbody>
<tr>
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<td>AM</td>
<td>PM</td>
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<td>6 – 9.9</td>
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<td>7 – 7.9</td>
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<td>8 – 8.9</td>
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<td>10 ml</td>
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<tr>
<td>12 – 13.9</td>
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<td>11 ml</td>
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<tr>
<td>14 – 19.9</td>
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<td></td>
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<td>20 – 29.9</td>
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<tr>
<td>30 – 34.9</td>
<td></td>
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<td></td>
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</tbody>
</table>

zidovudine for PMTCT prophylaxis in newborns
Give dose twice daily

<table>
<thead>
<tr>
<th>Weight unknown</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
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<td>3 – 3.9</td>
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<td></td>
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<tr>
<td>4 – 4.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**abacavir (ABC)**

**TREATMENT DOSE:** 8 mg/kg/dose (to maximum dose >16 years or > 37.5 kg: 300 mg/dose given twice daily) - give dose twice daily

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Syrup 20 mg/ml</th>
<th>300 mg tablet</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>5 – 5.9</td>
<td>2 ml</td>
<td></td>
</tr>
<tr>
<td>6 – 9.9</td>
<td>3 ml</td>
<td></td>
</tr>
<tr>
<td>7 – 9.9</td>
<td>4 ml</td>
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<tr>
<td>11 – 11.9</td>
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<td>14 – 19.9</td>
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<td></td>
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<tr>
<td>20 – 24.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 and above</td>
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<td></td>
</tr>
</tbody>
</table>
**nevirapine (NVP)**

**TREATMENT: MAINTENANCE DOSE: 160-200 mg/m²**

(to maximum 200 mg twice daily dose)

**Maintenance dose - give dose twice daily**

**Lead-in dose during weeks 1 and 2 = half of daily maintenance dosing**

(use the AM dose in table only)

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Syrup 10 mg/ml</th>
<th>200 mg tablet</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
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<td>6 – 9.9</td>
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<td>7 – 9.9</td>
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<td>8 – 8.9</td>
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<td>9 – 9.9</td>
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<tr>
<td>10 – 11.9</td>
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<td>10 ml</td>
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<tr>
<td>12 – 13.9</td>
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<td>11 ml</td>
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<tr>
<td>14 – 24.9</td>
<td></td>
<td></td>
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<tr>
<td>25 and above</td>
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</tbody>
</table>

**nevirapine for PMTCT prophylaxis in newborns**

2 mg/kg within 72 hours of birth - once only

<table>
<thead>
<tr>
<th>Unknown weight</th>
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</tr>
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<tbody>
<tr>
<td>1 – 1.9</td>
<td>0.2</td>
</tr>
<tr>
<td>2 – 2.9</td>
<td>0.4</td>
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<tr>
<td>3 – 3.9</td>
<td>0.6</td>
</tr>
<tr>
<td>4 – 4.9</td>
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</table>
COMBINATIONS

Dual FDCs

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 – 5.9</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>17 – 19.9</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>20 – 24.9</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>30 – 34.9</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Zidovudine + lamivudine (ZDV-3TC = AZT-3TC)
300 mg ZDV + 150 mg 3TC
Give twice daily

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 – 14.9</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>20 – 34.9</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>35 or above</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Triple FDCs

Stavudine + lamivudine + nevirapine (d4T-3TC-NVP)
30 mg d4T + 150 mg 3TC + 200 mg NVP
Give twice daily

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 – 13.0</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>14 – 19.0</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>20 or above</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Zidovudine + lamivudine + abacavir (ZDV-3TC-ABC = AZT-3TC-ABC)
300 mg ZDV + 150 mg 3TC + 300 mg ABC
Give twice daily

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 – 19.9</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>20 – 24.9</td>
<td>1</td>
<td>0.5</td>
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<tr>
<td>25 – 34.9</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>30 or above</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
A.1 Post-test support

