WHO/CDS/IMAI/2004.1 Rev. 3

Acute Care

INTEGRATED MANAGEMENT OF ADOLESCENT AND ADULT ILLNESS

GUIDELINES FOR FIRST-LEVEL FACILITY HEALTH WORKERS AT HEALTH CENTRE AND DISTRICT OUTPATIENT CLINIC

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Integrated management of adolescent and adult illness: interim guidelines for first-level facility health workers at health centre and district outpatient clinic: acute care.

"This is one of 4 IMAI modules relevant for HIV care: 1. Acute Care: this module is for adolescents and adults, for children use the IMCI-HIV adaptation; 2. Chronic HIV Care with ARV Therapy; __3. General Principles of Good Chronic Care; __4. Palliative Care: Symptom Management and End-of-Life Care."

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This is one of 7 IMAI-IMCI guideline modules relevant for clinical care at the health centre and hospital outpatient clinic:

- ***Acute Care***—this module is for adolescents and adults.
- For children use ***Integrated Management of Childhood Illness for High HIV settings: Chart Booklet***
- ***Chronic HIV Care with ARV Therapy and Prevention***
- ***General Principles of Good Chronic Care***
- ***Palliative Care: Symptom Management and End-of-Life Care***
- ***TB Care with TB-HIV Co-Management***
- ***Management of MDR-TB: A field guide***

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 clinic. The clinical guidelines have been simplified and systematized so that they can be used by nurses, clinical aids and other multi-purpose health workers, working in good communication with a supervising district clinician (a doctor or medical officer) at the district hospital. Acute Care presents a syndromic approach to the most common adult illnesses including most opportunistic infections. Instructions are provided so the health worker knows which patients can be managed at the first-level facility, and which require referral to the district hospital or further assessment by a more senior clinician. Preparing first-level facility health workers to treat the common, less-severe opportunistic infections will allow them to stabilize many clinical stage 3 and 4 patients prior to ARV therapy without referral to the district hospital. This module also incorporates content from the Integrated Management of Essential Emergency Surgical Care (IMEESC).

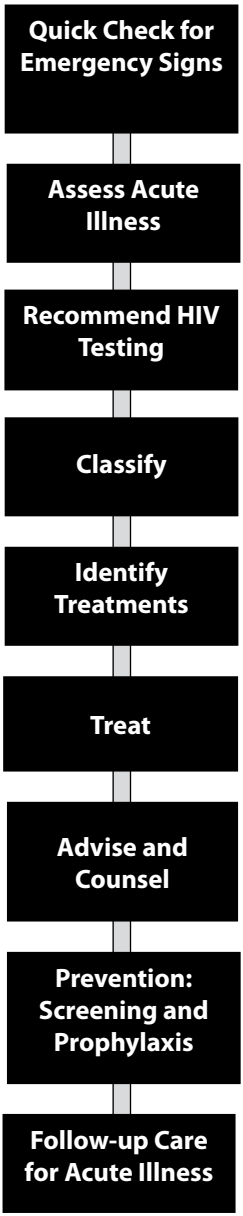
This module cross-references the IMAI-IMCI ***Chronic HIV Care with ART and Prevention*** and ***Palliative Care: Symptom Management and End-of-Life Care*** guideline modules. If these are not available, national guidelines for HIV care, ART and palliative care can be substituted.

Guidance on management, logistics and laboratory support to facilitate decentralization to health centres can be found in the *Operations Manual for Delivery of HIV Prevention. Care and Treatment at Primary Health Centres in High-Prevalence, Resource-Constrained Settings.* 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 and for the community and district clinicians. This revision of ***Acute Care*** has been updated to recommend HIV testing for all adolescents and adults attending the health centre or outpatient clinics. This is a generic guideline module for country adaptation.

For more information about IMAI, please visit *http://www.who.int/hiv/capacity/en* or contact *imaimail@who.int*.

WHO HIV/AIDS Department—IMAI Project

Integrated Management: Acute Care



Index

Treatments 75

IV/IM Drugs:

Metered Dose Inhaler:

See ***District Clinician Manual*** module for instructions on:

Manage airway
Insert IV, rapid fluids
Insert IV, slow fluids
Recovery position
Classify/treat wheezing/use epinephrine

Oral drugs

Advise and counsel 107

Care and prevention for health workers 125

Recording form/desk aid 130-133

Steps to Use the IMAI Acute Care Module

Quick Check for Emergency Signs

Do the Quick Check for Emergency Signs—if any positive sign, call for help and begin providing the emergency treatment.

Recommend HIV Testing

In a generalized HIV epidemic, HIV testing should be routinely recommended in all adolescents and adults. Individual or group pre-test information should be given before seeing the provider.

Assess Acute Illness

Ask: What is your problem? Why did you come for this consultation? Prompt: "Any other problems?"

- Determine if patient has acute illness or is here for follow-up. Circle this on the recording form (p. 130).
- How old are you?
- If woman of childbearing age, are you pregnant (she will also need to be managed using the antenatal guidelines—circle this on the recording form)?

In all patients:

- Ask: cough or difficult breathing (p. 16-17)?
- Check for undernutrition and anaemia (p. 20-21).
- Ask: genital or anal sore, ulcer or warts (p. 22-24)?
- Ask men: do you have a discharge from your penis (p. 26-27)?
- Look in the mouth (and respond to volunteered mouth/dental/throat problems) (p. 28-30).
- Ask about pain (p. 31).

  If patient is in pain, grade the pain, determine location and consider cause. Manage pain using the ***Palliative Care*** guideline module.
- Ask: Are you taking any medications?

Respond to volunteered problems or observed signs.

Mark with an X on the recording form all the main symptoms the patient has.

You will need to do the assessment for any of these symptoms if volunteered or observed:

- Fever (p. 32-34)
- Diarrhoea (p. 36-38)
- Genito-urinary symptoms or lower abdominal pain in women (p. 40-43)
- Skin problem or lump (p. 44-49)
- Headache or neurological problem or painful feet (p. 50-52)
- Mental problem (p. 54-56)—use these pages if patient complains of or appears depressed, anxious, sad or fatigued, or has an alcohol problem, recurrent multiple complaints or pain. Remember to use this page. If you have a doubt, use it.

  For special considerations in assessing adolescents, see *Adolescent Job Aid*.

Assess and treat other problems. Use national and other existing guidelines for other problems that are not included in the ***Acute Care*** module.

If laboratory tests are required, instructions for these are in the Operations Manual.

Classify

Classify using the IMAI acute care algorithm, following the 3 rules:

1. **Use all classification tables where the patient fits** the description in the arrow.
2. **Start at the top** of the classification table. Decide if the patient's signs fit the signs in the first column. If not, go down to next row.
3. **Once you find a row/classification—STOP!** Use only **one row** in each classification table (once you find the row where the signs match, do not go down any further, even if the patient has signs that also fit into other, lower rows/classifications).

Then record **all** classifications on the recording form. Remember that there is often more than one.

Identify Treatments

Read the treatments for each classification you have chosen. List these. Consider HIV-related illness (p. 57-59). In patients with HIV-related illness, if HIV serostatus is unknown, an HIV test should be performed urgently and the results made available to clinical management.

Treat

The detailed treatment instructions are in the section called Treat.

Advise and Counsel

Instructions for patient education, support and counselling are in Advise and Counsel.

If the patient is HIV+, also use the ***Chronic HIV Care*** module, for chronic care, ART, prevention and support.

If the treatment list advises sending sputums for TB, note this on the recording form and send sputums.

Remember that for all patients you need to also consider what prevention and prophylaxis are required (circle on the recording form p. 130).

Prevention: Screening and Prophylaxis

Reassess the patient and treat or refer as necessary. This is initial follow-up care after acute illness, not ongoing chronic care.

Follow-up Care for Acute Illness

Quick Check for Emergency Signs

then

Assess Acute Illness/ Classify/Identify Treatments

Quick Check for Emergency Signs

Use this chart for rapid triage assessment for all patients. Then use the *Acute Care* guidelines.

▶ Quick check for emergency signs (medical)
(consider all signs)

FIRST ASSESS: AIRWAY AND BREATHING

- Appears obstructed or
- Central cyanosis (blue mucosa) or
- Severe respiratory distress

→ Check for obstruction, wheezing and pulmonary oedema.

THEN ASSESS: CIRCULATION (SHOCK)

- Weak and fast pulse or
- Capillary refill longer than 2 seconds

→ Check BP and pulse. Look for bleeding. Ask: Have you had diarrhoea?

TREATMENT

- **If obstructed breathing, manage the airway.**
- Prop patient up or help to assume position for best breathing.
- If wheezing, treat urgently.
- If pulmonary oedema, consider furosemide if known heart disease.
- Give appropriate IV/IM antibiotics pre-referral.
- **Refer urgently to hospital.**

This patient may be in shock:

- If systolic BP < 90 mmHg or pulse >110 per minute:
  - Insert IV and give fluids rapidly. If not able to insert peripheral IV, use alternative.
  - Position with legs higher than chest.
  - Keep warm (cover).
  - Consider sepsis—give appropriate IV/IM antibiotics.
  - Refer urgently to hospital.
- If diarrhoea: assess for dehydration and follow plan C (this patient may not need referral after rehydration). If severe undernutrition, see p. 20.
- If melena or vomiting blood, manage as in ***Quick Check*** module and refer to hospital.
- If haemoptysis > 50 ml, insert IV and refer to hospital.

UNCONSCIOUS/CONVULSING

- Convulsing (now or recently), or
- Unconscious.
  If unconscious, ask relative: Has there been a recent convulsion?

→ Measure BP and temperature

PAIN

If chest pain:

- What type of pain?

→ Check BP, pulse, temperature and age

If severe abdominal pain:

- Is abdomen hard?

→ Check BP, pulse and temperature

If neck pain or severe headache:

- Has there been any trauma?

→ Check BP
Ask patient to move neck—do not passively move

For all:

- Protect from fall or injury. Get help.
- Assist into recovery position (wait until convulsion ends).
- Insert IV and give fluids slowly.
- Give appropriate IM/IV antibiotics.
- Give IM antimalarial.
- Give glucose *.
- Refer urgently to hospital after giving pre-referral care. Do not leave alone.

If convulsing, also:

- Give diazepam IV or rectally.
- Continue diazepam en route as needed.

If unconscious:

- Manage the airway.
- Assess possibility of poisoning, alcohol or substance abuse.

If trauma, use IMAI District Clinician Manual guidelines and WHO Surgical Care at District Hospital.

If, no history of trauma and history suggests cardiac ischaemia:

- Give aspirin (160 or 325 mg, chewed).
- **Refer urgently to hospital.**

If pleuritic pain with cough or difficult breathing, assess for pneumonia. Consider pneumothorax.

For other pain, use the ***Acute Care*** module to determine cause.

See the ***Palliative Care*** module for management of pain.

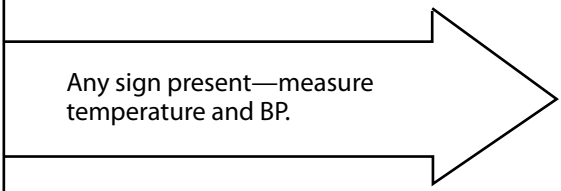
- Insert IV. If hard abdomen or shock, give fluids rapidly. If not, give fluids slowly (30 drops/minute).
- **Refer urgently to hospital *.**

- Consider serious neurological problem and other causes of acute headache.
- If BP > systolic 180, refer urgently to hospital.
- If pain on neck movement by patient after trauma, by history or exam, immobilize the neck and refer.

** If high glucose, see diabetes management guidelines.*

FEVER from LIFE-THREATENING CAUSE

- Any fever with:
  - — stiff neck
  - — very weak/not able to stand
  - — lethargy
  - — unconscious
  - — convulsions
  - — severe abdominal pain
  - — respiratory distress



For laboratory tests: see Operations Manual

- Insert IV. Give fluids rapidly if shock or suspected sepsis. If not, give fluids slowly (30 drops/minute).
- Give appropriate IV/IM antibiotics.
- Give appropriate IM antimalarial.
- Give glucose.
- **Refer urgently to hospital.**

Also consider neglected trauma with infection. See District Clinician Manual.

If no emergency signs, proceed immediately to

Assess Acute Illness/ Classify/Identify Treatments

Ask: what is your problem? Why did you come for this consultation?
Prompt: "Any other problems?"

- Determine if patient has acute illness or is here for follow-up. Circle this on recording form (p. 130).
- How old are you?
- If woman of childbearing age, are you pregnant (she will also need to be managed using the antenatal guidelines—circle this on the recording form)?

▶ In all patients: Do you have cough or difficult breathing?

IF YES, ASK:	LOOK AND LISTEN
• For how long? • Are you having chest pain? — If yes, is it new? Severe? Describe it. • Have you had night sweats? • Do you smoke? • Are you on treatment for a chronic lung or heart problem, or TB? Determine if patient diagnosed with asthma, emphysema or chronic bronchitis (COPD), heart failure or TB. • If not, have you had previous episodes of cough or difficult breathing? — **If recurrent:** –– Do these episodes of cough or difficult breathing wake you up at night or in the early morning? –– Do these episodes occur with exercise? • Are you HIV-positive or do you think you might be?	• Is the patient lethargic? • Count the breaths in one minute—repeat if elevated. • Look and listen for wheezing. • Determine if the patient is uncomfortable lying down. • Measure temperature. If not able to walk unaided or appears ill, also: • Count the pulse. • Measure BP.

Classify in all with cough:

AGE	FAST BREATHING IS:	VERY FAST BREATHING IS:
5-12 years	30 breaths per minute or more	40 breaths per minute
13 years or more	20 breaths per minute or more	30 breaths per minute or more

Use this classification table in all with cough or difficult breathing:

SIGNS:	CLASSIFY AS:	TREATMENTS:
One or more of the following signs: • Very fast breathing or • High fever (39°C or above) or • Pulse 120 or more or • Lethargy or • Not able to walk unaided or • Uncomfortable lying down or • Severe chest pain.	**SEVERE PNEUMONIA OR VERY SEVERE DISEASE**	• **Position.** • **Give oxygen.** • **Give first dose IM antibiotics.** • **If wheezing present, treat (p. 80).** • **If severe chest pain in patient 50 years or older, use *Quick Check*.** • **If known heart disease and uncomfortable lying down, give furosemide.** • **Refer urgently to hospital.** • **Consider HIV-related illness (p. 57).** • **If on ARV therapy, this could be a serious drug reaction. See *Chronic HIV Care* module.**
Two of the following signs: • Fast breathing • Night sweats • Chest pain	**PNEUMONIA**	• Give appropriate oral antibiotic **Exception: if second/third trimester pregnancy, HIV clinical stage 4, or low CD4 count, give first dose IM antibiotics and refer urgently to hospital.** • If wheezing present, treat (p. 80). • If smoking, counsel to stop smoking. • If on ARV therapy, this could be a serious drug reaction; consult/refer. • If cough > 2 weeks or HIV-positive, send sputums for AFB. • Advise when to return to the clinic immediately. • Follow up in 2 days (p. 68).
• Cough or difficult breathing for more than 2 weeks or • Recurrent episodes of cough or difficult breathing which: - Wake patient at night or in the early morning or - Occur with exercise.	**POSSIBLE CHRONIC LUNG OR HEART PROBLEM**	• Send sputums for AFB (record in register). • If sputums sent recently, check register for result. See follow-up TB (p. 69). • If smoking, counsel to stop. • If wheezing, treat (p. 80). • Advise when to return to the clinic immediately.
• Insufficient signs for the above classifications	**NO PNEUMONIA COUGH/COLD, OR BRONCHITIS**	• Advise on symptom control. • If smoking, counsel to stop. • If wheezing, treat (p. 80). • Advise when to return to the clinic immediately. If HIV positive, follow up in 3-5 days.

▶ What to do in HIV-positive patients with SEVERE PNEUMONIA OR VERY SEVERE DISEASE when referral is impossible

- ❖ Send sputum samples for AFB if possible.
- ❖ Treat empirically for bacterial pneumonia with IM antibiotics.
- ❖ If patient has very fast breathing or is unable to walk unaided, treat empirically for *Pneumocystis* pneumonia (PCP)
  - Give cotrimoxazole: 2 double-strength or 4 single-strength tablets three times a day for 21 days (15mg/kg of TMP component). Give supplemental oxygen if available.
- ❖ Assess the patient daily. **Consult and discuss case with medical officer if possible (via phone, etc). and continue to try to refer**:
  - Check the patient with pneumonia using the Look and Listen part of the assessment:
    - Is the breathing slower?
    - Is there less fever?
    - Is the pleuritic chest pain less?
    - How long has the patient been coughing?
- ❖ After 3-5 days, if breathing rate and fever are the same or worse, start standardized, first-line TB regimen if available, or refer to district hospital. Do not start an incomplete regimen. Once TB treatment is started, treatment should be completed.
- ❖ If breathing slower or there is less fever, start first line oral antibiotic (for bacterial pneumonia) and finish 7 day course. If PCP treatment started, continue cotrimoxazole for three weeks.

NOTES:

▶ Check all patients for undernutrition and anaemia:

IF YES, ASK:	LOOK AND FEEL
• Have you lost weight? • What medications are you taking? **If wasted or reported weight loss,** how much has your weight changed? • Ask about diet. • Ask about alcohol use. **%** weight loss = $\frac{\text{old–new}}{\text{old weight}}$ **If pallor:** • Black stools? • Blood in stools? • Blood in urine? • In menstruating adolescents and women: heavy menstrual periods?	• Look for visible wasting: • Loose clothing? Did it fit before? **If wasted or reported weight loss:** • Weigh and calculate **%** weight loss. • Measure mid-upper arm circumference (MUAC). • Look for sunken eyes. • Look for oedema of the legs. **If present:** - Does it go up to the knees? Is it pitting? • Assess for infection using the full ***Acute Care*** algorithm (ask for unreported signs). • Look at the palms and conjunctiva for pallor. - Severe? Some? **If pallor:*** • Count breaths in one minute. • Breathless? • Bleeding gums? • Petechiae?

If visible wasting or weight loss:

If pallor:

* If haemoglobin result available, classify as SEVERE ANAEMIA if haemoglobin < 7 gm; ANAEMIA if < than 10 gm.

Use this table if **visible wasting or weight loss:**

SIGNS:	CLASSIFY AS:	TREATMENTS:
• MUAC < 160 mm or • MUAC 161-185 mm plus one of the following: - Pitting edema to knees on both sides - Cannot stand - Sunken eyes	**SEVERE UNDER-NUTRITION**	• **Refer for therapeutic feeding if nearby or begin community-based feeding.** • Consider TB (send sputums if possible). • Consider HIV-related illness (p. **57**). • Counsel on HIV testing.
• Weight loss > 5 **%** or • Reported weight loss or • Loose clothing which used to fit.	**SIGNIFICANT WEIGHT LOSS**	• Treat any apparent infection. • If diarrhoea, manage as cited on p. 36-38. • Increase intake of energy and nutrient-rich food—counsel on nutrition. • Consider TB (send sputums if cough present for more than 2 weeks); diabetes mellitus (dipstick urine for glucose); excess alcohol; and substance abuse. • Consider diabetes mellitus if weight loss accompanied by polyuria or increased thirst (dipstick urine for glucose). • Consider HIV-related illness (p. 57). • Counsel on HIV testing. • Follow up in two weeks.
* Weight loss < 5 **%**.	**NO SIGNIFICANT WEIGHT LOSS**	• Advise on nutrition.

Use this table if **pallor**

• Severe palmar and conjunctival pallor; • Any pallor with: - 30 or more breaths per minute or - Breathless at rest; • Bleeding gums or petechiae; or • Black stools or blood in stools.	**SEVERE ANAEMIA OR OTHER SEVERE PROBLEM**	• **Refer to hospital.** • If not able to refer, treat as below and follow up in one week. • Consider HIV-related illness (p. 57). • Consider ARV side effect (especially ZDV) or cotrimoxazole side effects. (see ***Chronic HIV Care).*** • Consider malaria if low immunity or increased exposure (p. 32-34).
• Palmar or conjunctival pallor.	**ANAEMIA**	• Consider HIV-related illness (p. 57). • ARV drugs, especially ZDV and cotrimoxazole, can cause anaemia. (see ***Chronic HIV Care)***. • Consider malaria if low immunity or increased exposure (p. 32-34). • Give twice daily iron/folate. • Counsel on adherence. • Advise to eat locally available foods rich in iron. • Give albendazole if none in last 6 months. • If heavy menstrual periods—see p. 40. • Follow up in 1 month.