- Provide immediate support after diagnosis.
- Provide emotional support.
- Provide time for the result to sink in.
- Empathize.
- Use good listening skills.
- Find out the immediate concerns of the patient and help:
  - Ask: what do you understand this result to mean? (Correct any misunderstandings of the disease.)
  - Provide support.
  - What is the most important thing for you right now? Try to help address this need.
  - Tell them their feelings/reactions are valid and normal.
  - Mobilize resources to help them cope.
  - Help the patient solve pressing needs.
  - Talk about the immediate future—what are your plans for the next few days?
  - Advise how to deal with disclosure in the family. Stress importance of disclosure. (See Annex A.5)
    - Who do you think you can safely disclose the result to?
    - It is important to ensure that the people who know you are HIV infected can maintain confidentiality. Who needs to know? Who doesn’t need to know?
- Offer to involve a peer who is HIV positive, has come to terms with his or her infection, and can provide help. (This is the patient’s choice.)
- Advise how to involve the partner. (See 8.5)
- Make sure the patient knows what psychological and practical social support services are available.
- Explain what treatment is available.
- Advise on how to prevent spreading the infection. (See 11.1)
- Ask patient to come back depending on needs.
Good Listening Skills

- Elicit concerns.
- Listen to feelings.
- Use good body language.
- Pauses are good. Be able to be quiet.
- Do not speak before listening.
- Understanding is as important as advice.
- Use empathy.

**EMPATHY** is feeling with another—tuning in to the feelings of another and responding in a way that the person knows he or she has been heard. Empathy is not the same as sympathy (feeling for another).

- Tune in to the other person’s feelings. Listen to all of the feelings. (Do not listen selectively.)
- Respond with understanding. Do not try to minimize, change, or "solve" the feelings.
- When empathizing, do not:
  - Judge (evaluate other’s feelings).
  - Try to fix it (solve the problem).
  - Advise (tell them what to do).
  - Question (keep seeking more information).
These may be appropriate at other times but not while empathizing.

A.2 Explain what is available for chronic HIV care

- Explain what is involved in care and how the clinic works.
  - Explain the clinic system for shared confidentiality.
  - Explain who is on the clinical team and that the patient will see more than one health worker.
  - Explain the support available in clinic, home visits, etc.
- Explain the follow-up schedule. (See 10.3.)
- Explain the basics of HIV infection, transmission and treatments available.
- Explain what prophylaxis and treatments are available, when they are used and requirements for treatment:
  - ARV therapy
  - Cotrimoxazole prophylaxis
  - INH prophylaxis
### A.3 Initiate chronic HIV care (if this is the first visit for chronic care)

| **ASSESS** | - Patient’s goals for today’s visit.  
- Understanding of treatments available.  
- Readiness for prophylaxis and ART (if indicated).  
- Determine the family circumstance:  
  - Where does the patient live? With whom? Is this stable?  
  - Has patient disclosed to family?  
  - Who else is infected and on care or needs care?  
- Health worker needs to assess patient, clinical stage and develop Treatment Plan. |
| **ADVISE** | - Explain and recommend treatment or prophylaxis (based on nurse or clinician review).  
- Encourage testing of other family members.  
- Explain family care options. |
| **AGREE** | - On Treatment Plan. |
| **ASSIST** | - With adherence to Treatment Plan.  
- Plan home visit, if desired by patient. |
| **ARRANGE** | - Register patient—assign unique ART number, start HIV Care/ART Card (adapt locally).  
- Make next follow-up appointment. (Make sure patient knows when and where to go.)  
- Arrange home visit as appropriate and feasible. (Involve home-based care teams.) |
A.4 Provide Ongoing Support

Provide ongoing education and support appropriate to patient’s circumstances. Record on the patient’s HIV Care/ART card.

Types of support needed may change as the patient adjusts to his/her diagnosis and overcomes the first impact of test result. Be prepared to:

❖ Provide emotional support.
  • Empathize with concerns and fears. Provide a secure opportunity for the patient to discuss feelings and to experience feeling understood and accepted by a caregiver.
  • Let them know that how they feel is a normal reaction. Learning that others have felt this way can reduce the sense of isolation.

❖ Assure confidentiality.

❖ Pay attention to the family setting.
  • Offer counselling on reproductive choices and family planning.
  • If a family planning method is desired, almost all methods can be used. See 11.1.
  • If more children are desired, counsel that pregnancy is possible, although with some risk. See 11.1.
  • Advise that people living with HIV can still have a healthy sexual life, and have children if they desire. See 11.1.

❖ Confirm and reinforce (or explain again) information
  • Given during voluntary HIV testing and counselling on maternal to child transmission, possibility of ARV treatment, safer sex, infant feeding, and family planning advice.
  • Help patient absorb the information and apply it in his/her own situation.

❖ Advise how to avoid stigma
  • Discuss to whom to disclose result. See Annex A.5.
  • Discuss how ways in which we behave can be interpreted by other people.
  • Anticipate that the availability of treatment will help reduce stigma.
Other ways to provide psychosocial support:

- **Promote use of peer support groups for:**
  - Patients who have tested HIV positive.
  - Patients on ART.
  - Couples affected by HIV/AIDS.
  - Older children whose parents are positive.
  - Groups should be:
    - Led by a social worker and/or a man/woman who has come to terms with his/her HIV positive status.
    - Held outside the clinic in order to not reveal the HIV status of the people involved.

  *Note: Groups are key to psychosocial support. However, they do not replace use of individual support and use of skilled counsellors, when needed.*

- **Connect patient with other existing support services and community resources.**
  - These may include support groups, income-generating activities, religious support groups, orphan care, home care.
  - Exchange information for the coordination of interventions.
  - Make a coordinated plan for each family involved.
  - The health worker and the social worker/community-based worker should establish active linkages with each other and with other existing support organizations—for home-based care and psychosocial support.
  - Help patient identify a senior person from the community who will help provide support and care.

- **Facilitate spiritual counselling for those who want it.**
  - Church or other religious institutions may have specifically prepared counsellors in issues related to HIV/AIDS: death, stigma, illness, planning ahead for care of children, etc.

- **Refer for individual or couples counselling by community counsellors or professional counsellors, where available.**
A.5 Discuss disclosure

- Ask the patient if they have disclosed their result or are willing to disclose the result to anyone.
- Discuss concerns about disclosure to partner, children and other family, friends.
- Assess readiness to disclose HIV status and to whom.
- Assess social support and needs. (Refer to support groups.) See Annex A.4.
- Provide skills for disclosure. (Role play and rehearsal can help.)
- Help the patient make a plan for disclosure if now is not the time.
- Encourage attendance of the partner to consider testing and explore barriers.
  - Couples may have different HIV status. Partner testing is important.
- Reassure that you will keep the result confidential.

If the patient does not want to disclose the result:

- Reassure that the results will remain confidential.
- Explore the difficulties and barriers to disclosure. Address fears and lack of skills. (Help provide skills.)
- Continue to motivate. Address the possibility of harm to others.
- Offer to assist in disclosure. (For example, talk with spouse.)
- Offer another appointment and more help as needed (such as peer counsellors or couples counselling).

For women, discuss benefits and possible disadvantages of disclosure of a positive result and involving and testing male partners.

Men are generally the decision makers in the family and communities. Involving them will:
- Have greater impact on increasing acceptance of condom use, practicing safer sex to avoid infection or avoiding unwanted pregnancy.
- Help to decrease the risk of suspicion and violence.
- Help to increase support to their partners.
- Motivate him to get tested.

Disadvantages of involving and testing the partner: danger of blame, violence, abandonment.

Health worker should try to counsel the couple together, when possible.
A.6 Prepare for/support adherence to care, prophylaxis, ART

Adherence to care:
- Help patient arrange to attend follow-up appointments.
- Follow up missed appointments if stage 2 or higher or on prophylaxis or treatment.

Prophylaxis: prepare for, then support adherence—see section 7.

Prepare for ARV therapy, use section 8.7.
- If treatment is not available through clinic, indicate private and other treatment options. Educate on importance of treatment with 3 drugs and the dangers of taking only 1 or 2 drugs.