▶ **In all patients, ask: Do you have a genital or anal sore, ulcer or wart?**

IF YES, ASK:	LOOK AND FEEL
• How long has ulcer been present? • Are these new? If not, how often have you had them? • Do you have anal discharge or bleeding? • Do you have pain in the anal/rectal area? • Do you have pain on defecation?	• Look for anogenital sores or ulcers. • Look for vesicles. • Look for warts. • Look/feel for enlarged lymph node in inguinal area. If present: Is it painful?

If anogenital ulcer:

If painful inguinal node:

If warts:

If anorectal pain or bleeding

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Vesicles/ ulcers present	**GENITAL OR ANAL HERPES**	• Keep clean and dry. • Give aciclovir, if indicated. • Promote/provide condoms and water-based lubricants if appropriate. • Recommend HIV testing and screen for syphilis if not already done. Educate on STIs, HIV and risk reduction.
• Sore or ulcer	**GENITAL OR ANAL ULCER**	• Give benzathine penicillin for syphilis. • Give ciprofloxacin for chancroid. • If vesicles, also give aciclovir if indicated. • Promote/provide condoms and water-based lubricants if appropriate. • Recommend HIV testing and screen for syphilis if not already done. Educate on STIs, HIV and risk reduction. • HIV-positive patients with chronic ulcerations for more than one month may be eligibile for ART. • Treat all partners within last 3 months. • Follow up in 7 days if sores not fully healed, and earlier if worse (p. 70).
• Enlarged and painful inguinal node	**INGUINAL BUBO**	• Give doxycycline for 21 days; if ulcer present also give ciprofloxacin for 3 days. • If fluctuant, aspirate through healthy skin; do not incise. • Promote/provide condoms. • Recommend HIV testing and screen for syphilis if not already done. Educate on STIs, HIV and risk reduction. • Follow up in 7 days.
• Warts	**GENITAL OR ANAL WARTS**	• Apply podophyllin. • Consider HIV-related illness. • Recommend HIV testing and screen for syphilis if not already done. Educate on STIs, HIV and risk reduction.

go to next page

Use this table if patient has anorectal pain or bleeding:

• Bleeding or • Palpable mass on rectal examination	**RECTAL MASS**	• Refer for evaluation.
• Anorectal pain and • Tenesmus and • Discharge	**PROCTITIS**	• Give benzathine penicillin for syphilis and treat for possible GC/chlamydia infection. • Return if worse or not improved within 1 week . • Recommend the use of condoms and water-based lubricants if anal sexual practices. • Recommend HIV testing and screen for syphilis if not already done. Educate on STIs, HIV and risk reduction. • Manage/treat partners.
• Visible hemorrhoids or visible anal fissure	**HEMORRHOIDS OR ANAL FISSURE**	• Discuss possible causes (constipation, prolonged sitting, anal sexual practices). Manage/treat partners. • Recommend the use of condoms and water-based lubricants if anal sexual practices.

NOTES:

▶ **Ask men: Do you have a discharge from your penis?**
If male patient complains of genito-urinary symptoms or lower-abdominal pain:
(use this page for men).

IF YES, ASK:	LOOK AND FEEL
• What is your problem? • Do you have discharge from your urethra? — If yes, for how long? If this is a persistent or recurrent problem, see follow-up box. • Do you have burning or pain on urination? • Do you have pain in your scrotum? — If yes, have you had any trauma there? • Do you have sore(s)?	Perform genital exam: • Look for scrotal swelling. • Feel for tenderness. • Look for ulcer: — If present, also use p. 22. • Look for urethral discharge. • Look and feel for rotated or elevated testis. — If abdominal pain, feel for tenderness. — If tenderness: –– Is there rebound? –– Is there guarding? –– Can you feel a mass? –– Are bowel sounds present? –– Measure temperature. –– Measure pulse.

If lower-abdominal pain:

If urethral discharge or urination problems:

If scrotal swelling or tenderness:

** If fever with right lower abdominal pain and referral is delayed, give ampicillin and metronidazole for possible appendicitis.*

Use this table in men with lower abdominal pain:

SIGNS:	CLASSIFY AS:	TREATMENTS:
Abdominal tenderness with: • Fever > 38°C or • Rebound or • Guarding or • Mass or • Absent bowel sounds or • Not able to drink or • Pulse > 110	**SEVERE OR SURGICAL ABDOMINAL PROBLEM**	• **Give patient nothing by mouth (NPO).** • **Insert IV.** • **Give appropriate IV/IM antibiotics.** • **Refer URGENTLY to hospital.***
• Abdomen soft and none of the above signs	**GASTROENTERITIS OR OTHER GI PROBLEM**	• If diarrhoea, see p. 36. • If constipation, advise remedies. • Return if not improved.

Use this table in men with urethral discharge or urination problem

• Not able to urinate and • Bladder distended	**PROSTATIC OBSTRUCTION**	• **Pass urinary catheter if trained.** • **Refer to hospital.**
• Urethral discharge or • Burning on urination	**POSSIBLE GONORRHOEA/ CHLAMYDIA INFECTION**	• Treat patient and partner with antibiotics for possible GC/chlamydia infection. • Promote/provide condoms. • Return if worse or not improved within 1 week (p. 71). • Offer HIV/STI counselling and HIV and syphilis testing. • Consider HIV infection (p. 57). • Partner management.

Use this table in all men with scrotal swelling or tenderness

• Testis rotated or elevated or • History of trauma	**POSSIBLE TORSION**	• **Refer URGENTLY to hospital for surgical evaluation.**
• Swelling or tenderness (without the above signs)	**POSSIBLE GONORRHOEA/ CHLAMYDIA INFECTION**	• Treat patient and partner with antibiotics for possible GC/chlamydia infection. • Promote/provide condoms. • Follow up in 7 days; return earlier if worse (p. 71). • Offer HIV counselling and HIV and syphilis testing. • Consider HIV infection (p. 57).

▶ Look in the mouth of all patients and respond to any complaint of mouth or throat problem:

If you see any abnormality or patient complains of a mouth or throat problem, ASK:	**LOOK**
• Do you have pain? — **If yes,** where? When does this occur (when swallowing, when hot or cold food)? • Do you have problems swallowing? • Do you have problems chewing? • Are you able to eat? • What medications are you taking?	Look in mouth for: • White patches — **If yes**, can they be removed? • Ulcer - **If yes,** are they deep or extensive? • Tooth cavities • Loss of tooth substance • Bleeding from gums • Swelling of gums • Gum bubble • Pus • Dark lumps Look at throat for: • White exudate • Abscess Look for swelling over jaw. Feel for enlarged lymph nodes in neck. **If patient complains of tooth pain,** does tapping or moving the tooth cause pain?

If patient has white or red patches:

If sore throat, without mouth problem:

If mouth ulcer or gum problem, p. 30.

If tooth problem or jaw pain or swelling, p. 30.

If patient has white or red patches:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Not able to swallow	**SEVERE OESOPHAGEAL THRUSH**	• **Refer to hospital.** • If not able to refer, give fluconazole.
• Pain or difficulty swallowing	**OESOPHAGEAL THRUSH**	• Give fluconazole. • Give oral care. • Follow up in 2 days (p. 70). • Consider HIV-related illness (p. 57).
• White patches in mouth and • Can be scraped off	**ORAL THRUSH**	• Give nystatin or miconazole gum patch or clotrimazole. • If extensive, give fluconazole or ketoconazole. • Give oral care. • Consider HIV-related illness (p. 57).
• White patches/vertical ridges on side of tongue and • Cannot be scraped off and • Painless.	**ORAL (HAIRY) LEUKOPLAKIA**	• No treatment needed. • Consider HIV-related illness (p. 57). • Instruct in oral care.

Use this table if sore throat without mouth problem:

• Not able to swallow or • Abscess.	**TONSILLITIS**	• **Refer urgently to hospital.** • **Give benzathine penicillin.**
• Enlarged lymph node on neck and • White exudate on throat.	**STREPTOCOCCAL SORE THROAT**	• Give benzathine penicillin. • Soothe throat with a safe remedy. • Give paracetamol for pain. • Return if not better.
• Only 1 or no signs in the above row present.	**NON-STREPT SORE THROAT**	• Soothe throat with a safe remedy. • Give paracetamol for pain.

go to next page

Use this table if mouth ulcer or gum problem:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Deep or extensive ulcers of mouth or gums or • Not able to eat	**SEVERE GUM/ MOUTH INFECTION**	• **Refer urgently to hospital unless only palliative care planned.** • **Trial aciclovir.** • **Start metronidazole if referral not possible or distant.** • **Consider HIV-related illness (p. 57).** • **If on ARV therapy, this may be drug reaction (see *Chronic HIV Care)*.**
• Ulcers of mouth or gums.	**GUM/MOUTH ULCERS**	• Show patient/family how to clean with saline, peroxide or sodium bicarbonate. • If lips or anterior gums, give aciclovir. • Instruct in oral care. • If oral sex, consider syphilis. Screen for syphilis. • Consider HIV-related illness (p. 57). • If on ARV, started cotrimoxazole or INH prophylaxis within last month, this may be drug reaction, especially if patient also has new skin rash (see ***Chronic HIV Care***—refer, stop drugs). • See ***Palliative Care*** for pain relief. • Follow up in 7 days.
• Bleeding from gums (in absence of other bleeding or other symptoms) • Swollen gums	**GUM DISEASE**	• Instruct in oral care.

Use this table if mass, tooth problem, jaw pain or swelling:

• Constant pain with: - Swollen face or gum near tooth or - Gum bubble or • Tooth pain when tapped or moved.	**DENTAL ABSCESS**	• If fever, give antibiotics. • Lance abscess or pull tooth. • **Refer urgently to dental assistant if not able to do so.** • Consider sinusitis (do not pull teeth if this is cause).
• Pain when eating hot or cold food or • Visible tooth cavities or • Loss of tooth substance.	**TOOTH DECAY**	• Place gauze with oil of clove. • Refer to dentist for care or pull tooth.

In all patients, ask: Are you in pain?

- If patient is in pain, grade the pain, determine location and consider cause.
- Manage pain using the ***Palliative Care*** guidelines.

In all patients, ask: Are you taking any medications?

It is particularly important to consider toxicity from ARV drugs and immune reconstitution syndrome in the first 2-3 months of antiretroviral therapy (ART), when evaluating new signs and symptoms.

Now respond to:

Volunteered Problems or Observed Signs

▶ Does the patient have fever—by history of recent fever (within 48 hours) or feels hot or temperature 37.5°C or above?

IF YES, ASK:	LOOK AND FEEL
• How long have you had a fever? • Any other problem? • What medications have you taken? Determine if antimalarial and for how long. **Decide malaria risk:** ***High Low No*** • *Where do you usually live?* • *Have you recently travelled to a malaria area?* • *If woman of childbearing age:* - *Are you pregnant?* • *Is an epidemic of malaria occurring?* • *HIV clinical stage 3 or 4.*	• Look at the patient's neurological condition. Is the patient: — Lethargic? Confused? Agitated? • Count the breaths in one minute. Use table on p. 16 to determine if fast breathing. — **If fast breathing** , is it deep? • Check if able to drink. • Feel for stiff neck. • Check if able to walk unaided. • Skin rash? • Headache? For how long? • Look for apparent cause of fever (assess all symptoms in this ***Acute Care*** algorithm and consider whether this could be related to ARV therapy—see ***Chronic HIV Care)***. • Do malaria dipstick or smear if available.

Patient has high malaria risk

Patient has low malaria risk

Classify the individual patient's malaria risk:

HIGH MALARIA RISK

If low immunity (with malaria transmission):
- Pregnant.
- Child < 10 years, if there is intense or moderate malaria.
- Stage 3 or 4 HIV infection (see ***Chronic HIV Care*** module).

Or increased exposure:
- Epidemic of malaria is occurring.
- Moved to or visited area with intense or moderate malaria.

LOW MALARIA RISK

If high immunity:
- Adolescent or adult who has lived since childhood in area with intense or moderate malaria.

Or low exposure:
- Low malaria transmission and no travel to higher transmission area.

NO MALARIA RISK

- If no malaria transmission and
- No travel to area with malaria transmission.

Patient has no malaria risk, p. 34

Use this table if patient has fever with high malaria risk:

SIGNS:	CLASSIFY:	TREATMENTS:
One or more of the following signs: • Confusion, agitation, lethargy or • Fast and deep breathing or • Not able to walk unaided or • Not able to drink or • Stiff neck	**VERY SEVERE FEBRILE DISEASE**	• **Give IM quinine or artemether.** • **Give first dose IM antibiotics.** • **Give glucose.** • **Refer urgently to hospital.** • **If fever accompanied by bleeding (gums, skin (purpura), into eyes or urine) or jaundice develops within 2 weeks of fever, report case to district clinician.**
• Fever or history of fever	**MALARIA**	• Give appropriate oral antimalarial. • Determine whether adequate treatment already given with the first-line antimalarial within 1 week—if yes, an effective second-line antimalarial is required. • Look for other apparent cause. • Consider HIV-related illness (p. 57). • If fever for 7 days or more, consider TB (send sputums/refer). • Follow up in 3 days if still febrile (p. 69).

Use this table if patient has fever with low malaria risk:

• Confusion, agitation, lethargy or • Not able to drink or • Not able to walk unaided or • Stiff neck or • Severe respiratory distress	**VERY SEVERE FEBRILE DISEASE**	• **Give IM quinine or artemether.** • **Give first dose IM antibiotics.** • **Give glucose.** • **Refer urgently to hospital.**
• Fever or history of fever and • No new rash and • No other apparent cause of fever or • Dipstick or smear positive for malaria	**MALARIA**	• Give appropriate oral antimalarial. • Determine whether adequate treatment already given with the first-line antimalarial within 1 week—if yes, an effective second-line antimalarial is required. • Consider fever related to ARV use (see ***Chronic HIV Care)***. • If fever for 7 days or more, consider TB (send sputums/refer). • Follow up in 3 days if still febrile (p. 69).
• Other apparent cause of fever or • New rash or • Dipstick or smear negative for malaria	**FEVER MALARIA UNLIKELY**	• Treat according to the apparent cause (Exception: Also give IM antimalarial if patient is classified as SEVERE PNEUMONIA). • Consider HIV related illness if unexplained fever for > 30 days (p. 57). • Consider fever related to ARV use. (see ***Chronic HIV Care)***. • If no apparent cause and fever for 7 days or more, send sputums for TB and refer to hospital for assessment (p. 69).

go to next page

Use this table if patient has fever with no malaria risk:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Confusion, agitation, lethargy or • Not able to drink or • Not able to walk unaided or • Stiff neck	**VERY SEVERE FEBRILE DISEASE**	• Give first dose IM antibiotics. • Give glucose. • Refer urgently to hospital.
• Fever for 7 days or more	**PERSISTENT FEVER**	• Treat according to apparent cause. • Consider TB (send sputums/refer). • If no apparent cause, refer to hospital for assessment. • Consider HIV related illness if unexplained fever for > 7 days (p. 57). • Consider fever related to ARV use (see ***Chronic HIV Care)***. • Give supportive care (see ***Palliative Care***).
• None of the above	**SIMPLE FEVER**	• Treat according to apparent cause. • Follow up in 2-3 days if fever persists (p. 69).

NOTES:

▶ If the patient has diarrhoea:

IF YES, ASK:	LOOK AND FEEL
• For how long? – **If more than 14 days,** have you been treated before for persistent diarrhoea? – **If yes,** with what? When? • Is there blood in the stool?	• Is the patient lethargic or unconscious? • Look for sunken eyes. • Is the patient: – Not able to drink or drinking poorly? – Drinking eagerly, thirsty? • Pinch the skin of the inside of the forearm. Does it go back: – Very slowly (longer than 2 seconds)? – Slowly?

Classify all patients with diarrhoea for DEHYDRATION:

Classify DIARRHOEA

If diarrhoea for 14 days or more and no blood, p. 70.

And if blood in stool, p. 70.

Use this table in all patients with diarrhoea:

SIGNS:	CLASSIFY AS:	TREATMENTS:
Two of the following signs: • Lethargic or unconscious • Sunken eyes • Not able to drink or drinking poorly • Skin pinch goes back very slowly	**SEVERE DEHYDRATION**	• If no other severe classification, give fluid for severe dehydration (plan C on p. 98–99), then reassess (this patient may not require referral). **Or, if another severe classification:** • **Refer URGENTLY to hospital after initial IV hydration or, if not possible, with frequent sips of ORS on the way.** **If there is cholera in your area, give appropriate antibiotic for cholera (according to sensitivity data). Report cases.**
Two of the following signs: • Sunken eyes • Drinks eagerly, thirsty • Skin pinch goes back slowly	**SOME DEHYDRATION**	• Give fluid and food for some dehydration (see Plan B on p. 97). • Advise when to return to the clinic immediately. • Follow up in 5 days if not improving.
Not enough signs to classify as some or severe dehydration	**NO DEHYDRATION**	• Give fluid and food to treat diarrhoea at home (see Plan A on p. 96). • Advise when to return to the clinic immediately. • Follow up in 5 days if not improving.

go to next page

Also use this table if diarrhoea for 14 days or more and no blood:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Some or severe dehydration present	**SEVERE PERSISTENT DIARRHOEA**	• Give fluids for dehydration (plan B or C on p. 97–99) before referral, then reassess (this patient may not require referral). • If signs of dehydration persist, or another severe classification, refer urgently to hospital.
• No dehydration	**PERSISTENT DIARRHOEA**	• Give appropriate empirical treatment, depending on recent treatment and HIV status. • Consider HIV-related illness (p. 57). • If on ARV treatment, this could be drug side effect (see ***Chronic HIV Care)***. • Give supportive care for persistent diarrhoea (see ***Palliative Care)***. • Give nutritional advice and support. • Follow up in 5 days (explain when to refer).

Also use this table if blood in stool:

• Blood in the stool	**DYSENTERY**	• **Treat for 5 days with an oral antibiotic recommended for Shigella in your area.** • Advise when to return to the clinic immediately. • Follow up in 2 days.

NOTES:

▶ If female patient complains of genito-urinary symptoms or lower abdominal pain:

- ❖ **For an adult non-pregnant woman or an adolescent,** use this page.
- ❖ **For a pregnant woman,** use antenatal guidelines.
- ❖ **For a man,** use p. 22.

IF YES, ASK:	LOOK AND FEEL
• What is the problem? • What medications are you taking? Do you have: • Burning or pain on urination? • Increased frequency of urination? • Ulcers or sore in your genital area? • An abnormal vaginal discharge? — If yes, does it itch? • Any bleeding on sexual contact? • Has your partner had any genital problem? — **If partner is present,** ask him about urethral discharge or sores. • When was your last menstrual period? — **If missed period:** Do you think you might be pregnant? Have you had very heavy or irregular periods? — ***If yes:*** –– Is the problem new? –– How many days does your bleeding last? –– How often do you change pads or tampons? • Do you have very painful menstrual cramps? • Are you using contraception? **If yes**, which one? • Are you interested in contraception? **If yes**, use *Family Planning* guidelines**.	• Feel for abdominal tenderness. **If tenderness:** — Is there rebound? — Is there guarding? — Can you feel a mass? — Are bowel sounds present? — Measure temperature. — Measure pulse. • Perform external exam, look for large amount of vaginal discharge (if only small amount white discharge in adolescent, this is usually normal). • Look for anal or genital ulcer. **If present**, also use p. 23. • Feel for enlarged inguinal lymph node. **If present**, also use p. 23. • **If you are able to do bimanual exam,** feel for cervical motion tenderness. • **If burning or pain on urination or complaining for back or flank pain:** — Percuss flank for tenderness. If cervical cancer prevention programme, perform recommended cervical cancer screening tests if you are trained and equipped to do so.

Classify:

If lower abdominal pain (other than menstrual cramps):

If abnormal vaginal discharge, p. 42.

Burning or pain on urination or flank pain, p. 42.

If menstrual pain or missed period or bleeding irregular or very heavy periods, p. 43.

If suspect gonorrhoea/ chlamydia infection based on any of these factors:

** If fever with right lower abdominal pain and referral is delayed, give ampicillin and metronidazole for possible appendicitis.*

*** Such as Decision-Making Tool for Family Planning Clients and Providers.*

Use this table in all women with lower abdominal pain (other than menstrual cramps):

SIGNS:	CLASSIFY AS	TREATMENTS:
Abdominal tenderness with: • Fever > 38° C or • Rebound or • Guarding or • Mass or • Absent bowel sounds or • Not able to drink or • Pulse > 110 or • Recent missed period or abnormal bleeding	**SEVERE OR SURGICAL ABDOMINAL PROBLEM**	• Give appropriate IV/IM antibiotics. • Give patient nothing by mouth (NPO). • Insert IV. • Refer URGENTLY to hospital *. • If bleeding, follow other guidelines for bleeding in early pregnancy; consider ectopic pregnancy. • Manage pain (see ***Paliative Care***).
• Lower abdominal tenderness or • Cervical motion tenderness	**PID** (pelvic inflammatory disease)	• Give ciprofloxacin plus doxycycline plus metronidazole. • Follow up in 2 days if not improved; follow up all at 7 days (p. 72). • Promote/provide condoms. • Offer HIV/STI counselling and HIV and syphilis testing • Treat partner for GC/chlamydia. • Abstain from sex during treatment. • Manage pain (see ***Paliative Care***).
• Abdomen soft and none of the above signs	**GASTRO-ENTERITIS OR OTHER GI OR GYN PROBLEM**	• If diarrhoea, see p. 36. • If constipation, advise remedies (see ***Palliative Care.*** • Return if not improved.

Use this table if suspect gonorrhoea/chlamydia based on any of these factors

• Sex worker or • Bleeding on sexual contact or • Partner with urethral discharge or burning on urination or • Any woman who thinks she may have a STI	**POSSIBLE GONORRHOEA/ CHLAMYDIA INFECTION**	• Treat woman and partner with antibiotics for possible GC/ chlamydia infection. • Promote/provide condoms. • Offer HIV/STI counselling and HIV and syphilis testing. • Follow up in 7 days if symptoms persist (p. 71).

go to next page

Use this table in all women with abnormal vaginal discharge:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Itching or • Curd-like vaginal discharge	**CANDIDA VAGINITIS**	• Treat with nystatin. • Return if not resolved. • Consider HIV-related illness if recurrent (p. 57).
• None of the above	**BACTERIAL VAGINOSIS (BV) OR TRICHOMONIASIS**	• Give metronidazole 2 gm PO single dose. • Follow up in 7 days if not resolved (p. 72).

Use this table in all women with burning or pain on urination or flank pain:

• Flank pain or • Fever.	**KIDNEY INFECTION**	If systemically ill: • Give appropriate IM antibiotics. • Refer URGENTLY to hospital. Also refer if on indinavir (an ARV drug). If not: • Give appropriate oral antibiotics. • Follow up next day.
• Burning or pain on urination and • Frequency and • No abnormal vaginal discharge	**BLADDER INFECTION**	• Give appropriate oral antibiotics. • Increase fluids. • Follow up in 2 days if not improved (p. 72).
• None of the above	**BLADDER INFECTION UNLIKELY**	• Treat for vaginitis if abnormal discharge. • Dipstick urine if possible.

Use this table in all women with menstrual pain or missed period or bleeding irregular or very heavy period:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Irregular bleeding and • Sexually active or • Any bleeding in known pregnancy	**PREGNANCY-RELATED BLEEDING OR ABORTION**	• **Follow guidelines for vaginal bleeding in pregnancy, e.g. IMPAC* * or** • **Refer**
• Missed period and • Sexually active and • Not using a very reliable method of contraception*.	**POSSIBLE PREGNANCY**	• Confirm pregnancy. • Discuss plans for pregnancy. • If she wishes to continue pregnancy, use guidelines for antenatal care e.g. IMPAC**. • Refer or provide PMTCT interventions if pregnant.
Not pregnant with: • New, irregular menstrual bleeding or • Soaks more than 6 pads each of 3 days (with or without pain)	**IRREGULAR MENSES OR VERY HEAVY PERIODS (MENORRHAGIA)**	• Consider contraceptive use and need (see *Family Planning* guidelines): - If contraception desired, suggest oral contraceptive pill. - IUD in the first 6 months and long-acting injectable contraceptive can cause heavy bleeding; combined contraceptive pills or the mini-pill can cause spotting or bleeding between periods. • If on ART, consider withdrawal bleeding from drug interaction (see ***Chronic HIV Care*** module). • If unusual or suspicious bleeding in women >35 years or HIV-positive, perform clinical exam with speculum and do recommended cervical cancer screening test if indicated, or refer for gynaecological examination. • If painful menstrual cramps or to reduce bleeding, give ibuprofen (not aspirin). • Follow up in 2 weeks.
• Only painful menstrual cramps	**DYSMENORRHOEA**	• If she also wants contraception, suggest oral contraceptive pill. • Give ibuprofen (aspirin or paracetamol may be substituted but are less effective).

* *Very reliable methods include injectable, implant, IUD, pills, sterilization.*

** *WHO Integrated Management of Pregnancy and Childbirth (IMPAC)*

▶ If patient has a **skin problem or lump:**

IF YES, ASK:	LOOK AND FEEL
• Do you have a sore, a skin problem or a lump? If yes, where is it? If yes, for how long? • Does it itch? • Does it hurt? • Duration? • Discharge? • Do other members of the family have the same problem? • Are you taking any medication? **If on ARV therapy,** skin rash or worsening/growing skin lesions or lumps could be a serious side effect or immune reconstitution. See ***Chronic HIV Care***.	• Are there lesions? Where? How many? Are they infected (red, tender, warm, pus or crusts)? • Are they tender? • Is there sensation to light touch? • Feel for fluctuance. • Feel for lymph nodes. Are they tender?  • Look/feel for lumps. **If painful inguinal node or ano-genital ulcer or vesicles,** see p. 22. **If dark lumps,** consider HIV-related illness, see p. 57.

If enlarged lymph nodes or mass:

Is it infected? Consider this in all skin lesions.

If red/dark, tender, warm, pus or crusts (infected skin lesion):

If itching-skin problem, use p. 47.

If skin sores, blisters or pustules, use p. 48.

If skin rash with no symptoms or loss of feeling, use p. 49.

Use this table if enlarged lymph nodes or mass:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Size > 4 cm or • Fluctuant or • Hard or • Fever	**SUSPICIOUS LYMPH NODE OR MASS**	• **Refer for diagnostic work at district hospital.** • **Consider TB.**
• Nearby infection, which could explain lymph node or • Red streaks	**REACTIVE LYMPHADENOPATHY**	• Give oral antibiotic. • Follow up in 1 week.
• > 3 lymph node groups with: — > 1 node — > 1 cm — 1 month duration — No local infection to explain	**PERSISTENT GENERALIZED LYMPHADENOPATHY**	• Screen for syphilis if not done recently. • Consider HIV-related illness (p. 57). • Consider TB.

Is it infected? Ask this in all skin lesions.* If yes, *also use the infection classification table below.

Use this table if lesion red, tender, warm, pus or crusts (infected skin lesion):

• Fever or • Systemically unwell or • Infection extends to muscle	**SEVERE SOFT TISSUE OR MUSCLE INFECTION**	• **Refer to hospital.** • **Start IV/IM antibiotics (if not available, give oral cloxacillin).** • **Consider HIV-related illness.**
• Size > 4 cm or • Red streaks or • Tender nodes or • Multiple abscesses	**SOFT TISSUE INFECTION OR FOLLICULITIS**	• Start cloxacillin. • Drain pus if fluctuance. • Elevate the limb. • Follow up the next day.
• Only red, tender, warm, pus or crusts—none of the signs in the pink or yellow row	**IMPETIGO OR MINOR ABSCESS**	• Clean sores with antiseptic. • Drain pus if fluctuance. • Follow up in 2 days.

go to next page

• Size > 4 cm or • Hard • Fast growing • Edema	**SUSPICIOUS MASS**	• Refer for diagnostic work at district hospital. • Consider TB. • Recommend HIV testing.
• Purple/dark lesions • Patchy, painless, non-pruritic swellings or nodules • Located on skin or mucous membranes	**POSSIBLE KAPOSI'S SARCOMA**	• Give oral antibiotic. • Follow up in 1 week. • Recommend HIV testing.
• Soft, movable • Slow growing	**POSSIBLE LIPOMA**	• Re-assure patient. • Follow-up if growing.

See ***Adolescent Job Aid*** for acne.

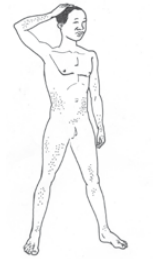
If on ARV therapy, see ***Chronic HIV Care Guideline*** module and consult. Skin reactions are potentially serious.

See other guidelines for:

- Tropical ulcer.
- Other skin problems not included here.

List it as, "other skin problem", if you don't know what it is. Consult.

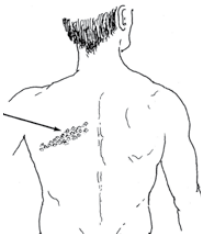
Use this table if itching skin problems:*

Scabies	Papular itching rash (prurigo)	Eczema	Ringworm (tinea)	Dry itchy skin (xerosis)
Rash and excoriations on torso; burrows in webspace and wrist; face spared. 	Itching rash with small papules and scratch marks. Dark spots with pale centers.	Wet, oozing sores or excoriated, thick patches. 	Pale, round, bald scaling patches on scalp or round patches with thick edge on body or web of feet.	Dry and rough skin, sometimes with fine cracks.
• Manage with benzyl benzoate (p. 94). • Treat itching. • If persistent, consider HIV-related illness (p. 57).	• Treat itching. • Locally effective remedies. • Give chlorpheniramine 4 mg every 8 hours or promethazine hydrochloride 25 mg at night. • Consider HIV-related illness (p. 57).	• Soak sores with clean water to remove crusts (no soap). • Dry the skin gently. • Short term: use topical steroid cream (not on face). • Treat itching.	• Whitfield's ointment (or other antifungal cream) if few patches. • If extensive, give ketoconazole or griseofulvin. • If in hairline, shave hair. • Treat itching. • Consider HIV-related illness (p. 57).	• Emollient lotion or calamine lotion; continue if effective. • Locally effective remedies. • Give chlorpheniramine or promethazine. • Consider HIV-related illness (p. 57).

* Seborrhoea may itch – see p. 49.

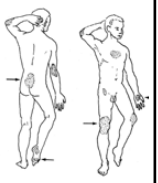
***Is it infected?** Ask this in all skin lesions. If* **yes,** *also use the infection classification table on p. 45.*

Use this table if blister, sore or pustules:

Contact dermatitis	Herpes zoster	Herpes simplex	Drug reaction	Impetigo or folliculitis
Limited to area in contact with problem substance. Early: blistering, red. Later: thick, dry, scaly. 	Vesicles in 1 area on 1 side of body plus intense pain; or scars plus shooting pain. 	Vesicular lesion or sores, also involving lips and/or mouth—see p. 28. In children, primary herpes simplex presents with many small sores or ulcers in mouth, with or without fever and lymphadenopathy; usually resolves within 2 weeks.	Generalized red, widespread with small bumps or blisters; or 1 or more dark skin areas (fixed drug reaction).	Red, tender, warm crusts or small lesions. 
• Hydrocortisone 1 **%** ointment or cream. • If severe reaction with blisters, exudate or oedema, give prednisone. • Find and remove cause.	• Keep clean and dry; use local antiseptic. • If eye involved or any suspicion encephalitis, give aciclovir 800 mg 5 times daily x 7 days. • Pain relief—analgesics and low dose amitriptiline. • Offer HIV counselling and testing. Consider HIV-related illness. Discuss the possible HIV illness (p. 57). • Follow up in 7 days if sores not fully healed, earlier if worse.	• If ulceration for > 30 days, consider HIV related illness. • If first or severe ulceration, give aciclovir. • Maintain fluid intake. • Give liquid food and pain relief as required.	• Stop medications. • Give chlorpheniramine or promethazine HCl. • If peeling rash with involvement of eyes and/or mouth (e.g. Stevens Johnson)—refer urgently to hospital. • Give prednisone if severe reaction or any difficulty breathing – refer urgently to hospital.	See infection table on p. 45.

***Is it infected?** Ask this in all skin lesions. If* **yes,** *also use the infection classification table on p. 45.*

Use this table if skin rash with no or few symptoms:

No or few symptoms					
Leprosy Skin patch(es) with: • No sensation to light touch, heat or pain. • Any location. • Pale or reddish or copper-colored. • Flat or raised or nodular. • Chronic (> 6 months). • Not red or itchy or scaling.	**Seborrhoea** Greasy scales and redness, on central face, scalp, body folds, and chest. 	**Psoriasis** Thickened and scaling patches (may itch in some). Often on knees and elbows, scalp and hairline, lower back. 	**Molluscum contagiosum*** Raised dome-shaped lumps which may have a dimple in the center. Usually on face, neck, armpits, hands. In adults, on the genitals.*	**Warts** Small lumps or bumps with rough surface. May appear anywhere (see p. 22 for genital warts).	**Syphilis** Macular, papular or pustular rash on entire body, especially on palms and soles. Wides-pread, bilateral. May be symmetric pink, coppery or red. • May heal sponta-neously. • In dark skin patients look at palms.
• Treat with leprosy MDT (multidrug therapy) if no MDT in past (see ***Chronic Care*** module or other leprosy guidelines).	• Ketoconazole shampoo (alternative: keratolytic shampoo with salicylic acid or selenium sulfide or coal tar). Repeated treatment may be needed. • If severe, topical steroids or trial ketoconazole. • Consider HIV-related illness (p. 57).	• Coal tar ointment 5% in salicylic acid 2%. • Expose to sunlight 30-60 minutes/ day.	• Freeze with silver nitrate or scrape. Do not treat fascial molluscum as may get scarring. • Consider HIV-related illness (p. 57), especially if giant or extensive.	• Freeze with liquid nitrogen, salicylic acid or silver nitrate. Do not treat facial warts as may get scarring. • If severe, consider HIV-related illness (p. 57).	Do syphilis test. If positive, give benzathine penicillin (p. 75).

* Molluscum-like lesions with ulcerations may be a sign of a disseminated HIV-related infection such as a fungus.

***Is it infected?** Ask this in all skin lesions. If* **yes,** *also use the infection classification table on p. 45.*

▶ If patient has a **headache or neurological problem:**

IF YES, ASK:	LOOK AND FEEL
• Do you have weakness in any part of your body? • Have you had an accident or injury involving your head recently? • Have you had a convulsion? • Assess alcohol/drug use. • Are you taking any medications? • Do you feel like your brain/mind is working more slowly? • Do you have trouble keeping your attention on any activity for long? • Do you forget things that happened recently? • Do you have a visual problem? • Ask family: — Has the patient's behaviour changed? — Is there a memory problem? — Is patient confused? **If memory problem by patient or family, report it, tell patient you want to check his/her memory**: — Name 3 unrelated objects, clearly and slowly. Ask patient to repeat them: — Can he/she repeat them? (registration problem?) ***If yes,*** wait 5 minutes and again ask, "Can you recall the 3 objects?" (recall problem?) **If confused**: — When did it start? — Determine if patient is oriented to place and time. • **If headache:** — For how long? — Visual defects? — Vomiting? — On one side? — Prior diagnosis of migraine? — In HIV patient, new or unusual headache?	Assess for focal neurological problems: • Test strength. • Look at face: flaccid on one side? • Problem walking? • Problem talking? • Problem moving eyes? • Flaccid arms or legs? - **If yes**, loss of strength? • Feel for stiff neck • Measure BP • Is patient confused? • Do visual testing **If patient reports weakness,** test strength. **If headache,** feel for sinus tenderness. **If confused or disoriented**, look for physical cause, alcohol or drug or medication toxicity, or withdrawal.

If acute headache or loss of body function:

If delusions or bizarre thoughts, see p. 55.

If painful feet or legs:

If cognitive problems, see p. 52.

Use this table if headache or neurological problem:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Loss of body functions or • Focal neurological signs or • Stiff neck or • Acute confusion or • Recent head trauma or • Recent convulsion or • Behavioural changes or • Diastolic BP > 120 or • Prolonged headache (> 2 weeks) or • In known HIV patient: — Any new unusual headache or — Persistent headache more than 1 week	**SERIOUS NEURO-LOGICAL PROBLEM**	• Refer urgently to hospital. • If stiff neck or fever, give IM antibiotics and IM antimalarial. • If flaccid paralysis in adolescent < 15 years, report urgently to EPI programme. • If recent convulsion, have diazepam available during referral. • Consider HIV-related illness (p. 57).
• Tenderness over sinuses	**SINUSITIS**	• Give appropriate oral antibiotics. • Give ibuprofen. • If recurrent, consider HIV-related illness (p. 57).
• Repeated headaches with - Visual defects or - Vomiting or - One-sided or - Migraine diagnosis	**MIGRAINE**	• Give ibuprofen and observe response. • If more pain control is needed, see ***Palliative Care*** guidelines on acute pain.
• None of the above	**TENSION HEADACHE**	• Give paracetamol. • Check vision–consider trial of glasses. • Suggest neck massage. • Reduce: stress, alcohol and drug use. • Refer if headache more than 2 weeks. • If on ARV drugs, this may be a side effect (see ***Chronic HIV Care)***.

Use this table if painful leg neuropathy

• Painful burning or numb or cold feeling in feet or lower legs	**PAINFUL LEG NEUROPATHY**	• If on INH, give pyridoxine. If chronic diarrhoea, try ORS. • Consider HIV-related illness (p. 57), syphilis (do syphilis test); diabetes (check blood or urine for glucose); ART side effect—see ***Chronic HIV Care.*** • Refer for further assessment if cause unclear. • Treat with low-dose amitriptyline (p. 88). • Follow up in 3 weeks.

go to next page

Use if cognitive problems—problems thinking or remembering or disorientation:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Recent onset of confusion or • Difficulty speaking or • Loss of orientation or • Restless and agitated or • Reduced level of consciousness	**DELIRIUM**	• **Refer to hospital**. • Give antimalarial pre-referral if malaria risk (p. 76). • Give glucose and thiamine (check blood glucose). • Treat physical cause (systemic illness) or alcohol or drug/ medication toxicity or withdrawal. • Consider HIV-related illness (p. 57). If HIV-related, may improve on ARV therapy. • If not able to refer, also give fluids. • If **very** agitated and not alcohol or drug intoxicated, give low dose sedation with haloperidol (p. 91).
No reduced level of consciousness with: • Serious memory problems or • Slowed thinking with trouble keeping attention or • Misplaces important objects or • Loss of orientation	**DEMENTIA**	• Consult or refer for assessment if cause uncertain. Every patient with dementia needs a full assessment once to exclude a reversible cause. • Consider HIV-related illness (p. 57) If HIV-related, may improve on ARV therapy. • Advise family about dementia. • In elderly, make sure adequately hydrated. • If known diagnosis, arrange for home care support to provide a safe, protective environment. Supportive contact with familiar people can reduce confusion.
• Occasional decreased concentration or • Minor short term memory loss	**NORMAL AGING**	• Reassure patient and relatives.