A.7 Support for special circumstances

For woman using replacement feeding for her infant:
- Discuss strategies to avoid breastfeeding, including issues relating to stigma and family pressure.
- Help with the practicalities and resources required.
- Demonstrate and discuss safe preparation and administration of feeds, including volume and frequency of feeds. If possible, conduct home visits to counsel and support women who are not breastfeeding. (See IMCI-HIV Chart Booklet.)

For woman exclusively breastfeeding her infant:
- Discuss strategies to facilitate exclusive breastfeeding, including issues relating to family pressure, milk supply and demand and coping with a crying infant.
- Examine breast for signs of poor attachment (sore/cracked nipples, engorgement etc.).
- Help with correct attachment of infant to the breast.
- Discuss safe transition to replacement milk. (See IMCI-HIV Chart Booklet.)
For older child with HIV-infected parents
Caring for sick parents and siblings has a huge emotional impact on children. Witnessing illness and death of close family members, discrimination and stigma can result in severe depression. Children often are not able to talk about their fears and difficulties.

Children whose parent(s) or other family members are HIV+ need (appropriate to their age):
- To know what is happening. (They often know more than they are told.)
- To know who is responsible for them.
- To know that they are not expected to take over from their parents.
- To have support for their fears and emotions (including a peer support group for older children if possible).
- To receive medical care for their own problems.
- Legal protection for inheritance rights.
- Protection from sexual abuse and forced early marriage.
- Guidance in demanding and accessing social services.
- To be able to continue to attend school and play with friends.

The family often needs assistance to understand children’s needs, how to communicate with and support them, and how to plan ahead for them.

For HIV-infected child
See IMCI-HIV Chart Booklet

For adolescents
See Adolescent Job Aid

For grandparent caring for children or grandchildren:
- Pay attention to their own health.

For patient who is terminal
- Assure good end-of-life care at home.
- Health worker should provide medical support for palliative care at home.
  (See Palliative Care guideline module.)
- Connect to religious support.
- Help to plan ahead for the children.

For patients’ families with children:
Caregivers of children living in families where one or more members of the family are infected by HIV may find it difficult to provide essential care and attention to the children. Helping caregivers to strengthen their coping skills and capacities will allow them to better support the children.

A caregiver is a parent, or another adult providing care for the children.
A caregiver may also be a sibling or young adult.
**Encourage and help caregiver to:**

**ASSESS**
- family needs: psychological needs, social with special attention to stigma, financial needs linked to lack of income due to illness and death, practical needs particularly concerning child care, legal assistance
- specific needs of children in the family: quality of care and support; state of health and nutrition; exposure to developmental stimuli such as communication, play, school, learning, recreational activities; psychological conditions linked to fear and understanding of the family member’s HIV status; role in caring for parents/siblings and providing for the family; exposure to discrimination, exploitation, abuse, loss of inheritance rights
- availability of further adult resources in family or community to fill in gaps and/or provide continued care and support for the children
- caregiver’s own support and guidance needs, in relation to issues such as disclosure, children’s rights, coping with stigma, accessing available services

**ADVISE**
- disclose HIV status of a family member to children gradually and in an age-appropriate way (see A.5 “Discuss disclosure”, “Disclosure to children”)

**AGREE**
- develop a plan addressing assessed needs
- make sure children are involved in plans for their future

**ARRANGE**
- link with relevant support and guidance services available in the community, such as social welfare, income generation activities, home care, peer support groups for caregivers, community volunteer support, spiritual support, organizations of PLWHAs
- link with relevant services for children, such as schools, daycare, educational, artistic and recreational activities, peer groups for older children, child-counselling, services providing school fees, community volunteer support services, meals for children
Support when an HIV infected parent or sibling is sick, or dies

**Assess**
- Availability of adult support in the family or community able to provide provisional and/or long-term loving care for the child
- Need to protect the child’s inheritance rights.

**Advise**
- Tell the child that it is not her/his fault that the parent or sibling is sick, or has died

**Agree**
- Involve the child in plans for the future, including exploring by whom s/he would like to be cared for, depending on the child’s age.