NOTES:

▶ If patient has a **mental problem, looks depressed or anxious, sad, fatigued, might have an alcohol problem or recurrent multiple issues:**

IF YES, ASK:	LOOK AND FEEL
How are you feeling (listen without interrupting)? Ask: — Do you feel sad or depressed? — Have lost interest/pleasure in things you usually enjoy? — Do you have less energy than usual? — Are you able to work? Go to school? **If yes to any of the above four questions**, ask for these depression symptoms: — disturbed sleep — appetite loss (or increase) — poor concentration — moves slowly — decreased sex drive — loss of self-confidence or esteem — guilty feelings — thoughts of suicide or death **Have you had bad news for yourself or your family?** **If suicidal thoughts, assess the risk:** — Do you have a plan? — Determine if patient has the means. — Find out if there is a fixed time-frame. — Is the family aware? — Has there been an attempt? How? Potentially lethal? **Do you drink alcohol?* If yes:** — Calculate the drinks per week over last month. — Calculate number of times that 5 drinks were consumed in one occasion in past year?	• Does patient appear: — Agitated? — Restless? — Depressed? • Is patient disoriented to time and place? • Is patient confused? • Does the patient express bizarre thoughts? **If yes,** — Does the patient express incredible beliefs (delusions) or see or hear things others cannot (hallucinations)? — Is the patient intoxicated with alcohol or on drugs which might cause these problems? • Does patient have a tremor? **If fatigue or loss of energy**, consider medical causes of fatigue such as anaemia (p. 20), infection, medications, lack of exercise, sleep problems, fear of illness, HIV disease progression. **If confusion or cognitive problems**, see p. 52. **If HIV patient,** consider underlying medical problem or drug toxicity for any new change in mental status.

If sad or loss of interest or decreased energy:

If tense, anxious, or excess worrying; if more than 21 drinks/week for men, 14 for women, or drunk more than twice in last year, treat for harmful/hazardous alcohol use, p. 56.

If bizarre thoughts:

* if pregnant, breast-feeding, taking medications, HIV+, has medical or mental health conditions, has trouble controlling drinking, patient may be better off not drinking any alcohol.

Use this table if sad or loss of interest or decreased energy:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Suicidal thoughts If patient also has a plan and the means, or attempts it with lethal means, consider high risk	**SUICIDE RISK**	• **If high risk, refer for hospitalization (if available) or arrange to stay with family or friends (do not leave alone).** • **Provide emotional support and ensure safety.** • **Assess for and treat underlying mental illness.** • **Remove any harmful objects.** • **Mobilize family support.** • **Follow closely.**
• Five or more depression symptoms and • Duration more than 2 weeks	**MAJOR DEPRESSION**	• If suspect bipolar disorder (manic at other times), refer for lithium. • If patient is taking efavirenz (EFV), see ***Chronic HIV Care.*** • Otherwise, start amitryptiline or fluoxetine (p. 88). • Educate patient and family about medication. • Refer for counselling if available or provide basic counselling to counter depression (see p. 123). • Follow up.
• Less than 5 depression symptoms or • More than 2 months of bereavement with functional impairment	**MINOR DEPRESSION/ COMPLICATED BEREAVEMENT**	• Counsel to counter depression. • Give amitryptyline or fluoxetine if serious problem with functioning. • If problems with sleep, suggest solutions. • Follow up in 1 week.
• Bereaved, but functioning	**DIFFICULT LIFE EVENTS/LOSS**	• Counsel, facilitate psychosocial support. • If acute, uncomplicated bereavement with high distress and not able to sleep, give diazepam 5 mg or amitryptiline 25 mg at night for one week only.

Use this table in all with bizarre thoughts:

• Delusions • Hallucinations • Confusion	**POSSIBLE PSYCHOSIS**	• Exclude alcohol intoxication/withdrawal or drug toxicity or ARV side effect (especially EFV). • Consider infection and other causes—see Delirium, p. 52. • Refer for psychiatric care. • If acutely agitated or dangerous to self or others, give haloperidol (p. 91).

Use this if tense, anxious or excess worrying:

SIGNS:	CLASSIFY AS:	TREATMENTS:
• Sudden episodes of extreme anxiety or • Anxiety in specific situations or • Exaggerated worry or • Inability to relax or • Restlessness	**ANXIETY DISORDER**	• Counsel on managing anxiety according to specific situation. • Teach patients slow breathing and progressive relaxation. • If severe anxiety, consider short-term use of diazepam (up to 2 weeks only). If anxiety > 1 month, start fluoxetine. Refer if patient cannot tolerate fluoxetine or does not improve after several weeks. • Follow up in 2 weeks.

Use this if more than 8 drinks per week in last month or more than 5 drinks on one occasion in past year:

Two or more of: • Severe tremors • Anxiety • Hallucinations	**SEVERE WITHDRAWAL SIGNS**	• **Refer to a treatment center or hospital.** • **Give diazepam for withdrawal if not able to refer; monitor daily.** • **Give thiamine.**
• Possible excessive alcohol use	**HAZARDOUS OR HARMFUL ALCOHOL USE**	• Assess further using WHO AUDIT. • Give brief interventions for harmful or hazardous alcohol use.

Assess and treat other problems

If:

- pain from chronic illness,
- constipation,
- hiccups, and/or
- trouble sleeping,

see ***Palliative Care*** module.

If chronic illness, see ***Chronic Care*** modules.

Consider HIV-related Illness

Clinical Signs of Possible HIV Infection

- Repeated infections
- Herpes zoster
- Skin conditions including prurigo, seborrhoea
- Lymphadenopathy (PGL)—painless swelling in neck and armpit

- **Kaposi lesions (painless dark or purple lumps on skin or palate)**
- **Severe bacterial infection—pneumonia or muscle infection**
- **Tuberculosis—pulmonary or extrapulmonary**
- **Oral thrush or oral hairy leukoplakia**
- **Gum/mouth ulcers**
- **Oesophageal thrush**
- **Weight loss 5–10 % without other explanation**
- **More than 1 month:**
  - **— Diarrhoea (unexplained)**
  - **— Vaginal candidiasis**
  - **— Unexplained fever**
  - **— Herpes simplex ulceration (genital or oral)**

These are all clinical signs of possible HIV infection. If the patient's serostatus is unknown, HIV testing should be done urgently and the results made available for clinical management.

▶ Consider TB and send sputums for examination of TB (p. 69) for any of these signs:

- Cough for more than 2 weeks
- Father, mother, partner, or sibling diagnosed as having TB
- Weight loss
- Hemoptysis
- Painless swelling in neck or armpit
- Sweats

▶ Signs of extrapulmonary TB:

Send sputum for AFB and refer for further evaluation if patient is HIV positive and has any of these signs:

- Significant weight loss (>5%).
- Unexplained, persistent fever or night sweats (>2 weeks).
- Distended abdomen with ascites.
- Deformity of the spine; unexplained spine pain.
- Unexplained enlarged lymph nodes (>2 cm).

❖ **For patients with a negative HIV test, consider retesting for HIV in 4 weeks (the "window" period) if your suspicion is high.**

❖ **If patient has signs in bold in the gray shaded area in the box on the previous page:**

- These signs indicate HIV clinical stage 3 or 4. Patient is likely eligible for ARV therapy. HIV testing is urgent (see ***Chronic HIV Care*** guideline module).

❖ **For patients with a positive HIV test:**

- Obtain a CD4 count if available.
- Provide ongoing HIV Care—use the ***Chronic HIV Care*** guideline module.

NOTES:

Prevention: Check Status of Routine Screening, Prophylaxis and Treatment

Do this in all acute and chronic patients!

ASSESS	TREAT AND ADVISE
• Ask whether patient and family are sleeping under a bednet. - If yes, has it been dipped in insecticide?	• Encourage use of insecticide-treated bednets.
• Is patient sexually active (for adolescent: Have you started having sex yet? See next page)? • Determine if patient is at risk for HIV infection. • Is patient's HIV status known?	• Counsel on safer sex. See next page for adolescents. • Offer family planning. • If unknown status: - offer HIV testing and explain its advantages (p. 113), and - counsel after HIV testing.
• Does patient smoke? • If adolescent, do you feel pressure to do so?	If yes, counsel to stop smoking (see *Brief Interventions: Smoking Cessation).* • If adolescent is smoking: educate on hazards, help to say no. If not, provide positive reinforcement.
• Does patient drink alcohol? If yes, calculate drinks per week over last 3 months. • Have you had 5 or more drinks on 1 occasion in last year?	• If more than 21 drinks/week for men, 14 for women or 5 drinks at once, assess further and counsel to reduce or quit. If adolescent is drinking: educate on hazards, help to say no. If not, provide positive reinforcement.
• Has patient over 15 years been screened for hypertension within last 2 years?	• Measure blood pressure. Repeat measurement if systolic >120 mmHg. • If still elevated, see hypertension guidelines.
• Occupation with back strain or history of back pain.	• Exercises to stretch and strengthen abdomen and back. • Correct lifting and other preventive interventions.

ASSESS	TREAT AND ADVISE
In adolescent girls and women of childbearing age: Check Tetanus Toxoid (TT) immunization status: - When was TT last given? - Which doses of TT was this? Check when last dose mebendazole. Check HPV vaccination status	Give mebendazole if due. If Tetanus Toxoid (TT) is due: • give 0.5 ml IM, upper arm. • advise her when next dose is due. • record on her card. **TETANUS TOXOID (TT or Td) SCHEDULE:** • At first contact with woman of childbearing age or at first antenatal care visit, as early as possible during pregnancy. • At least four weeks after TT1 —>TT2. • At least six months after TT2 —>TT3. • At least one year after TT3 —>TT4. • At least one year after TT4 —>TT5. Offer HPV vaccine; priority should be vaccination of girls before first sexual intercourse (between 9-12 years). Follow manufacturer's schedule: 3 doses over 6 months.
In women of childbearing age: - Is she pregnant?	• If pregnant, discuss her plans, follow antenatal care guidelines, advise against alcohol use and smoking • If not pregnant, offer family planning.

Special Prevention for Adolescents **See *Adolescent Job Aid.***

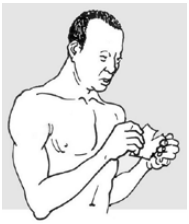
ASSESS	TREAT AND ADVISE
❖ Is patient sexually active? ❖ ***If yes—sexually active***, also ask: — does the patient use condoms? — was the patient forced to have sex? — does the patient consider him/herself to be at risk of HIV, other STIs or pregnancy? — does patient know his/her HIV status? Young people may know very little about HIV and how it is transmitted. Be sure to check their understanding, especially about how to protect themselves.	***If no***, encourage the patient to delay initiation of penetrative vaginal, anal or oral sexual intercourse, and to avoid anything that brings him/her into contact with his/her partner's semen or vaginal secretions. ❖ Advise to explore sexual pleasure in other forms of intimacy. Find non-sexual activities that you and your partner enjoy. ***If yes—sexually active***, provide information and counselling about the prevention of HIV, STIs and pregnancy, *emphasizing that condoms are dual protection* for pregnancy and STIs/HIV. ❖ Advise the patient to reduce the number of partners or, better yet, be faithful to one. ❖ Advise to use condoms correctly and consistently every time that s/he has sexual intercourse. **Demonstrate how to use a condom.** ❖ Discuss appropriate ways of saying no to unwanted sex and negotiating condom use. Reinforce skills to say no (refer to an appropriate organization or group if s/he does not have the skills). Make sure girls understand that they cannot tell by looking at someone if the person is infected with HIV and that HIV risk increases with the age of the man. ❖ Offer HIV testing and counselling (see p. 110). ❖ **If unprotected sexual intercourse,** advise on emergency contraception within 120 hours and prevention and treatment of STIs. ❖ If patient has been forced to have sex or raped, see ***Quick Check*** module.

Special Prevention for Men who have Sex with Men (MSM)

ASSESS	TREAT AND ADVISE
❖ Does the patient have sex with other men? **Non-judgemental ways of asking about sexual preference include:** "Are your sexual partners male, female or both?" "Some men, although they are married or have a girlfriend, occasionally have sex with other men. Do you?" ❖ Has the patient had unprotected anal or oral sex (receptive or insertive) with men? ❖ Has the patient been a victim of stigma, discrimination or violence as a result of sex with other men? NOTE: ❖ Not all MSM identify as gay, bisexual or homosexual ❖ Men may have sex with other men because of love, pleasure and/or economic exchange ❖ In many cultures sex between men is highly stigmatized and may be illegal ❖ Men may be reluctant to disclose about sex with other men and often avoid seeking health care out of fear of being stigmatized	❖ To reliably assess, advise and treat MSM, health workers need to be non-judgemental, build trust and ensure confidentiality ❖ Advise that unprotected anal sex (insertive or receptive) puts one at increased risk for HIV and STIs ❖ Advise that STIs in the penis, anus or throat will increase the risk of getting and/or passing on HIV ❖ Advise on correct use of condoms and water-based lube, especially for anal sex ❖ Recommend HIV testing and advise on regular STI screening ❖ If HIV-positive, condoms will reduce the risk of getting other STIs, passing on HIV to others and being infected with another strain of HIV ❖ As stigma, poor self-esteem, substance abuse, and depression have been shown to increase risk by limiting MSM's ability to use condoms, discouraging seeking health care and HIV testing, health workers should try to: • Address stigma and discrimination • Address self-esteem issues • Link to peer support if available • Link patient to MSM community organization if available • If patient seems depressed, or has problems with substance use, refer to p. 55

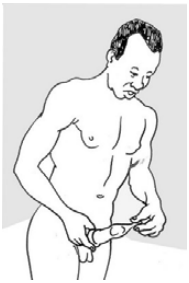
Always use condoms

1 Open condom and check expiry date.



2 Squeeze air from the teet of the condom.

3 Roll rim of condom on erect penis.



4 Hold condom and remove penis from vagina

5 Knot condom to avoid spilling sperm. Throw used condom in pit latrine or burn it.

How you should use condoms:

Condoms should be put on at the beginning of intercourse, not just before ejaculation.

NOTES:

Follow-up Care for Acute Illness

▶ Follow-up pneumonia

❖ **After 2 days, assess the patient:**

- Check the patient with pneumonia using the Look and Listen part of the assessment on p. 16.
- Also ask, and use the patient's record, to determine:
  - Is the breathing slower?
  - Is there less fever?
  - Is the pleuritic chest pain less?
  - How long has the patient been coughing?

❖ **Treatment:**

- I**f signs of SEVERE PNEUMONIA OR VERY SEVERE DISEASE or no improvement in pleuritic chest pain,** give IM antibiotics and refer urgently to hospital.
- **If breathing rate and fever** are the same, change to the second-line oral antibiotics and advise to return in 2 days.

  Exception: refer to hospital if the patient:
  - has a chronic disease or
  - is over 60 years of age or
  - has suspected or known HIV infection
- **If breathing slower or less fever,** complete the 5 days of antibiotics. Return only if symptoms persist.

❖ **Also:**

- If still coughing and cough present for more than 2 weeks, send 3 sputums for TB or send the patient to district hospital for sputum testing.
- Consider HIV-related illness (p. 57).
- If recurrent episodes of cough or difficult breathing and a chronic lung problem has not been diagnosed, refer patient to district hospital for assessment.

▶ Follow-up of patient with cough with sputum smear results

If:	Then:
Two samples are positive	Patient is sputum smear-positive (has infectious pulmonary TB).
Only one sample is positive in HIV-negative patient	Diagnosis is uncertain. Refer patient to district doctor/ medical officer for further assessment.
Only one sample is positive in HIV-positive patient	Patient is sputum smear-positive (has smear positive pulmonary TB).
All samples are negative in HIV-negative patient	Patient may or may not have pulmonary tuberculosis: ❖ If patient is no longer coughing and has no other general complaints, no further investigation or treatment is needed. ❖ If still coughing and/or having other general complaints (and not seriously ill), treat with a non-specific antibiotic such as cotrimoxazole or amoxicillin. ❖ If cough persists and patient is not severely ill, repeat examination of three sputum smears. If sputum negative, refer patient to a doctor/medical officer.
All samples are negative in HIV-positive patient	Patient may or may not have pulmonary tuberculosis: ❖ If cough persists, treat with non-specific antibiotic such as cotrimoxazole or amoxicillin and refer for evaluation for possible smear-negative pulmonary TB or other chronic lung/heart problem. If referral is impossible and patient has signs of SEVERE PNEUMONIA OR VERY SEVERE DISEASE, follow instructions on p. 18.

▶ Follow-up fever

If high or low malaria risk—examine malaria smear

If persistent fever—consider:

- TB
- HIV-related illness (See p. 57).

Refer if unexplained fever 7 days or more.

* The number of sputum samples examined will depend on national guidelines. For high HIV settings, two sputum samples are recommended, usually one early morning specimen which should be brought to the clinic, and a second "spot" specimen produced at that time.

▶ Follow-up persistent diarrhoea in HIV negative patient (for HIV positive, see *Chronic HIV Care* module)

- Advise to drink increased fluids (see Plan A, p. 96).
- Continue eating.
- Consider giardia infection—give metronidazole and follow up in 1 week.
- Stop milk products (milk, cheese).
- If elderly or confined to bed, do rectal exam to exclude impaction (diarrhoea can occur around impaction).
- If blood in stool, follow guidelines for dysentery.
- If fever, refer.
- If no response, refer. District clinician should evaluate.

▶ Follow-up oral or oesophageal candida

- For suspected oesophagitis—if no response and not able to refer, give aciclovir if mouth lesions suggest herpes simplex.
- If not already tested for HIV, encourage testing and counselling.
- If HIV positive, see ***Chronic HIV Care*** module.

▶ Follow-up anogenital ulcer

If ulcer is healed: no further treatment

If ulcer is improving:

- Continue treatment for 7 more days
- Follow up in 7 days

If no improvement: refer

▶ Follow-up urethritis in men

Rapid improvement usually seen in a few days with no symptoms after 7 days.

If not resolved, consider the following:

- Has patient been reinfected? Were partners treated? If not, treat partners and patient again.
- Make sure treatment for both GC and chlamydia was given and that patient adhered to treatment. If not, treat again.
- If trichomonas is an important cause of urethritis locally, treat patient and partner with metronidazole.
- If patient was adherent and no reinfection likely and resistant GC is common, give second-line treatment or refer.

For all patients

- Promote and provide condoms.
- Offer HIV testing and counselling, p. 110.
- Educate on STIs, HIV and risk reduction.

▶ Follow-up gonorrhoea/chlamydia infection in women

- Make sure treatment for both GC and chlamydia was given and that patient adhered to treatment. If not, treat again.
- If abnormal discharge or bleeding on sexual contact continues after re-treatment, perform clinical exam with speculum and perform cervical cancer screening tests as recommended (by national cancer control programme), refer for gynaecological assessment. Persistence of these symptoms after repeated treatment can be an early sign of cervical cancer, especially in women > 35 years or HIV positive.

▶ Follow-up candida vaginitis

Some improvement usually seen in a few days with no symptoms after 7 days of treatment.

If symptoms persist:

- Re-treat patient.
- Ask about oral contraceptive or antibiotic use—these can contribute to repeated candida infections.
- Consider HIV infection or diabetes, particularly if symptoms of polyuria or increased thirst or weight loss. Check urine glucose—if present, refer for fasting blood sugar, repeat candida infections are common. Consider intermittent treatment (H60).
- Consider treating for possible GC/chlamydia infection if not treated on the first visit.

▶ Follow-up bladder infection or menstrual problem

Consider STIs if symptoms persist—treat patient and partner for GC/chlamydia. Consider use of second-line antibiotic.

If polyuria continues or is associated with increased thirst or weight loss, check for diabetes mellitus by dipstick of urine. If positive for sugar, refer for fasting blood sugar and further assessment.

Check adherence to treatment.

▶ Follow-up PID

Some improvement usually seen in 1-2 days but it may take weeks to feel better (chronic PID can cause pain for years).

If no improvement:

- Consider referral for hospitalization.
- If IUD in place, consider removal.

If some improvement but symptoms persist:

- Extend treatment. Make sure partner has been treated for GC/chlamydia. Follow up regularly and consider referral if still not resolved.

For all patients

- Promote and provide condoms.
- Offer HIV testing and counselling, p. 110.
- Educate on STIs, HIV and risk reduction.

▶ Follow-up BV or trichomonas vaginitis

Some improvement usually seen in a few days with no symptoms after 7 days.

If symptoms persist:

- Treat patient and partner with 7 days course of metronidazole at same time.
- Consider treating candida infection and cervicitis if these were not treated on the first visit.
- For bacterial vaginosis (BV), make sure she avoids douching or using agents to dry vagina.
- If discharge persists after re-treatment, refer for gynaecological assessment.

Treatments

Special advice for prescribing medications for symptomatic HIV or elderly patients

- For some medications, start low, go slow (give full dose of antimicrobials and ARV drugs).
- Expect the unexpected—unusual side effects and drug interactions.
- Need for dynamic monitoring—you may need to adjust medications with change in weight and illness.
- If on ARV therapy, be sure to check for drug interactions before starting any new medication—see ***Chronic HIV Care*** module.

Instructions for Giving IM/IV Drugs:

- Explain to the patient why the drug is given.
- Determine the dose appropriate for the patient's weight. For some drugs, it is preferable to calculate exact dose for weight.
- Use a sterile needle and sterile syringe for each patient.
- Measure the dose accurately.

▶ Give benzathine penicillin

For syphilis:

- ❖ Treat woman and her partner with 2.4 million units benzathine penicillin. If pregnant, plan to treat newborn.
- ❖ If allergic to penicillin: give doxycycline 100 mg twice daily for 14 days or tetracycline 500 mg orally 4 times daily for 14 days.

Adolescent or adult	BENZATHINE PENICILLIN IM Add 5 ml sterile water to vial containing 1.2 million units = 1.2 million units/6 ml total volume
Genital or oral ulcer	12 ml (6 ml in each buttock) once
Syphilis rash (see skin section) or asymptomatic positive syphilis test	12 ml (6 ml in each buttock) once
Neurological syphilis	Aqueous benzylpenicillin (penicillin G) 2–4 million units intravenous every 4 hours for 14 days. This requires referral for hospital administration.

For rheumatic fever/heart disease (RF/RHD) prophylaxis:

- ❖ Give 1.2 million units every 4 weeks—see RF/RHD ***Chronic Care*** module.

Prophylaxis: RF/RHD	6 ml Benzathine Penicillin IM every 4 weeks
Suspect streptococcal pharyngitis	6 ml once

▶ Give glucose

- ❖ Give by IV. Make sure IV is running well. Give by slow IV push.

	50% GLUCOSE SOLUTION *
Adolescent or Adult	25 - 50 ml

* 50% glucose solution is the same as 50% dextrose solution or D50.

- ❖ If no IV glucose is available, give sugar water by mouth or nasogastric tube.
- ❖ To make sugar water, dissolve 4 level teaspoons of sugar (20 grams) in a 200 ml cup of clean water.

▶ Give IM antimalarial

❖ Give initial IM loading dose before referral.

- **Artesunate:** Give one IM injection.
- Or **artemether:** Give one IM injection.
- Or **quinine:** Give 20 mg/kg divided equally into two injections—one in each anterior thigh.

always give glucose with quinine

	QUININE IM 20 mg/kg* (loading dose)		ARTEMETHER 3.2 mg/kg (loading dose)	ARTESUNATE 2.4 mg/kg (loading dose)
WEIGHT	**150 mg/ml (in 2 ml ampoules)**	**300 mg/ml (in 2 ml ampoules)**	**80 mg/ml (in 1 ml ampoules)**	**60 mg/3 ml (after reconstitution with 1 ml of 5% sodium bicarbonate and dilution with 2 ml normal saline)**
30-39 kg	4 ml	2 ml	1.2 ml	3.6 ml
40-49 kg	5.3 ml	2.7 ml	1.6 ml	4.8 ml
50-59 kg	6.7 ml	3.3 ml	2.0 ml	6 ml
60-69 kg	8 ml	4 ml	2.4 ml	7.2 ml

* Dosages are appropriate for quinine hydrochloride, quinine dihydrochloride or quinine sulfate. If quinine base, give 8.2 mg/kg every 8 hours.

❖ If not able to refer, continue treatment as follows:

- **After loading dose of artesunate,** give 1.2 mg/kg (half of above dose) IM at 12h and 24h, then once a day until able to take orally, to complete 6 days of treatment.
- **After loading dose of artemether,** give 1.6 mg/kg (half of above dose) IM each day until able to take orally, to complete 6 days of treatment.
- **After loading dose of quinine,** give quinine 10 mg/kg (half of above dose) every 8 hours until able to take oral medication: give a full course of an effective antimalarial treatment, preferably of combination therapy, ACT or quinine plus clindamycin or doxycycline. Regimens containing mefloquine should be avoided if the patient presented initially with impaired consciousness.

▶ Give diazepam IV or rectally

- ❖ Call for help to turn and hold patient.
- ❖ Draw up 4 ml dose from an ampoule of diazepam into a 5 ml syringe. Then remove the needle.
- ❖ Insert small syringe 4 to 5 centimeters into the rectum and inject the diazepam solution.

DIAZEPAM RECTALLY 10 mg/2 ml solution 0.5 mg/kg		**IV** 0.2-0.3 mg/kg
Initial dose	4 ml (20 mg)	2 ml (10 mg)
Second dose	2 ml (10 mg)	1 ml (5 mg)

- ❖ Hold buttocks together for a few minutes.

If convulsion continues after 10 minutes, give a second, smaller dose of 1 ml diazepam IV or 2 ml rectally.

Maintenance dose during transportation if needed and health worker accompanies:

- 2 ml rectal dose can be repeated every hour during emergency transport **or**
- Give slow IV infusion of 10 mg diazepam in 150 ml over 6 hours.

Stop the maintenance dose if breathing less than 16 breaths per minute. If respiratory arrest, ventilate with bag and mask.

Maximum total dose diazepam: 50 mg.

▶ Give appropriate IV/IM antibiotic pre-referral

Classification	Antibiotic
Severe Pneumonia, Very Severe Disease	**First-line antibiotic:** _____ (Common choice: ceftriaxone or ampicillin plus gentamicin) **Second-line antibiotic:** _____ (Common choice: chloramphenicol)
Very Severe Febrile Disease or suspect sepsis	**First-line antibiotic:** _____ (Common choice: ceftriaxone) **Second-line antibiotic:** _____ (Common choice: ampicillin plus gentamicin)
Severe soft tissue, muscle, or bone infection or suspected Staphylococcal infection	**First-line antibiotic:** _____ (Common choice: cloxacillin) **Second-line antibiotic:** _____ (Common choice:)
Severe or surgical abdomen	**First-line antibiotic:** _____ (Common choice: ampicillin plus gentamicin plus metronidazole) **Second-line antibiotic:** _____ (Common choice: ciprofloxacin plus metronidazole)
Kidney infection	**First-line antibiotic:** _____ (Common choice: ampicillin plus gentamicin) **Second-line antibiotic:** _____ (Common choice: ciprofloxacin)

▶ IV/IM antibiotic dosing

WEIGHT	**BENZYLPENICILLIN** Dose: 50 000 units per kg.	**GENTAMICIN** Dose: 5 mg/kg/day. Calculate EXACT dose based on body weight. Only use these doses if this is not possible.	
	To a vial of 600 mg (1 000 000 units): Add 2.1 ml sterile water = 2.5 ml at 400 000 units/ml	Vial containing 20 mg = 2 ml at 10 mg/ml undiluted	Vial containing 80 mg = 2 ml at 40 mg/ml undiluted
30-39 kg	4 ml	15-19 ml	4-5 ml
40-49 kg	6 ml	20-24 ml	5-6 ml
50-59 kg	7 ml	25-29 ml	6-7 ml
60-69 kg	8 ml	30-34 ml	7.5-8.6 ml
	If not able to refer: Give above dose IV/IM every 6 hours	**If not able to refer: Give above dose once daily**	

	CHLORAMPHENICOL Dose: 40 mg per kg	**CLOXACILLIN** Dose: 25-50mg/kg	**AMPICILLIN** Dose: 50mg/kg
WEIGHT	Add 5.0 ml sterile water to vial containing 1000 mg = 5.6 ml at 180 mg/ml	IV: To a vial of 500 mg add 8 ml of sterile water to give 500 mg/10 mls IM: Add 1.3 ml of sterile water to a vial of 250 mg to give 250 mg/1.5 ml	To a vial of 500 mg add 2.1 ml sterile water = 2.5 ml for 500 mg
30-39 kg	8 ml	6-12 ml IM (20-40 ml IV)	10 ml
40-49 kg	10 ml	7.5-15 ml IM (25-50 ml IV)	12 ml
50-59 kg	12 ml	9-18 ml IM (30-60 ml IV)	15 ml
60-69 kg	14 ml	10-20 ml IM (35-70 ml IV)	18 ml
	If not able to refer: Give above dose IV/IM every 12 hours	**If not able to refer: Give above dose IV/IM every 4-6 hours**	**If not able to refer: Give above dose IV/IM every 6 hours**

▶ Give salbutamol by metered-dose inhaler

100 mcg/puff; 200 doses/inhaler
Use spacer and/or mask depending if patient not able to coordinate breathing and inhaler.*

If MODERATE WHEEZING or SEVERE WHEEZING:

- ❖ Give salbutamol, either continuous nebulizers or prime spacer with 5 puffs then give 2 puffs via spacer every 2 minutes.

If MILD WHEEZING:

- ❖ 2 puffs every 20 minutes x 3 times, then 2 puffs every 3 to 6 hours.

* For further management of wheezing, see asthma guidelines in *IMAI District Clinician Manual: Hospital Care for Adolescents and Adults* or other module or asthma guidelines.

Instructions for Giving Oral Drugs

TEACH THE PATIENT HOW TO TAKE ORAL DRUGS AT HOME

- Determine the appropriate drugs and dosage for the patient's age and weight.
- Tell the patient the reason for taking the drug.
- Demonstrate how to measure a dose.
- Watch the patient practise measuring a dose by himself.
- Ask the patient to take the first dose.
- Explain carefully how to take the drug, then label and package the drug.
- If more than 1 drug will be given, collect, count and package each drug separately.
- Explain that all the oral drug tablets must be used to finish the course of treatment, even if the patient gets better.
- Support adherence.
- Check the patient's understanding before s/he leaves the clinic.

▶ Give appropriate oral antibiotic

For pneumonia

First-line antibiotic: _____
(Common choice: amoxicillin or cotrimoxazole)
Second-line antibiotic: _____
(Common choice: erythromycin or doxycycline or azithromycin)

For dysentery

First-line antibiotic: _____
(Common choice: nalidixic acid or ciprofloxacin)
Second-line antibiotic: _____

For cholera - single dose treatment

First-line antibiotic: _____
(Common choice: tetracycline or doxycycline)
Second-line antibiotic: _____
(Common choice: ciprofloxacin or erythromycin)

For abscess, soft tissue infection, folliculitis, dental abscess , infection after adult male circumcision

First-line antibiotic: _____
(Common choice: cloxacillin)
Second-line antibiotic: _____

For chancroid (treat for 7 days)

First-line antibiotic:_____
(Common choice: ciprofloxacin or erythromycin)
Second-line antibiotic: _____

For lymphogranuloma venereum, treat for 14 days

First-line antibiotic: _____
(Common choice: doxycycline)
Second-line antibiotic: _____

For reactive lymphadenopathy

First-line antibiotic: _____
Second-line antibiotic: _____

For outpatient treatment PID

First-line antibiotic:_____
(Common choice: ciprofloxacin and doxycycline and metronidazole)
Second-line antibiotic: _____

For bladder infection

First-line antibiotic:_____
(Common choice: cotrimoxazole)
Second-line antibiotic: _____

	COTRIMOXAZOLE (trimethoprim + sulfamethoxazole) Give 2 times daily for 5 days	AMOXICILLIN Give 3 daily for 5 days		CLOXACILLIN Give 4 times daily for 5 days
AGE or WEIGHT	**ADULT TABLET** 80 mg trimethoprim + 400 mg sulfamethoxazole	**TABLET** 500 mg	**TABLET** 250 mg	**TABLET** 500 mg
5 years to 13 years (19-50 kg)	1	1/2	1	1
14 years or more (> 50 kg)	2	1	2	1

	DOXYCYCLINE * Give 2 times daily for 5 days (avoid doxycycline in young adolescents)	ERYTHROMYCIN Give 4 times daily for 5 days		PEN VK Give 3 times daily for 5 days	CIPRO-FLOXACIN Give 2 times daily for 7 to 14 days
AGE or WEIGHT	**TABLET** 100 mg	**TABLET** 500 mg	**TABLET** 250 mg	**TABLET** 500 mg	**TABLET** 500 mg
5 years to 13 years (19-50 kg)	1	1/2	1	1	I/2
14 years or more (> 50 kg)	1	1	2	1	1

* Avoid doxycycline under 12 years.

▶ Give antibiotics for possible GC/chlamydia infection

IN NON-PREGNANT WOMAN, OR MAN:

First-line antibiotic combination for GC/chlamydia: _____
_____

(Common choice: ceftriaxone plus azithromycin)

Second-line antibiotic combination if high prevalence resistant GC or recent treatment: _____

IN PREGNANT WOMAN:

First-line antibiotic combination for GC/chlamydia:_____
_____

(Common choice: ceftriaxone plus azithromycin)

Second-line antibiotic combination if high prevalence resistant GC or recent treatment: _____

▶ Antibiotics for gonorrhoea (GC)

SAFE FOR USE IN PREGNANCY: Ceftriaxone	 250 mg IM
Cefixime 400 mg	1 tablet in clinic
Spectinomycin	2 grams IM
Kanamycin	2 grams IM
NOT SAFE FOR USE IN PREGNANCY: Ciprofloxacin 250 mg 500 mg	 2 tablets in clinic 1 tablet in clinic

▶ Antibiotics for chlamydia

SAFE FOR USE IN PREGNANCY:	
Amoxicillin 500 mg	1 tablet 3 times daily for 7 days
250 mg	2 tablets 3 times daily for 7 days
Azithromycin 250 mg	4 capsules in clinic
Erythromycin base 250 mg	2 tablets 4 times daily for 7 days
base 500 mg	1 tablet 4 times daily for 7 days
NOT SAFE FOR USE IN PREGNANCY OR DURING LACTATION:	
Doxycyline 100 mg	1 tablet 2 times daily for 10 days
Tetracycline 500 mg	1 tablet daily for 10 days

▶ Give metronidazole

Advise to avoid alcohol when taking metronidazole

❖ **For bacterial vaginosis or trichomoniasis**

	METRONIDAZOLE 250 mg tablet
Adolescent or adult	2 grams (8 tablets) at once in clinic or 2 tablets twice daily for 7 days

❖ **For persistent diarrhoea, bloody diarrhoea, PID or severe gum/mouth infection:**

Weight	**METRONIDAZOLE** 250 mg tablet twice daily for seven days	**METRONIDAZOLE** 500 mg tablet twice daily for 7 days
Adolescent or adult	2	1

▶ Give appropriate oral antimalarial

First-line antimalarial: _____

Second-line antimalarial: _____

AGE or WEIGHT	ARTESUNATE + AMODIAQUINE daily dose, once daily for 3 days	ARTEMETHER/ LUMEFANTRINE twice daily for 3 days*	SULFADOXINE/ PYRIMETHAMINE (SP) Single dose in clinic + ARTESUNATE daily for 3 days**				ARTESUNATE daily for 3 days + MEFLOQUINE split over the 2nd and 3rd days			
	Separate tablets: artesunate tablet 50 mg; amodiaquine tablet 153 mg base	Coformulated tablet: artemether 20 mg + lumefantrine 120 mg	Separate tablets: SP tablet (sulfadoxine 500 mg + pyrimethamine 25 mg); artesunate tablet (Art) 50 mg				Separate tablets: artesunate tablet (Art) 50 mg; mefloquine tablet (Mef) 250 mg base			
			Day	1	2	3	Day	1	2	3
5-7 yr (19-24 kg)	1+1	2	SP Art	1 1	1	1	Art Mef	1	1 1	1
8-13 yr or small or wasted adult (25-50 kg)	2+2	3	SP Art	2 2	2	2	Art Mef	2	2 2	2 1
14 yr + (>50 kg)	4+4	4	SP Art	3 4	4	4	Art Mef	4	4 4	4 2

* The second dose on the first day should be given any time between 8h and 12h after the first dose. Dosage on the second and third days is twice a day (morning and evening)

** Do not use sulfadoxine/pyrimethamine for treatment if patient is on cotrimoxazole prophylaxis.

For children under 5 years, see IMCI guidelines.

▶ Give paracetamol for pain

- ❖ Give every 6 hours (or every 4 hours if severe pain).
- ❖ Do not exceed 8 tablets (4 gms) in 24 hours. If pain not controlled with paracetamol, alternate aspirin with paracetamol. If pain is chronic, see ***Palliative Care*** module p. 14. If severe acute pain or chronic pain, see ***Palliative Care*** guideline.

Adolescent or Adult	**paracetamol** 500 mg tablet
40-50 kg or more	1 tablet
50 kg or more	1-2 tablets

Do not use for > 1 week if on nevirapine.

▶ Give albendazole or mebendazole

albendazole 400 mg single dose OR

mebendazole 500 mg single dose

▶ Give prednisolone

❖ **For acute moderate or severe wheezing, before referral:**
Give prednisolone or prednisone 60 mg orally.

Or, if not able to take oral medication, give either:

- hydrocortisone 300 mg IV or IM, or
- methyprednisolone 60 mg IV/IM.

❖ **For asthma or COPD not under control, where prednisone is in the treatment plan,** give prednisolone or prednisone.

Give high dose for several days, then taper, and then stop. COPD may require longer treatment at low level (see Practical Approach to Lung Health (PAL) Guidelines).

	prednisolone or prednisone 5 mg tablets						
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
ADULT	7	7	7	6	5	4	3

▶ Give amitriptyline

Indications: Depression, insomnia, and some neuropathic pain. Helps relieve pain when used with opioids and for sleep, in a low dose.

Common side effects: Orthostatic hypotension (risk of falling), dry mouth, constipation, difficulty urinating, dizziness, and blurred vision.

Contraindications and cautions: In depressed patients, watch for increased risk for suicide. Do not give if history of mania-refer patient. Do not give if history of arrhythmia or recent heart attack. If suicide risk, give only one week's supply at a time, or have caregiver dispense drug. Amitriptyline may impair ability to perform skilled tasks such as driving—take precautions until accustomed to drug.

For depression:

Educate patient and family

- ❖ Review above noted medication facts as relevant
- ❖ Not addictive.
- ❖ Avoid use of alcohol.
- ❖ Takes 3 weeks to get a response in depression—don't be discouraged; often see effect on sleep or pain within 2-3 days.
- ❖ May feel worse initially due to side effects; side effects gradually fade.

In healthy adults:

- ❖ Initiate treatment with 50 mg of amitriptyline at bedtime.
- ❖ Increase by 25 to 50 mg every 1-2 weeks, aiming for 150 mg by 4-6 weeks depending on response and tolerability .
- ❖ Maximum dose is 250 mg in divided doses.
- ❖ If patient is unable to tolerate amitriptyline, or fails to improve after 8 weeks, switch to fluoxetine for the treatment of depression.
- ❖ Continue for 6 months if this is the first episode of depression, and 12 months or more if previous episodes of depression have occurred.

In elderly or medically ill patients (including those with stage 3/4 HIV/AIDS—these patients are very sensitive to side effects of amitriptyline).

- Initiate with 25 mg at bedtime.
- Increase by 25 mg weekly, aiming for a target dose of 100 mg by 4-6 weeks.
- May increase to 200 mg if required to control symptoms and patient can tolerate higher doses.
- Monitor carefully for hypotension and fall risk.
- Switch to fluoxetine if necessary as noted above.
- Continue medication as noted above.

For painful foot/leg neuropathy:

Give low dose amitriptyline- 25 mg at night or 12.5 mg twice daily (some experts advise starting as low as 12.5 mg daily). Wait 2 weeks for response, then increase gradually to 50 mg.