**Assist**
- When parent or sibling is sick:
  - Gradual transition to a loving caregiver
  - Siblings are better off remaining together in their own environment than broken up into different families or other structure
  - Counsel the child about the illness and the possibility of death according to the child’s age (see section 12.10 on disclosure)
  - Let the child spend time with the sick parent or sibling
  - Help the child to identify and perform small tasks to «help»
  - Encourage and assist the child to carry on with habitual everyday activities such as school, sports, recreational activities, and to keep up friendships and other relationships.
  - Encourage child to talk about his/her feelings. Listen and provide loving support.
  - Start a memory box contained happy memories and loved objects.
  - Write a will to protest the child’s inheritance rights.
**ARRANGE**

- Link with relevant services available in the community, such as:
  - home care
  - community volunteer support
  - part or full-time foster care
  - legal services
  - support groups for older children
  - child counseling
  - schools
  - day-care centers
  - sports and other play activities
  - services providing school fees
  - meals for children

**Additional assistance when parent or sibling dies:**

- be patient with a grieving child, encourage him/her to express his/her grief
- listen to the child, provide loving care and empathy
- allow the child to participate in the dying process and burial activities, and to share in adults’ expression of grief, so as not to feel alone in his/her bereavement
- make sure that the child’s inheritance rights are respected
- assist caregiver to draw up a plan for the children, bearing in mind the points listed above
Annex B: Care for health workers and lay providers

B.1 Use universal precautions

- Use for all patients.

- When drawing blood:
  - Use gloves.
  - No recapping of needles.
  - Dispose in sharps’ box (puncture resistant).

- Safe disposal of waste contaminated with blood or body fluids.

- Proper handling of soiled linen.

- Proper disinfection of instruments and other contaminated equipment.

- Use protective barriers (gloves, aprons, masks, plastic bags) to avoid direct contact with blood or body fluids.

B.2 Post-exposure prophylaxis

- Immediately wash with soap and water any wound or skin site in contact with infected blood or fluid, then irrigate with sterile physiological saline or mild disinfectant.

- Rinse eyes or exposed mucous membrane thoroughly with clear water or saline.

- Report immediately to person in charge of PEP and follow local PEP protocol.
## Post-exposure prophylaxis (PEP) for occupational exposure for health workers

Use this page if the source patient is known to be HIV-positive, is suspected to be HIV-positive, or has unknown HIV status.*

<table>
<thead>
<tr>
<th>ASK</th>
<th>LOOK</th>
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| When was the health worker injured?  
(If more than 72 hours ago, do not give PEP.) | Look at the body part/skin area that was exposed and the instrument, if one was involved.  
(If the injury happened more than 24 hours ago, you may need to ask the health worker to get the following information): |
| **How was the health worker injured:** | **If the skin was punctured or broken by an instrument:**  
• Where was the exposure?  
  • Skin  
  • Mucous membranes |  
• How deep was the injury? |
|   • Puncture or cut with an instrument  
   • Splash of blood or other bodily fluid | **If the instrument was a needle:**  
• What kind of an exposure was it?  
  • Puncture or cut with an instrument  
  • Splash of blood or other bodily fluid  
  • What was the potentially infectious material?  
  • Was it a hollow or solid needle?  
  • Is there blood on the instrument?  
  • Was the needle used in the source patient’s artery or vein?  
  • Or was it some other body fluid other than blood: semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial, amniotic fluid, tissue? (lower risk)  
  • Chapping  
  • Dermatitis  
  • Abrasion  
  • Open wound |

* If source patient has unknown HIV status, offer HIV testing and counselling to the source patient  
(See Acute Care, p. 97).
**B.3 Care for HIV-infected staff**

- Encourage off-site testing for all staff and confidentiality.
- HIV-positive staff should be supported.
- Policy on ARV therapy.

**B.4 Help staff cope with stigma of caring for patients with HIV/AIDS**
B.5 Recognize and prevent burnout

**Recognize burnout:**
- Irritability, anger.
- Poor sleep.
- Poor concentration.
- Avoidance of patients and problems—withdrawal from others.
- Fatigue.
- Emotional numbing—lack of pleasure.
- Resorting to alcohol or drugs.
- In survivors of multiple loss—afraid to grieve.

**How to prevent and respond to burnout:**
- Be confident that you have the skills and resources to care for the patient and family.
- Define for yourself what is meaningful and valued in care giving.
- Discuss problems with someone else.
- Be aware of what causes stress and avoid it.
- Use strategies that focus on problems, rather than emotions.
- Change approach to care giving:
  - Divide tasks into manageable parts (small acts of care).
  - Learn how to adjust the pace of caregiving.
  - Ask others to help.
  - Encourage self-care by the patient.
- Use relaxation techniques.
- Take care of your life outside of the caregiving (other interests, support, family, friends).
- Develop your own psychosocial support network (such as caregiver support groups).
- Take care of your own health.
- Take time off on a regular basis.
- Be aware that you can’t do everything and need help.
- Include in your week a time to discuss patients together.
- Share problems with your colleagues.
- Organize social events.
How to record on HIV Care/ART Card

Suspect TB

Record sputum results

- 
  +
  ++
  +++

Sputums or Refer: ? TB

If on INH prophylaxis and no signs

INH

No signs

No suspicion of TB

Active TB

TB Rx

No signs (no INH)

H115
HIV CARE/ART CARD _____

District_______________ Health unit_______________ District clinician/team_______________

Name_________________________________________ Pt clinic #__________________

Sex:  M ○ F ○ Age_______ DOB_______________ Marital status_______

Address______________________________________________________________

Telephone (whose):________________________________________________________

Treatment supporter/med pick-up if ill:________________________________________

Address______________________________________________________________

Telephone:________________________________________________________________

Home-based care provided by:_____________________________________________

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<tr>
<th>Names of family members and partners</th>
<th>Age</th>
<th>HIV +/-</th>
<th>HIV care Y/N</th>
<th>Unique no.</th>
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**Prior ART:**
- ○Transfer in with records
- ○Earlier ARV but not a transfer in
- ○PMTCT only
- ○None

**Care entry point:**

- ○PMTCT
- ○Medical
- ○Under5
- ○TB
- ○STI

- ○Outpatient
- ○Outreach

- ○Private/Co
- ○Inpatient
- ○IDU
- ○Adol
- ○Sex

- ○Self-ref
- ○CBO
- ○Other:

**ART treatment interruptions**

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**Drug allergies**


Date

_____ Confirmed HIV+ test  Where__________________ HIV 1 2  Ab / PCR
(If < 18 mo)

_____ Enrolled in HIV care

**ARV therapy**

_____ Medically eligible  Clinical stage_____

Why eligible: ● Clinical only  ● CD4/%_________  ● TLC_________

_____ Medically eligible and ready for ART

_____ Transferred in from__________________ ART started___________

**Start ART 1st-line initial regimen:**

**At start ART:** Weight _____ Function_____ Clinical stage_____

**Substitute within 1st-line:**

_____ New regimen_________________________ Why_______

_____ New regimen_________________________ Why_______

**Switch to 2nd-line (or substitute within 2nd-line):**

_____ New regimen_________________________ Why_______

_____ New regimen_________________________ Why_______

_____ New regimen_________________________ Why_______

_____ Dead

_____ Transferred out  To where:__________________________

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<tr>
<th>Why STOP codes:</th>
<th>Why SUBSTITUTE or SWITCH codes:</th>
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<td>2 Pregnancy</td>
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<td>3 Treatment failure</td>
<td>3 Risk of pregnancy</td>
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<td>4 Poor adherence</td>
<td>4 Due to new TB</td>
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<td>5 Illness, hospitalization</td>
<td>5 New drug available</td>
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<td>6 Drugs out of stock</td>
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<td>7 Patient lacks finances</td>
<td>7 Other reason (specify)</td>
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<td>8 Other patient decision</td>
<td>Reasons for SWITCH to 2nd-line regimen only:</td>
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<td>9 Planned Rx interruption</td>
<td>8 Clinical treatment failure</td>
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<td>10 Other</td>
<td>9 Immunologic failure</td>
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<td>10 Virologic failure</td>
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## HIV CARE/ART CARD