For problems with sleep:
Use low dose at night- 12.5 to 25 mg.

▶ Give fluoxetine

Indications: Depression and chronic anxiety disorders.

Common side effects: Restlessness, nervousness, insomnia, anorexia and other gastrointestinal disturbances, headache, sweating.

Contraindications and cautions: Watch for increased risk for suicide. Do not give if history of mania—refer patient. May impair ability to perform skilled tasks such as driving—take precautions until accustomed to drug.

Educate patient and family

- ❖ Review above noted medication facts as relevant.
- ❖ Fluoxetine is not addictive.
- ❖ Avoid alcohol use .
- ❖ Usually takes several weeks to get a response—don't be discouraged.
- ❖ May feel worse initially due to side effects; most side effects gradually fade.

In healthy adults:

- ❖ Initiate treatment with 20 mg of fluoxetine daily.
- ❖ Reassure patient about initial side effects, which usually occur in the first few days. If the patient is unable to adjust to side effects despite reassurance, stop medication for three days and then resume fluoxetine using same dosing as for elderly.
- ❖ If patient has severe insomnia (caused by the psychiatric illness and/or fluoxetine), consider adding diazepam 5-10 mg at bedtime. Gradually taper and discontinue diazepam as psychiatric symptoms improve.
- ❖ After three weeks, fluoxetine dose may be increased to 40 mg according to patient tolerability and symptom response.
- ❖ Fluoxetine dose may be gradually increased up to 60 mg as necessary and tolerable to achieve optimal response.
- ❖ If patient is being treated for depression and there is an inadequate symptom response by week 12 at the maximum tolerated dose, consider switching to amitriptyline.
- ❖ When switching from fluoxetine to amitriptyline, note that fluoxetine may increase serum amitriptyline levels; therefore, initially use the dosing schedule suggested for elderly or medically ill patients, rather than for healthy adults.

- ❖ Continue for 6 months if this is the first episode of depression, and 12 months or more if previous episodes of depression have occurred.

In elderly or medically ill patients or patients who cannot initially tolerate a 20 mg daily dose (including those with stage 3/4 HIV/AIDS).

- ❖ Initiate treatment with 20 mg fluoxetine every other day for three weeks (fluoxetine has a very long half-life); if 10 mg preparation is available, give 10 mg daily.
- ❖ If patient has severe insomnia (caused by psychiatric illness and/or fluoxetine), consider adding diazepam 2-5 mg at bedtime. Avoid diazepam in cognitively impaired patients. Gradually taper and discontinue diazepam as psychiatric symptoms improve.
- ❖ After three weeks dose can be raised to 20 mg daily, according to patient tolerability and symptom response. Dose can be raised more gradually if necessary.
- ❖ Fluoxetine dose may be gradually increased up to 60 mg as necessary and tolerable to achieve optimal response.
- ❖ Follow instructions above for switching to amitriptyline.
- ❖ Continue medication as noted above.

▶ Give haloperidol

Indications: Psychosis, acute severe agitation, poses a danger to self or others based on agitation.

Common side effects: Stiffness, tremor, muscle spasm, and motor restlessness.

Contraindications and cautions: Do not use for alcohol withdrawal. If acute severe muscle spasm, especially of the mouth, neck, or eyes:

- ❖ Maintain airway.
- ❖ Stop haloperidol.
- ❖ Give diazepam 5 mg rectally.
- ❖ Refer.
- ❖ If available, give biperiden 5 mg IM.

In healthy adults:

- ❖ Initiate treatment with 2 to 5 mg. one to three times daily, depending on symptom severity.
- ❖ Titrate up to 20 mg. depending on tolerability and symptom response.
- ❖ Use lowest effective dose.

continued on next page

In elderly or medically ill patients (including those with stage 3/4 HIV/AIDS—these patients are very sensitive to side effects of haloperidol).

- ❖ Initiate treatment with 2 mg. once daily.
- ❖ Depending on level of tolerability and symptom response, increase dose up to 5 mg.
- ❖ Higher doses may be needed, but there is a significant risk of toxicity.
- ❖ Use lowest effective dose.

▶ Treat with nystatin

- ❖ **Treat oral thrush with nystatin:**
  - Suck on nystatin uncoated lozenges twice daily or apply nystatin suspension five times daily (after each meal and between meals) for seven days (or until 48 hours after lesions resolve).
- ❖ **Treat candida vaginitis with nystatin pessaries:**
  - Dosage: 100 000 IU daily by vaginal pessaries.
  - Dispense 14 nystatin suppositories.

If relapse—treat first week of every month or when needed (consider HIV-related illness and diabetes).

▶ Treat with antiseptic

- ❖ **Wash hands before and after each treatment.**

  To treat impetigo or herpes zoster with local bacterial infection:
  - Gently wash with soap and water.
  - Paint with topical antiseptic. Choices include:
    - chlorhexidine
    - polyvidone iodine
    - full-strength gentian violet (0.5%)
    - brilliant green
  - Keep skin clean by washing frequently and drying after washing.

▶ Give aciclovir

- **Primary infection:**
  200 mg five times daily for seven days or
  400 mg three times daily for seven days.
- **Recurrent infection:**
  As above except for five days only.

▶ Give fluconazole

- For suspected oesophageal candidiasis:
  400 mg in clinic, then 200 mg per day for 14 days. If no response in 3-5 days, increase to 400 mg per day.
  Avoid in pregnancy.

▶ Give ketoconazole

- For resistant oral thrush or vaginal candidiasis, give ketoconazole 200 mg daily.

▶ Apply podophyllin (do not use in pregnancy or children)

- **By health worker**—10-20% in compound tincture of benzoin.
  Apply weekly.
  Apply only to warts—avoid and protect normal tissue. Let dry.
  Caution: do not use internally in mouth, vagina or anus.
  Wash thoroughly 1-4 hours after application.
- **By patient**—only if Podofilox or Imiquimod are available.

▶ Treat scabies

Treat with one of the following:	Treatment period	Warnings For all treatments—will initially itch more (as mites die and lead to inflammatory response) then itch goes away
1% Lindane (gamma benzene hexachloride) cream or lotion	Once—wash off after 24 hours (after 12 hours in children)	Potentially toxic if overused; avoid in pregnancy and small children
25% benzyl benzoate emulsion—dilute 1:1 for children; 1:3 for infants	At night, wash off in morning–repeat if necessary	Tendency to irritate the skin
5% permethrin cream		Expensive, very low systemic absorption and toxicity

- ❖ Patient and all close contacts must be treated simultaneously—whole household and sexual partners, even if asymptomatic.
- ❖ Clothing or bed linen that have possibly been contaminated by the patient in the two days prior to the start of treatment should be washed and dried well (or dry-cleaned).
- ❖ Do not bathe before applying the treatment (increases systemic absorption and does not help).
- ❖ Apply the cream to the whole skin surface giving particular attention to the flexures, genitalia, natal cleft, between the fingers and under the fingernails. Include the face, neck and scalp but avoid near the eyes and mouth.
- ❖ The cream may irritate the skin a little, especially if there are excoriations.
- ❖ Keep on for the treatment period.
- ❖ If any cream is washed off during the treatment period (e.g., hands) reapply immediately.
- ❖ Wash the cream off at the end of the treatment period.
- ❖ Itching should start to diminish within a few days, but may persist for a number of weeks. This does not mean that the treatment has failed. Another cream may help with the itching (crotamiton or topical steroid).

▶ Advise on symptom control for cough/cold/bronchitis

❖ **Advise to use a safe, soothing remedy for cough**

- Safe remedies to recommend:

_____

_____

_____

_____

_____

- Harmful remedies to discourage (health worker should add local harmful remedies):

_____

_____

_____

_____

_____

❖ **If running nose interferes with work:** suggest decongestant

❖ **For fever, give paracetamol** (p. 86)

▶ Give iron/folate

❖ **For anaemia:** 1 tablet twice daily

iron/folate tablets: iron 60 mg, folic acid 400 microgram

Dehydration

▶ Plan A for adolescents/adults: treat diarrhoea at home.

❖ **Counsel the patient on the *3 Rules of Home Treatment:* Drink extra fluid, continue eating, when to return to the clinic.**

1. **Drink extra fluid** (as much as the patient will take)—any fluid (except fluids with high sugar or alcohol) or ORS.

- Drink at least 200-300 ml in addition to usual fluid intake after each loose stool.
- If vomiting, continue to take small sips. Antiemetics are usually not necessary.
- Continue drinking extra fluid until the diarrhoea stops.
  - It is especially important to provide ORS for use at home when:
    -- the patient has been treated with Plan B or Plan C during this visit;
    -- the patient cannot return to a clinic if the diarrhoea gets worse; or
    -- the patient has persistent diarrhoea or large volume stools.

IF ORS is provided: TEACH THE PATIENT HOW TO MIX AND DRINK ORS. GIVE 2 PACKETS OF ORS TO USE AT HOME.

2. **Continue eating.**
3. **Know when to return to the clinic.**

▶ Plan B for adolescents/adults: treat some dehydration with ORS

❖ **Give in clinic recommended amount of ORS over 4 hour period.**

- **Determine amount of ORS to give during first 4 hours.**

* *Use the patient's age only when you do not know the weight. The approximate amount of ORS required (in ml) can also be calculated by multiplying the patient's weight (in kg) times 75.*

- If the patient wants more ORS than shown, give more.

AGE *	5-14 years	≤15 years
WEIGHT	20 < 30 kg	30 kg or more
In ml	1000-2200	2200-4000

- **If the patient is weak, help him/her take the ORS:**
  - Give frequent small sips from a cup.
  - If the patient vomits, wait 10 minutes. Then continue, but more slowly.
  - If patient wants more ORS than shown, give more.
- **After four hours:**
  - Reassess the patient and classify for dehydration.
  - Select the appropriate plan to continue treatment.
  - Begin feeding the patient in clinic.
- **If the patient must leave before completing treatment:**
  - Show how to prepare ORS solution at home.
  - Show how much ORS to give to finish four-hour treatment at home.
  - Give enough ORS packets to complete rehydration. Also give two packets as recommended in Plan A.
  - Explain the ***3 Rules of Home Treatment:***

    1. Drink extra fluid

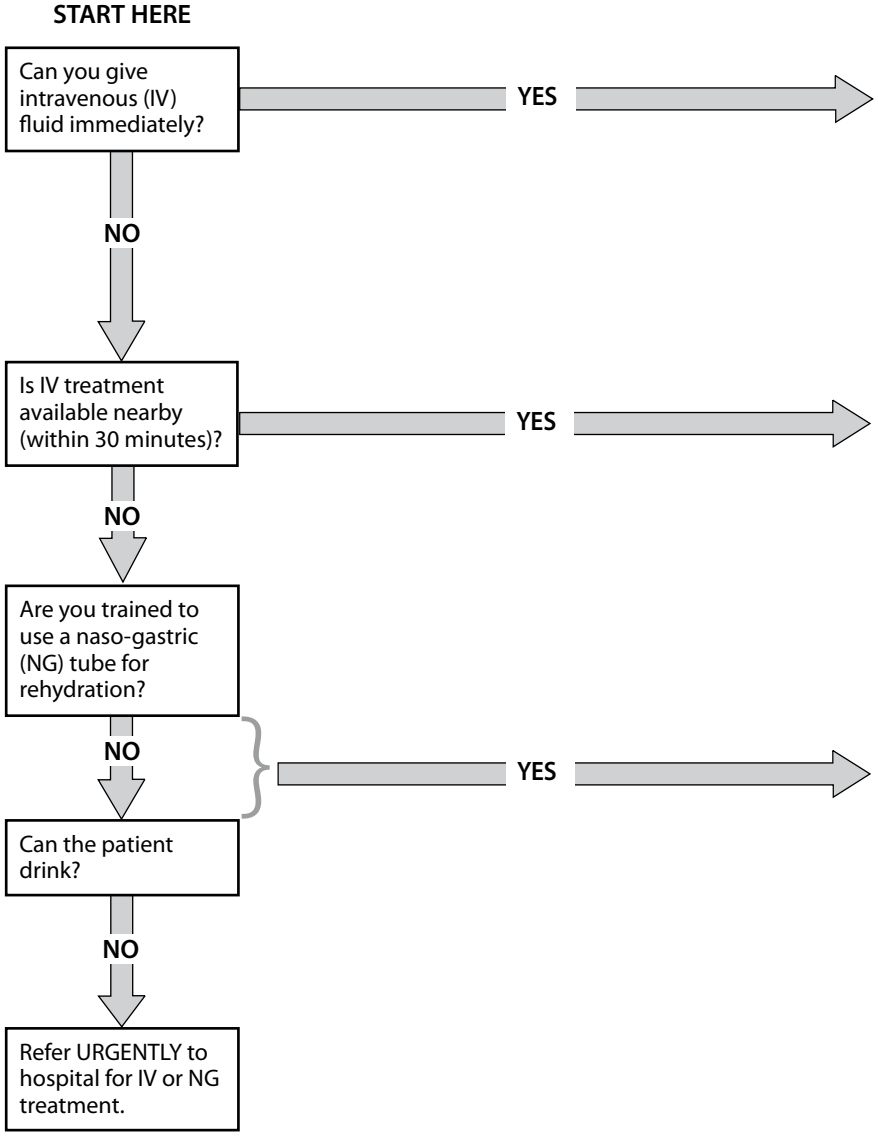
    2. Continue eating

    3. When to return to the clinic

See Plan A for recommended fluids

▶ Plan C: Treat severe dehydration quickly—at any age

❖ **FOLLOW THE ARROWS. IF ANSWER IS "YES", GO ACROSS. IF "NO", GO DOWN.**



- Start IV fluid immediately. If the patient can drink, give ORS by mouth while the drip is set up. Give 100 ml/kg Ringer's Lactate Solution (or, if not available, normal saline), divided as follows:

Age	First give 30 ml/kg in:	Then give 70 ml/kg:
Infants (under 12 months)	1 hour *	5 hours
Older (12 months or older, including adults)	30 minutes *	2 ½ hours

** Repeat once if radial pulse is very weak or not detectable.*

- Reassess the patient every 1-2 hours. If hydration status is not improving, give the IV drip more rapidly.
- Also give ORS (about 5 ml/kg/hour) as soon as the patient can drink: usually after 3-4 hours (infants) or 1-2 hours for children, adolescents and adults.
- Reassess an infant after 6 hours and older patient after 3 hours. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

- Refer URGENTLY to hospital for IV treatment.
- If the patient can drink, provide the mother or family/friend with ORS solution and show how to give frequent sips during the trip.

- Start rehydration by tube (or mouth) with ORS solution: give 20 ml/kg/hour for six hours (total of 120 ml/kg).
- Reassess the patient every 1-2 hours:
  - If there is repeated vomiting or increasing abdominal distension, give the fluid more slowly.
  - If hydration status is not improving after 3 hours, send the patient for IV therapy.
- After six hours, reassess the patient. Classify dehydration. Then choose the appropriate plan (A, B, or C) to continue treatment.

NOTE: If possible, observe the child at least 6 hours after rehydration to be sure the mother can maintain hydration giving the child ORS solution by mouth.

▶ Refer urgently to hospital *

- ❖ Discuss decision with patient and relatives.
- ❖ Quickly organize transport.
- ❖ Send with patient:
  - Health worker, if airway problem or shock.
  - Relatives who can donate blood.
  - Referral note.
  - Essential emergency supplies (below).
- ❖ Warn the referral centre by radio or phone, if possible.
- ❖ During transport:
  - Watch IV infusion.
  - Keep record of all IV fluids, medications given and time of administration.
  - If transport takes more than four hours, insert Foley catheter to empty bladder; monitor urine output.

* If referral is difficult and is refused:

Adapt locally

* If chronic illness, determine if palliative care is preferred.

Does patient have known terminal disease in a late stage (AIDS without ART, COPD, lung cancer, etc)?

Discuss needs with family and patient—can these be better met at home, with support? Comfort of the patient is prime responsibility.

Essential Emergency Supplies To Have During Transport

Emergency Drugs	Quantity for Transport
• Diazepam (parenteral)	30 mg
• Artemether or	160 mg (2 ml)
• Quinine	300 mg
• Ampicillin	2 grams
• Gentamicin	240 mg
• IV glucose—50% solution	50 ml
• Ringer's lactate (take extra if distant referral)	4 litres

Emergency Supplies	Quantity for Transport
IV catheters and tubing	2 sets
Clean dressings	
Gloves, one of which is sterile	at least 2 pairs
Clean towels	3
Sterile syringes and needles	
Urinary catheter	

▶ Manage a fresh soft tissue injury

Fresh tissue injuries can either be from blunt or open trauma.

If blunt trauma:

If no neurovascular deficit - symptomatic management.

If neurological or vascular deficit present - refer to hospital.

If open trauma:

If NO neurovascular or tendon deficit:	**If neurovascular or tendon deficit** present, and/or tendons visibly cut:
❖ Clean ❖ Primary closure if less than 6 hours old ❖ Dress ❖ Give antibiotics ❖ Tetanus toxoid (TT) if indicated	❖ Clean ❖ Loose closure of skin only ❖ Dress ❖ Splint ❖ Antibiotics ❖ Tetanus toxoid (TT) if indicated ❖ Refer to hospital

Wound care–All wounds except face

- ❖ All trauma wounds are colonized with bacteria—thorough cleaning of the wound is a critical step; use a large volume of saline or tap water and use enough pressure.
- ❖ Examine for function, sensation and vascular status.
- ❖ Repeat exam after local anesthesia to exclude foreign body.
- ❖ Suture or, if low tension area, tape close or use tissue adhesive.
- ❖ Good wound care:
  - Not all wounds need to be closed; after cleaning, small wounds and abrasions can be treated with topical antibiotic and clean dressing.
  - Consider suturing if wound is: 1) large; 2) continues to bleed; 3) over a joint; 4) where cosmetic result is important (face).
  - Keep antibiotic ointment on sutures for 24 hours only.
  - Keep dry for about 5 days.
  - Avoid trauma or sun exposure.
  - Return if redness, purulent drainage, increased pain, or fever.

Facial wounds

- ❖ Do not use pressure irrigation (use gravity pressure only).
- ❖ Do not shave eyelashes.
- ❖ Preserve tissue, especially skin, but remove all foreign material and all devitalized tissue.
- ❖ Make sure there is no penetrating eye injury—If suspected eye injury, REFER.

Mammal bite

- ❖ Bites often become infected - human or cat bites more often than dog or rat bites.
- ❖ Cleanse bite injuries thoroughly, immediately, with an antiseptic solution.
- ❖ Consider antibiotics (broad-spectrum for 5 days) if high-risk of infection:
  - deep puncture wounds involving underlying structures (e.g. joint, bone, tendons).
  - delayed presentation with inadequately cleansed wounds.
- ❖ Consider surgical debridement (refer if in doubt).
- ❖ Immunize if indicated:
  - give rabies medication if endemic–and bite by wild or unimmunized animal.
  - give tetanus medication, if due (if no prior tetnus, immunize now and at 1 month and 6–12 months; if dirty wound or more than 6 hours old: also give tetanus immune globulin).

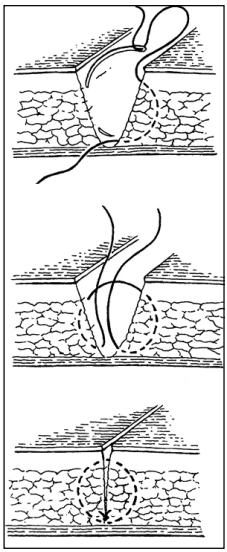
Follow up: consider deep tissue or bone involvement in those with persistent discharge, pain or fevers despite antibiotics.

SUTURE AND SUTURING TECHNIQUES

Besides sutures, discontinuity in skin can also be repaired with tape, glue, staples.

Choice of suture material (synthetic or biological, absorbable or non-absorbable and constructed with a single or multiple filaments) depends on:

- ❖ Availability
- ❖ Individual preference in handling
- ❖ Security of knots
- ❖ Behaviour of the material in the presence of infection
- ❖ Cost



How to suture:

- ❖ Use the minimal size and amount of suture material required to close the wound.
- ❖ The size of the bite, and the interval between bites, should be consistent and will depend on the thickness of the tissue being approximated.
- ❖ Close deep wounds in layers with either absorbable or monofilament nonabsorbable sutures.
- ❖ Leave skin sutures in place for an average of 7 days.
  - In locations where healing is slow and the cosmetic appearance is less important (the back and legs), leave sutures for 10–14 days.
  - In locations where cosmetic appearance is important (the face), sutures can be removed after 3 days but the wound should be reinforced with skin tapes.

Suturing techniques include but are not limited to these shown above:

Interrupted sutures:

- ❖ Most commonly used to repair lacerations.
- ❖ Use only when there is minimal skin tension.
- ❖ Ensure that bites are of equal volume.
- ❖ If the wound is unequal, bring the thicker side to meet the thinner to avoid putting extra tension on the thinner side.
- ❖ Use non-absorbable suture and remove it at an appropriate time.

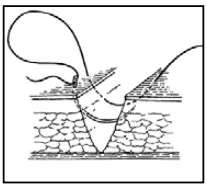
Continuous/running sutures

- ❖ Less time-consuming than interrupted sutures
- ❖ Less precision in approximating edges of the wound
- ❖ Poorer cosmetic result than other options
- ❖ Inclusion cysts and epithelialization of the suture track are potential complications

Mattress sutures

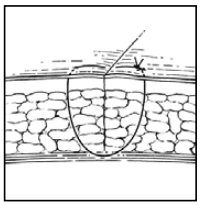
- ❖ Provide a relief of wound tension and precise apposition of the wound edges
- ❖ More complex and therefore more time-consuming to put in

Vertical mattress technique



Vertical mattress sutures are best for allowing eversion of wound edges and perfect apposition and to relieve tension from the skin edges.

1 Start the first bite wide of the incision and pass to the same position on the other side of the wound.



2 The second step is a similar bite which starts on the side of the incision where the needle has just exited the skin. Pass the needle through the skin between the exit point and the wound edge, in line with the original entry point. From this point, take a small bite; the final exit point is in a similar position on the other side of the wound.

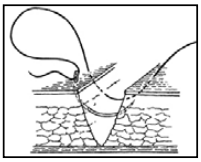
3 Tie the knot so that it does not lie over the incision line. This suture approximates the subcutaneous tissue and the skin edge.

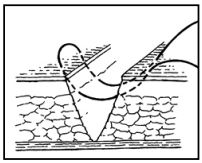
Horizontal mattress technique

Horizontal mattress sutures reinforce the subcutaneous tissue and provide more strength and support along the length of the wound; this keeps tension off the scar.

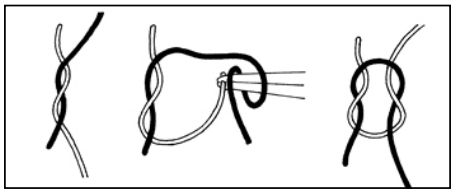
1 The two sutures are aligned beside one another. The first stitch is aligned across the wound; the second begins on the side that the first ends.

2 Tie the knot on the side of the original entry point.



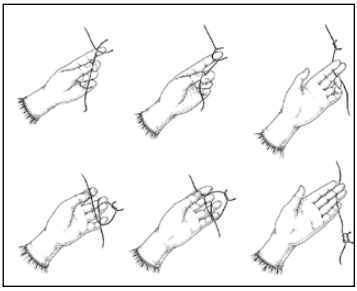


There are three basic techniques of knot tying.



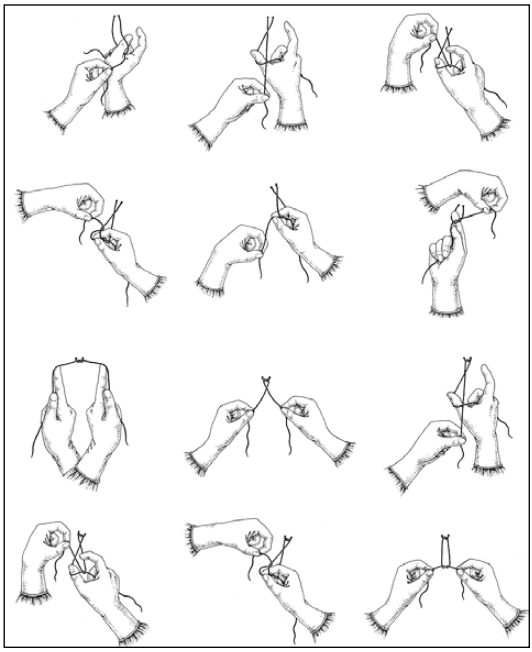
1. Instrument tie

- This is the most straightforward and the most commonly used technique.
- You must cross your hands to produce a square knot; to prevent slipping, use a surgeon's knot (place the first throw of the knot twice) on the first throw only.
- Do not use instrument ties if the patient's life depends on the security of the knot.



2. One handed knot

- Use the one handed technique to place deep seated knots and when one limb of the suture is immobilized by a needle or instrument.
- Hand tying has the advantage of tactile sensations lost when using instruments; if you place the first throw of the knot twice, it will slide into place, but will have enough friction to hold while the next throw is placed.
- This is an alternative to the surgeon's knot, but must be followed with a square knot.
- To attain a square knot, the limbs of the suture must be crossed even when the knot is placed deeply.



3. Two handed knot

- The two handed knot is the most secure. Both limbs of the suture are moved during its placement. A surgeon's knot is easily formed using a two handed technique.

Advise and Counsel

Preamble

These guidelines are in accordance with the *Guidance on provider-initiated HIV testing and counselling in health facilities*. WHO/UNAIDS, 2007.

These guidelines are consistent with June 2004 WHO/UNAIDS Policy Statement on HIV Testing which calls for the standard pre-test counseling to be adapted in provider-initiated testing and counselling to provide pre-test education and ensure informed consent. The minimum amount of information that patients require in order to be able to provide informed consent is outlined below. This is for country adaptation.

▶ Provide key information on HIV (Human Immune Deficiency Virus)

Counsel on how HIV is transmitted and not transmitted

HIV is a virus that destroys parts of the body's immune system. A person infected with HIV may not feel sick at first, but slowly the body's immune system is destroyed. S/he becomes ill and is unable to fight infection. Once a person is infected with HIV, s/he can transmit the virus to others.

HIV can be transmitted through:

- ❖ Exchange of HIV-infected body fluids such as semen, vaginal fluid or blood during unprotected sexual intercourse.
- ❖ IV-infected blood transfusions.
- ❖ Injecting drug use.
- ❖ Sharing of instruments for tattoo or skin piercing.
- ❖ From an infected mother to her child during:
  - pregnancy;
  - labour and delivery; and
  - postpartum through breastfeeding

HIV cannot be transmitted through hugging or kissing, or mosquito bites.

A special blood test is done to find out if the person is infected with HIV.

▶ HIV testing and counselling

A provider-initiated HIV testing and counselling session is based on the 3Cs:

1. Counselling
2. Consent
3. Confidentiality

▶ When to recommend HIV testing

Low-Level Epidemics

- ❖ All adults/adolescents who present with signs/symptoms that could indicate HIV infections
- ❖ HIV-exposed children or children born to HIV-positive women
- ❖ Men seeking circumcision as an HIV prevention intervention
- ❖ Consider in:
  - STI services
  - services for most-at-risk populations
  - antenatal, childbirth, and postpartum services
  - TB settings

Concentrated Epidemics

- ❖ All adults/adolescents who present with signs/symptoms that could indicate HIV infections
- ❖ HIV-exposed children or children born to HIV-positive women
- ❖ Men seeking circumcision as an HIV prevention intervention
- ❖ Consider in:
  - STI services
  - services for most-at-risk populations
  - antenatal, childbirth, and postpartum services
  - TB settings

Generalized Epidemics

In generalised epidemics where an enabling environment is in place and adequate resources available, HIV testing and counselling should be recommended for all adolescents and adults seen in all health facilities. In the case of phased implementation of PITC, the priorities for the implementation depending on local conditions are:

- All adults/adolescents who present with signs/symptoms that could indicate HIV infection
- Medical inpatient and outpatient facilities, including TB clinics
- Antenatal, childbirth, and postpartum health facilities
- STI services
- Health services for most-at-risk populations
- Services for children under 10 years of age
- Services for adolescents
- Men seeking circumcision as an HIV prevention intervention
- Medical inpatient and outpatient facilities
- Surgical services
- Reproductive health services, including family planning

▶ Recommending Provider- Initiated Testing and Counselling to symptomatic patients

- ❖ Provider initiated testing and counselling is part of the clinical process of determining the diagnosis of a sick patient. If the patient presents with symptoms consistent with HIV infection, explain that you will be testing for the HIV as part of your clinical workup.
- ❖ Provider initiated testing and counselling should be offered in this way for all the conditions in Acute Care where the treatment column indicates "Consider HIV-related illness." These are summarized on p. 57.
- ❖ For example: "You are sick; I want to find out why. In order for us to diagnose and then treat your illness, you need tests for typhoid, TB and HIV infection. Unless you object, I will conduct these tests."

▶ Recommending Provider-Initiated Testing and Counselling to asymptomatic patients

- ❖ Provider initiated testing and counelling should be recommended to all sexually active patients who present for medical care regardless of their initial reason for seeking medical attention.
- ❖ For example: *"One of our hospital policies is to provide everyone with the opportunity to have an HIV test so that we can provide you with care and treatment while you are here and refer you for follow-up after discharge. Unless you object, I will conduct this test and provide you with counselling and the results."*

In all uses of provider initiated testing and counselling the patient should be provided with the following pre-test information.

This information can be delivered either individually by a health care worker, including a social worker, or through group pre-test information sessions.

Pre-test information and education to an adult**

The health care worker should provide the patient the following information at a minimum:

- Reasons why HIV testing is being recommended.
  Say: "In order to understand your health problem, I need to know if it is related to you having HIV." or *"We have many people in this area who have HIV. We have started to test everyone so that we can provide the best health care possible."*
- Clinical and preventive benefits and risks of HIV testing.
  Say: *"There are many things we can do if we find out you have HIV, including medicines which keep many patients healthy for a long time."* or *"If you know you have HIV, you can protect yourself from other diseases, and keep your wife/husband safe."*
- Services that are available whether the test is negative or positive, including availability of antiretroviral therapy.
  Say: *"We will offer drugs which fight HIV if you have the virus."* or *"If you are negative, we will treat your health problems and we have counselors who can help you learn to stay negative and protect yourself."*
- The right to decline HIV testing, and that the test will be performed unless they object.
  Say: *"I want to perform an HIV test today. If that isn't alright, you need to let me know."* or *"I think this test will help me take care of your health and, unless you object, I'm going to obtain a sample. Can you agree with me?"*
- Declining an HIV test will not limit the patient's access to services.
  Say: *"You will get medical care from us regardless of your decision about taking this HIV test."* or *"If you refuse this test, we will still take care or you."*
- The importance of disclosure to former partners if the test is positive.
  Say: *"It will be very important to let your former partners know that they may have been exposed to HIV if you are positive. We will help you with that if you like."* or *"If you test positive, notifying your former partners will be extremely helpful so they can take car of their health."*

** For adolescents, see **Adolescent Job Aid***

For women of reproductive age or who are pregnant, include:

- ❖ The risk of transmitting HIV to the infant.
  Say: *"A baby whose mother has HIV may be HIV + themselves."* or *"A woman with HIV may give HIV to her baby."*
- ❖ PMTCT interventions that are available.
  Say: *"The risk to the baby is greatly reduced if a woman finds out her HIV status early in her pregnancy."* or *"There are very good medicines which can protect a baby, but we must know a mother's HIV status to start these."*
- ❖ Benefits to the infant of early diagnosis of HIV.
  Say: *"If we find out a baby has HIV early, we can take measures to keep the baby healthy longer."* or *"There are important things which can help a baby whose mother has HIV, but we must know early in order to help."*

Explain procedures to safeguard confidentiality

Say: *"The results of your HIV test will only be known to you and the medical team that will be treating you. This means the test results are confidential and it is against our facility's policy to share the results with anyone else, without your permission. It is your decision to tell other people the results of this test."*

Confirm willingness of patient to proceed with test and seek informed consent

Informed consent means that the individual has been provided with essential information about HIV/AIDS and HIV testing, has fully understood it and based on this has agreed to undergo an HIV test.

- ❖ Unless you object, I will get a sample for HIV testing. I think it will be important for you to know this information.

OR

- ❖ I want to perform an HIV test today. If that isn't all right, you need to let me know.

OR

- ❖ I think this test will help me take care of your health and, unless you object, I'm going to obtain a sample. Can you agree with me?

▶ If patient declines HIV testing

If a patient declines HIV testing you may wish to identify barriers and strategize ways to overcome these barriers. Note also that some patient groups may be more susceptible to coercion to be tested or to adverse outcomes of disclosure of HIV status (e.g. violence, abandonment incarceration). In such cases providing additional information beyond the minimum requirements may be appropriate to ensure voluntary informed consent.

If patient requires additional information, discuss advantages and importance of knowing HIV status.

Things to say:

- ❖ The testing will allow health care providers to make a proper diagnosis and ensure effective follow-up treatment.
- ❖ If you test negative, we can eliminate HIV infection from our diagnosis and provide counselling to help you remain negative.
- ❖ If you test positive, you will be supported to protect yourself from reinfection and your partner from infection.
- ❖ You will be provided with treatment and care for managing your disease, including:
  - cotrimoxazole prophylaxis;
  - regular follow-up and support;
  - treatment for infections; and
  - ARV therapy (explain availability and when it is used. See Chronic HIV Care module).
- ❖ You will be supported to access interventions to prevent transmission from mothers to their infants, and make informed decisions about future pregnancies.
- ❖ We will also discuss the psychological and emotional implications of HIV infection with you and support you to disclose your infection to those you decide need to know.
- ❖ An early diagnosis will help you cope better with the disease and plan better for the future.

▶ Post-test counselling

If the test result is negative include:

- ❖ An explanation of the test result, including information about the window period for appearance of antibodies and possible need for retesting.
  Say: *"This test is negative—HIV antibodies weren't found. Remember, this test will not reflect any contacts you have had in the last three months. Can we talk about that?"* or *"If you have been exposed by a recent partner, we will need to schedule another test to be sure you didn't get HIV from that partner."*
- ❖ Basic advice on methods to prevent HIV transmission.
  Say: *"Having one partner who you know is faithful and who is also negative is an excellent way to avoid HIV."* or *"If you aren't with only one partner or if you aren't sure about your partner's practices, using a latex condom every time you have sex is a great way to avoid HIV."*
- ❖ Provision of male and female condoms and guidance for their usage.
  Say: *"Here are some latex condoms. Tell me what you have heard about how to use them."* or *"This is a female condom. You can decide when to use one-it will be your decision. Let me show you how it works."*

If the test result is positive include:

- ❖ Inform patient of the result and give time to consider.
  Say: *"The test is positive-this means we did find HIV in your body."* or *"The results suggest you have been infected with HIV-you are HIV positive."*
- ❖ Ensure patient understands.
  Say: *"What does what I have just said mean to you?"* or *"If you were going to explain to someone what I just told you, what would you say?"*
- ❖ Allow patient to ask questions.
  Say: *"What would you like to ask me now?"* or *"Is there information I can offer that will be helpful to you?"*
- ❖ Help patient cope with emotions.
  Say: *"This is really hard news to hear. Tell me about how you are feeling."* or *"How are you feeling now that you've heard this result?"*
- ❖ Discuss immediate concerns and immediate sources of support.
  Say: *"What do you plan do to in the next 24 hours?"* or *"Let's talk about who could support you in this difficult time. Who do you think you can tell about this news?"*

- Discuss follow up services available.
  Say: *"We have staff here providing medical treatment and support groups. I think both of these could help you."* or *"There is a doctor who provides specialized HIV care, and I want you to consult with him next time he will be in the village."*
- Provide information on preventing transmission.
  Say: *"Remember how HIV is transmitted. It will be important now for you to not get your blood, semen, vaginal secretions in someone else's body."* or *"Abstaining from sex or using condoms every time you have sex are ways to protect yourself and other people."*
- Provide information on relevant preventive health measures.
  Say: *"There are many things you can do to take care of yourself which may have a big effect on your future health. Can we talk about how healthy people stay healthy?"* or *"Eating right, exercising, taking medications are three important ways that people with HIV keep themselves healthy."*
- Encourage referral for testing of children.
  Say: *" This virus may have been passed on to your children. I would like us to make a plan to test them."*
- Encourage referral for testing of partners.
  Say: *" It is very important that your partner be tested. They may be negative and we can help him stay that way. Otherwise, I'd like to start him on medicines and take advantage of some of the things you have learned."*
- Assess the risk of violence/suicide.
  Say: *"What are the reactions that you fear when you let people know your status?"* or *"What will your husband do when he hears you have tested positive for HIV?"*
- Arrange appointments for follow-up services (e.g. counselling, family planning, STI treatment).
  Say: *"I'd like to schedule an appointment to come back and see the nurse this week. She will do some tests, and decide what the best things we can do now to keep you well are."* or *"Since you may become pregnant and that could mean a risk that your baby would have HIV, I'd like to schedule an appointment for you to talk to our family planning nurse about birth control. For now, it might be a good idea for you to find a method and use one when you have sex."*

▶ Support disclosure

- Discuss advantages of 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 (start with least risky)
- Assess social network.
- Assess social support and needs (refer to support groups). See ***Chronic HIV Care*** Annex A.4.
- Provide skills for disclosure (role play and rehearsal can help).
- Help the patient make a plan for disclosure.
- Encourage attendance of the partner to consider testing; explore barriers to this.
- Reassure that you will keep the result confidential.
- If domestic violence is a risk, create a plan for a safe environment.

❖ **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 another appointment and more help as needed (such as peer counsellors).

❖ **Especially for women, discuss benefits and possible disadvantages of disclosure of a positive result, and involving and testing partners**

Men are generally the decision makers in the family and communities. Involving them will:

- Have greater impact on increasing acceptance of condom use and practicing safer sex to avoid infection.
- Help avoid unwanted pregnancy.
- Help to decrease the risk of suspicion and violence.
- Help to increase support to their partners.
- Motivate them to get tested.

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

Health worker should try to counsel couples together, when possible.

▶ Counsel on safer sex and condom use

❖ **Safer sex is any sexual practice that reduces the risk of transmitting HIV and other sexually transmitted infections (STIs) from one person to another.**

- Protection can be obtained by:
  - Correct and consistent use of condoms; condoms must be used before any penetrative sex, not just before ejaculation.
  - Abstaining from sexual activity.
  - Choosing sexual activities that do not allow semen, fluid from the vagina or blood to enter the mouth, anus or vagina of the partner, and not touching the skin of the partner where there is an open cut or sore.

❖ **If HIV positive:**

- Explain to the patient that s/he is infected and can transmit infection to the partner. A condom should be used, as above.
- If partner's status is unknown, counsel on benefits of involving and testing the partner (p. 117).
- For women: explain the extra importance of avoiding infection during pregnancy and breastfeeding. The risk of infecting the baby is higher if the mother is newly infected.

❖ **If HIV negative OR result is unknown:**

- Discuss the risk of HIV infection and how to avoid it.
- If partner's status is unknown, counsel on benefits of testing the partner.
- For women: explain the extra importance of remaining negative during pregnancy and breastfeeding. The risk of infecting the baby is higher if the mother is newly infected during this time.

Make sure the patient knows how to use condoms and where to get them. **Provide easy access to condoms in clinic in a discrete manner.**

Ask: Will you be able to use condoms? Check for barriers.

▶ Educate and counsel on STIs

- ❖ **Speak in private, with enough time, and assure confidentiality.**
- ❖ **Explain:**
  - The disease.
  - How it is acquired.
  - How it can be prevented.
  - The treatment.
  - That most STIs can be cured, except HIV, herpes and genital warts.
  - The need also to treat the partners (except for vaginitis):
    - Recent sex partner(s) are likely to be infected but may be unaware.
    - If partners are untreated, they may develop complications.
    - Sex with untreated partners can lead to re-infection.
    - Treatment of the partner, even if no symptoms, is important to the health of the partner and to you.