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<th>Date</th>
<th>Follow-up date</th>
<th>Duration in months since first starting ART/ since starting current regimen</th>
<th>Wt</th>
<th>If Pregnant EDD? PMTCT? FP/no FP If FP write method(s) If child write height</th>
<th>Function</th>
<th>WHO clinical stage</th>
<th>TB status</th>
<th>Potential SIDE EFFECTS</th>
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</tr>
<tr>
<td><strong>G</strong> (good)</td>
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<td>95%</td>
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<td>3 doses</td>
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<tr>
<td><strong>F</strong> (fair)</td>
<td></td>
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<tr>
<td>85-94%</td>
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<tr>
<td>4-8 doses</td>
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</tr>
<tr>
<td><strong>P</strong> (poor)</td>
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<td></td>
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<td></td>
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<tr>
<td>&lt; 85%</td>
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</tr>
<tr>
<td>9 doses</td>
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</table>

**Codes for potential side effects or other problems:**
- Nausea
- Diarrhoea
- Fatigue
- Headache
- BN (burning/numb/tingling)
- Rash
- Anaemia
- Abdominal pain
- Jaundice
- Fat changes
- CNS (dizzy, anxiety, nightmare, depression)

**Codes for new OI or other problems:**
- Zoster
- Pneumonia
- Dementia/Enceph
- Thrush—oral/vaginal
- FEVER
- Cough
- DB (difficult breathing)
- IRIS (immune reconstitution inflammatory syndrome)
- Weight loss
- UD (urethral discharge)
- PID (pelvic inflammatory disease)
- GUD (genital ulcer disease)
- Ulcers—mouth or other

**Pregnancy/family planning status if woman is of childbearing age:**
- **P** = Pregnant
  - If pregnant, give estimated due date (EDD) and write PMTCT if referred to PMTCT
- **FP** = Not pregnant and on family planning
  - If using FP, note methods (note: more than 1 method may be recorded)
- **No FP** = Not pregnant and not using FP

**Codes for TB status (check on each visit):**
- **No signs** = no signs or symptoms of TB
- **TB refer** = TB suspected and referred for evaluation
- **INH** = currently on INH prophylaxis (IPT)
- **TB Rx** = currently on TB treatment. Record TB card #
- **Sputums** = TB suspected and sputum sample sent or record results
### Adherence % Missed doses per month

<table>
<thead>
<tr>
<th>Adherence</th>
<th>%</th>
<th>Missed doses per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>G (good)</td>
<td>≥ 95%</td>
<td>≤ 3 doses</td>
</tr>
<tr>
<td>F (fair)</td>
<td>85-94%</td>
<td>4-8 doses</td>
</tr>
<tr>
<td>P (poor)</td>
<td>&lt; 85%</td>
<td>≥ 9 doses</td>
</tr>
</tbody>
</table>

### Codes for potential side effects or other problems:
- Nausea
- Diarrhoea
- Fatigue
- Headache
- Burning/numb/tingling
- Rash
- Anaemia
- Abdominal pain
- Jaundice
- Fat changes
- CNS: dizzy, anxiety, nightmare, depression

### Codes for new OI or other problems:
- Zoster
- Pneumonia
- Dementia/Encephalitis
- Thrush: oral/vaginal
- Ulcers: mouth, genital, etc.
- Fever
- Cough
- DB: difficult breathing
- IRIS: Immune reconstitution inflammatory syndrome
- Weight loss
- UD: urethral discharge
- PID: pelvic inflammatory disease
- GUD: genital ulcer disease
- Ulcers: mouth or other

### Codes for why poor/fair adherence:
- 1 Toxicity/side effects
- 2 Share with others
- 3 Forgot
- 4 Felt better
- 5 Too ill
- 6 Stigma, disclosure or privacy issues
- 7 Drug stock out—dispensary
- 8 Patient lost/ran out of pills
- 9 Delivery/travel problems
- 10 Inability to pay
- 11 Alcohol
- 12 Depression
- 13 Other ____________________

### Codes for TB status (check on each visit):
- No signs = no signs or symptoms of TB
- TB refer = TB suspected and referred for evaluation
- INH = currently on INH prophylaxis (IPT)
- TB Rx = currently on TB treatment
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### Pregnancy/family planning status if woman is of childbearing age:
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### Codes for ART adherence.
Estimate adherence for twice daily ART using the table below:
<p>| Follow-up education, support and preparation for ARV therapy |
|---------------------------------|----------------|----------------|
| <strong>Educate on basics, prevention, disclosure</strong> | Date/comments | Date/comments | Date/comments |
| Basic HIV education, transmission |               |               |               |
| Prevention: abstinence, safer sex, condoms |               |               |               |
| Prevention: household precautions, what is safe |               |               |               |
| Post-test counselling: implications of results |               |               |               |
| Positive living |               |               |               |
| Testing partners |               |               |               |
| Disclosure |               |               |               |
| To whom disclosed (list) |               |               |               |
| Family/living situation |               |               |               |
| Shared confidentiality |               |               |               |
| Reproductive choices, prevention MTCT |               |               |               |
| Child's blood test |               |               |               |
| <strong>Progression, Rx</strong> |               |               |               |
| Progression of disease |               |               |               |
| Available treatment/prophylaxis |               |               |               |
| Follow-up appointments, clinical team |               |               |               |
| CTX, INH prophylaxis |               |               |               |
| ART -- educate on essentials | Why complete adherence needed | Adherence preparation, indicate visits | Indicate when READY for ART: DATE/result | Clinical team discussion | Explain dose, when to take | What can occur, how to manage side effects | What to do if one forgets dose | What to do when travelling | Adherence plan (schedule, aids, explain diary) | Treatment supporter preparation | Which doses, why missed | ARV support group | How to contact clinic | Symptom management/palliative care at home | Caregiver booklet | Home-based care -- specify | Support groups | Community support |
|-----------------------------|-----------------------------|-------------------------------------|-----------------------------------------|------------------------|----------------------------|---------------------------------------|--------------------------------------|---------------------------------|---------------------------------|-----------------------------|----------------|-----------------|------------------|-------------------|----------------|-------------------|------------------|-----------------|-------------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
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<tr>
<td>ALT</td>
<td>Alanine Aminotransferase (a liver function test)</td>
</tr>
<tr>
<td>AMB</td>
<td>Ambulatory</td>
</tr>
<tr>
<td>ARV</td>
<td>Antiretroviral</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral Therapy</td>
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<tr>
<td>AZT</td>
<td>azidothymidine—chemical name for the generic zidovudine (ZDV)</td>
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<tr>
<td>BED</td>
<td>Bedridden</td>
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<tr>
<td>CBOs</td>
<td>Community-Based Organizations</td>
</tr>
<tr>
<td>CD4</td>
<td>Count of the lymphocytes with a CD4 surface marker per cubic millimetre of blood (mm³)</td>
</tr>
<tr>
<td>cm</td>
<td>Centimetre</td>
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<tr>
<td>d4T</td>
<td>stavudine</td>
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<tr>
<td>EFV</td>
<td>efavirenz</td>
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<tr>
<td>FBOs</td>
<td>Faith-Based Organizations</td>
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<tr>
<td>GI</td>
<td>Gastrointestinal</td>
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<tr>
<td>H</td>
<td>isoniazid (INH)</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>IMAI</td>
<td>Integrated Management of Adolescent and Adult Illness</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
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<tr>
<td>INH</td>
<td>isoniazid</td>
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<tr>
<td>kg</td>
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<tr>
<td>mg</td>
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<tr>
<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<td>nevirapine</td>
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<td>Opportunistic Infection</td>
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<td>ORS</td>
<td>Oral Rehydration Solution</td>
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<td>OVS</td>
<td>Orphans and Vulnerable Children</td>
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<tr>
<td>PLHA</td>
<td>People Living with HIV/AIDS</td>
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<tr>
<td>PMTCT</td>
<td>Prevention of Mother to Child Transmission (of HIV)</td>
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<td>PEP</td>
<td>Post-Exposure Prophylaxis</td>
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<tr>
<td>Rx</td>
<td>Treatment</td>
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<td>3TC</td>
<td>lamivudine</td>
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