Special counselling for adolescents:
See Adolescent Job Aid.

- ❖ **Listen to the patient: is there stress or anxiety related to STIs?**
- ❖ **Promote safer sexual behaviour to prevent HIV and STIs.**
  - Counsel on limiting partners (or abstinence) and careful selection of partners.
  - Instruct in condom use (p. 65).
- ❖ **Educate on HIV.**
- ❖ **Recommend HIV testing and counselling (p. 113).**
- ❖ **Inform the partner(s) or spouse.**
  - Ask the patient, can you do this? Ask, is it possible for you to:
    - Talk with your partner about the infection?
    - Convince your partner to get treatment?
    - Bring/send your partner to the health centre?
  - Determine your role as the health worker.
  - Strategies to discuss and introduce condom use.
  - Risk of violence or stigmatizing reactions from partners and family.

Refer for counselling on:
- **Concerns about herpes infection (no cure).**
- **Possible infertility related to PID.**
- **Behavioural-risk assessment.**
- **Patient with multiple partners.**
- **Difficult circumstances or risk.**

▶ Basic counselling

All providers can apply counselling skills in a range of clinical situations. These include:

- ❖ Educating patients
- ❖ Providing emotional support
- ❖ Supporting patients with mental illness such as depression or anxiety disorders
- ❖ Addressing multiple aspects of HIV care (HIV testing, disclosure of HIV status, safer sex and condom use, adherence to care and treatment)
- ❖ Intervening in a crisis situation

Elements of basic counselling

- ❖ Establish a good relationship.
- ❖ Find out (what) the patient's current situation (is).
- ❖ Respond with empathy.
- ❖ Provide feedback that enables the patient to make sense of the situation.
- ❖ Offer information.
- ❖ Help the patient recognize his/her strengths.
- ❖ Help the patient identify and find ways to connect with family or friends who can provide support.
- ❖ Teach specific skills that help patients deal with their situation:
  - Relaxation techniques such as deep breathing or progressive muscular relaxation or positive imagery.
  - Problem solving.
- ❖ Provide encouragement.
- ❖ Convey hope.

Useful tools for counselling:

- ❖ Use more open-ended than closed questions.
  - Open-ended question: What problems have you had recently in taking your medicines?
  - Closed question: Did you take your medicine today?
- ❖ Listen carefully, paying attention to verbal and non-verbal communication.
- ❖ Clarify responses that you do not understand.
- ❖ Use role-playing to help the patient develop skills and confidence to carry out a plan.
- ❖ Allow time for questions from the patient.
- ❖ Ask about suicidal thoughts (in the case of crises and mental illness).

The counsellor's role:

- ❖ Provide confidentiality.
- ❖ Provide support.
- ❖ Help the patient prioritize problems and find own solutions.
- ❖ Be aware of the patient's treatment.
- ❖ Be aware of other referral resources.
- ❖ Be aware of the patient's social-support resources.
- ❖ Advocate for the patient.
- ❖ Refer to treatment, care and prevention services, as appropriate.

When working with patients:

- ❖ Ensure privacy.
- ❖ Minimize interruptions.
- ❖ Ensure patient's comfort.
- ❖ Agree on the length of time you have.
- ❖ Make arrangements for follow-up when necessary.

▶ Counsel the depressed patient and family

- ❖ **Review the symptoms of depression that the patient is experiencing (see p. 54-55).**
- ❖ **Give essential information.**
  - Explain that the symptoms are part of the illness called depression.
  - Depression is common and effective treatment is available.
  - Depression is not a sign of weakness or laziness.
  - The patient is trying hard to manage.
- ❖ Recognize the distress of the patient by saying that you understand how badly s/he feels and that you want to be of some assistance to him/her.
- ❖ Inquire of the patient how depressed s/he feels at the moment compared to how s/he has been feeling, in order to inform your treatment plan.
- ❖ Ask if s/he has thought about hurting themselves or if s/he is thinking much about death.

  If risk of suicide and harm to others, see suicide risk instructions; consult with someone trained in mental health.
- ❖ Plan short-term activities which give the patient enjoyment or build confidence.
- ❖ Identify current life problems or social stresses. Focus on small, specific steps the patient might take towards managing these problems.
  - If bereavement after a death, see ***Palliative Care*** module, p. 58.
  - If HIV+, give support. See ***Chronic HIV Care*** module, Annex A.
  - If new TB diagnosis and worried about HIV, give support.
  - Teach new problem-solving techniques.

❖ Encourage patient to resist pessimism and self-criticism:

- Not to act on pessimistic ideas (end marriage, leave job).
- Not to concentrate on negative or guilty thoughts.

❖ If counselling is not sufficiently helpful, consider these additional interventions:

- Give amitriptyline, especially if sleep and appetite are significantly disturbed (p. 88).
  - If already on anti-depressant, check on adherence and dose. The dose may need to be raised.
  - Remind patient that it takes 2-3 weeks for the medication to work.
  - After improvement, discuss action to be taken if signs of depression return.
- Refer to support group.
- Refer to skilled counsellor.
- If suicide risk or major depression not responding to treatment, consult or refer.

Prevention and Care for Health Workers and Lay Providers

Use standard 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.

Unprotected sex remains the most common route of HIV transmission for health workers.

Safer sex practices are very important for health workers to protect themselves from HIV.

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.
- If the source person is known to be HIV-positive, ask if there is a history of ART use with treatment failure. If the source has known ART treatment failure/drug resistance or if drug resistance prevalence is higher than 15%, consider adding a protease inhibitor to the two drugs.
- The HIV status of the source person is unknown, encourage testing using local HIV testing and counselling protocols (including informed consent and counselling). The source person can consent without receiving the results. If the source person's HIV test is negative, PEP of the exposed person should be stopped unless there is suspicion that the source person is in the "window period".

- The earlier PEP is started, the more effective.
- PEP should not be started more than 72 hours after exposure.
- PEP should not be delayed while waiting for test results
- Adherence to PEP treatment is very important for the full 28 days.
- PEP can be taken while breastfeeding (breastmilk substitutes are an option if AFASS).
- While taking PEP, it is especially important use condoms and not to donate blood.
- After the initial HIV test at exposure, testing should be repeated at 3 and 6 months.

Post-exposure prophylaxis for (PEP-HIV) 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.*

ASK

When was the health worker injured (if more than 72 hours ago, do not give PEP)?

How was the health worker injured:

- ❖ Where was the exposure?
  - Skin
  - Mucous membranes
- ❖ 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 is blood or bloody fluid?
  - Or was it some other body fluid other than blood: semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial, amniotic fluid, tissue (lower isk)?

LOOK

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):

If the skin was punctured or broken by an instrument:

- How deep was the injury?

If the instrument was a needle:

- 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?

If it was a splash, look to see if the skin is broken or damaged:

- Chapping
- Dermatitis
- Abrasion
- Open wound

Classify:

* If source patient has unknown HIV status, offer HIV testing and counselling to the source patient (see ***Acute Care***, p. 107).

SIGNS:	CLASSIFY AS:	TREATMENTS
Puncture or cut with: ❖ Large bore hollow needle, ❖ Needle used in source patient's artery or vein, ❖ Deep puncture wound or ❖ Visible blood on instrument	**HIGH RISK EXPOSURE**	❖ Recommend PEP regimen (for country adaptation): 28 days of AZT-3TC or d4T-3TC** ❖ Before starting PEP, strongly recommend HIV testing and counselling to the health worker (see p. 62).* Stop PEP if health worker is HIV-positive and refer for chronic HIV care.
❖ Puncture or cut with small bore or solid needle, ❖ Superficial scratch, or ❖ Splash onto broken skin or mucous membranes	**MEDIUM RISK EXPOSURE**	❖ Offer PEP regimen: 28 days of AZT-3TC or d4T-3TC ❖ If health worker desires PEP, strongly recommend HIV testing before starting.* Stop PEP if health worker is HIV-positive and refer for chronic HIV care.
❖ Splash onto intact skin	**VERY LOW RISK**	PEP not recommended

* An HIV test before starting or in the first few days of starting PEP is strongly recommended to prevent creating drug resistance in an HIV-positive individual.

** For national adaptation—consider adding third drug.

HIV testing and counselling and TB screening for all health workers

- ❖ Encourage HIV testing and counselling for all staff with full confidentiality (on- or off-site).
- ❖ Provide information on special HIV care resources for health workers.
- ❖ Screen health workers for symptoms of TB.
- ❖ All staff should follow the TB infection control plan.

INTEGRATED MANAGEMENT OF ADOLESCENT/ADULT ILLNESS
ACUTE CARE RECORDING FORM

Name:_____ Sex:_____ Age:_____ Weight:_____ BP:_____ (if not measured within year or if hypertension)

What are the patient's problems? _____

Acute illness / Follow-up acute / Follow-up chronic **Quick check–emergency signs?** Yes No If yes,_____

All patients

ASSESS (circle all signs present)	CLASSIFY
___Yes ___No DOES THE PATIENT HAVE COUGH OR DIFFICULT BREATHING?	
If yes, ASK: • For how long?____ • Are you having chest pain? If yes, new? Severe? Describe it:_ *Pleuritic* • Night sweats? • Do you smoke? • On treatment for: Asthma? Emphysema or chronic bronchitis (COPD)? Heart failure? TB? If no: Have you had previous episodes of cough or difficult breathing? *Recurrent episodes* If yes: - Do these episodes wake you up at night or in the early morning? *Yes No* - Do they occur with exercise? *Yes No* • Are you HIV+ or think you might be? **LOOK, LISTEN:** • Is the patient: Lethargic? Confused? Agitated? • Count the breaths in one minute: ____ *Fast breathing? Very fast breathing?* • Look/listen for wheezing. • Uncomfortable lying down? • Measure temperature _____ *< 35°C 37.5°C or above ≥40°C* • If not able to walk unaided or appears ill, also: - Count pulse:_____ - Measure BP:_____	

All patients

X CHECK ALL PATIENTS FOR UNDERNUTRITION AND ANAEMIA	
• Have you lost weight? • Taking medications? Which ones? _____ • If wasted or weight loss: - Diet: Problem:_____ - Alcohol use? • Pallor? If pallor: Black stools? - Blood in stools? - Blood in urine? • If menstruating: Heavy periods? • Look for visible severe wasting: Loose clothing? Did it fit before? • If wasted or weight loss: Weight:_____kg Wt loss_____% MUAC_____ - Sunken eyes? - Oedema to knee? - Pitting? • Look at palms and conjunctiva for pallor. *Severe pallor*? *Some pallor*? If pallor, - Count breaths in one minute:_____ - Breathless? - Bleeding gums? - Petechiae - Measure haemoglobin:_____ • Assess for infection.	

All patients

All patients

All patients

___Yes ___No DOES THE PATIENT HAVE ANOGENITAL ULCER OR SORE?

- Are these new? Recurrent?
- Anal discharge? Bleeding?
- Anal/rectal pain?
- Pain on defecation?

- Look for anogenital sores. If present, are there vesicles?
- Look for warts.
- Look/feel for enlarged lymph node in inguinal area.
  If present, is it painful?

All patients

___Yes ___No DOES MALE PATIENT HAVE DISCHARGE FROM PENIS? ANY OTHER GENITO-URINARY SX OR LOWER ABDOMINAL PAIN?

- What is your problem?_____
- Discharge from urethra?
  - If yes, for how long? Is this recurrent?
- Burning or pain when you urinate?
- Pain in your scrotum?
  - If yes, have you had any trauma there?
- Do you have sores?

Genital exam:
- Look for scrotal swelling
- Feel for tenderness.
- Look for ulcer
- Look for urethral discharge
- Feel for rotated or elevated testis.
- Feel for abdominal pain. If tenderness:
  - Rebound?
  - Guarding?
  - Mass?
  - Absent bowel sounds?
  - Temperature:_____
  - Pulse:_____

All patients

___Yes ___No DOES THE PATIENT HAVE MOUTH OR THROAT PROBLEM?

- Do you have pain? If yes, Tooth, mouth or throat?
  - When swallowing?
  - When hot or cold food?
- Problems swallowing?
- Problems chewing?
- Not able to eat?
- Taking medications?
  Which ones? _____

Look in mouth for:
- White patches
  - If yes, can they be removed? *Yes No*
- Ulcer
  - If yes, deep or extensive?
  - Tooth cavities
  - Loss of tooth substance
  - Bleeding from gums
  - Swelling of gums
  - Gum bubbles
  - Pus
  - Dark lumps
- Look at throat for:
  - White exudate
  - Abscess
  - Swelling over jaw
  - Enlarged lymph nodes
- If tooth pain, does tapping/moving tooth cause pain?

All patients

Prevention, prophylaxis—all patients
- Encourage insecticide-treated bednet
- Counsel on safer sex
- Offer HIV testing and counselling
- Offer family planning
- Counsel to stop smoking
- Counsel to reduce or quit alcohol
- If back pain history or risk, teach exercise & correct lifting
- Measure BP

Women of childbearing age:
- Update tetanus toxoid
- Give mebendazole if due
- If pregnant, give antenatal care
- If not pregnant, offer family planning

Adolescent girls:
- Update tetanus toxoid
- Encourage delay interventions if sexually active
- Offer HPV vaccine.

___IF FEVER (by history or feels hot or temperature 37.5ºC or above)		CLASSIFY
• How long have you had a fever? _____ • Any other problem? Medications?_____ • Have you taken an antimalarial in the previous week? If yes, what and for how long? _____ Decide malaria risk: *High Low No* - Where do you usually live? - Recent travel to a malaria area? - If woman of childbearing age: Pregnant? - Epidemic of malaria occurring? - HIV clinical stage 3 or 4?	• Is the patient: Lethargic? Confused? Agitated? • Count the breaths in one minute:_____ *Fast breathing*? - If fast breaths, is it deep? • Check if able to drink *Not able to drink* • Feel for stiff neck • Check if able to walk unaided *Not able to walk unaided* • Skin rash? • Headache? If yes, for how long?_____ *Prolonged* • Look for apparent cause of fever_____ • Do malaria dipstick or smear.	
___IF DIARRHOEA • For how long? _____days - If more than 14 days, have you been treated before for persistent diarrhoea? *Yes No* - If yes, with what?_____ When?_____ • Is there blood in the stool?	• Look at the patient's general condition: - Lethargic? - Unconscious? • Look for sunken eyes. • Is the patient: - Not able to drink or drinking poorly? - Drinking eagerly, thirsty? • Pinch the skin of the inside forearm. Does it go back: *Very slowly (longer than 2 seconds)? Slowly?*	
___IF FEMALE PATIENT HAS GENITO-URINARY SX OR LOWER ABDOMINAL PAIN		
• What is the problem?_____ Meds? _____ • Burning or pain on urination? • Increased frequency of urination? • Ulcer or sore in your genital area? • Abnormal vaginal discharge? If yes, does it itch? • Bleeding on sexual contact? • Partner have problem? If present, Ask: *Urethral discharge or sore?* • Missed a period? If yes, possibly pregnant? • When was last period? • Periods: heavy or irregular periods? If yes, new? - Days of bleeding:____ Number pads used:_____ • Very painful menstrual cramps? • Using contraception? Which?_____ • If no, interested? If interested, use FP guidelines.	• Feel for abdominal tenderness. If pain: - Rebound? - Guarding? - Mass? - Absent bowel sounds? - Temperature_____ - Pulse_____ • External exam: - Large amount vaginal discharge? - Anal/genital ulcer? - Enlarged inguinal lymph node? • If able to do bimanual exam, cervical motion tenderness? • If burning or pain on urination, percuss back: Flank pain? • If cervical cancer prevention programme in place, screen with recommended screening tool.	

____IF SKIN PROBLEM OR LUMP

- Do you have a sore or skin problem or lump?
  - If yes, where is it? - If yes, for how long?
- Is there itching? - Does it hurt?
  - Duration_____ - Discharge?
- Do other family members have same problem?
- Are you taking any medications?

- Where are the lesions?
- How many are there?
- Are they infected (red, tender, warm, pus or crusts)?
  - Are they tender? - Is there sensation to light touch?
- Feel for fluctuance.
- Look/feel for lumps.
- Feel for lymph nodes—tender?

____IF HEADACHE OR NEUROLOGICAL PROBLEM

- Weakness in any part of body?
- Recent accident or injury involving head?
- Convulsion?
- Alcohol use?_____ Drug use?_____
- Medications?_____
- Brain/mind working more slowly?
- Trouble keeping attention?
- Forget things that happened recently?
- Ask family: - Patient's behaviour changed?
  - Memory problem? - Patient confused?
  - If confused, when did it start?_____
  - Disoriented to place or time?
- If memory problem, test registration/recall
- If headache:
  - For how long? - Visual defects? - Vomiting?
  - One-sided? - Prior diagnosis of migraine?
  - If HIV patient, new or unusual headache?

- Assess for focal neurological problems:
  - Test strength - Look at face: flaccid on one side?
  - Problem walking? - Problem talking?
  - Flaccid arms or legs? If yes, loss of strength?
- Problem moving eyes?
- Feel for stiff neck.
- Measure BP:_____
- Is patient confused?
- If patient reports weakness, test strength.
- If headache, feel for sinus tenderness.
- If confused or disoriented:
  - Physical cause? - Alcohol or drug medication or toxicity?
  - Withdrawal?

- Name 3 unrelated objects, clearly and slowly. Ask patient to repeat them.
- Can he/she repeat them? (registration problem?)

____IF MENTAL PROBLEM, LOOKS DEPRESSED OR ANXIOUS, SAD, FATIGUED, ALCOHOL PROBLEM OR RECURRENT MULTIPLE PROBLEMS

- How are you feeling? (listen without interrupting)
- Do you feel sad, depressed?
- Loss of interest/pleasure?
- I
  - Disturbed sleep - Appetite loss (or increase)
  - Poor concentration - Moves slowly
  - Decreased libido - Loss of self-confidence or esteem
  - Guilty feelings - Thoughts of suicide or death
- Have you had bad news?
- Do you drink alcohol? If yes:
  - Drinks/week over last 3 months:____
  - Have you been drunk more than 2 times in past year?

- Does patient appear: Agitated? Restless? Depressed?
- Patient disoriented to time and place? Is patient confused?
- Does the patient express bizarre thoughts? If yes:
  - Does the patient express incredible beliefs (delusions) or sees or hears things others cannot (hallucinations)?
  - Is the patient intoxicated with alcohol or on drugs which might cause these problems?
- Does patient have a tremor?

If suicidal thoughts, assess the risk:
- Do you have a plan? - Determine if patient has the means.
- Find out if there is a fixed timeframe. - Is the family aware?
- Has there been an attempt? How? Potentially lethal?

Acute Care Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral
ART	Antiretroviral Therapy
BP	Blood Pressure
BV	Bacterial Vaginosis
CD4	Count of the lymphocytes with a CD4 surface marker per cubic millimetre of blood
cm	Centimetre
COPD	Chronic Obstructive Pulmonary Disease
EPI	Expanded Programme on Immunization
GC	Gonorrhoea
GI	Gastrointestinal
GYN	Gynaecological
Hg	Mercury
HIV	Human Immunodeficiency Virus
IM	Intramuscular
IMAI	Integrated Management of Adolescent and Adult Illness
IMCI	Integrated Management of Childhood Illness
IMPAC	Integrated Management of Pregnancy and Childbirth
INH	Isoniazid
IU	International Units
IUD	Intrauterine Device
IV	Intravenous
kg	Kilogram
mcg	Microgram
MD	Medical Doctor
MDT	Multi-Drug Therapy (for leprosy)
mg	Milligram
ml	Millilitre
mm	Millimetre
MO	Medical Officer
MUAC	Middle Upper Arm Circumference
NG	Naso-gastric
NPO	Nothing per os = nothing by mouth
ORS	Oral Rehydration Solution
PCN	Penicillin
PGL	Persistent Generalised Lymphadenopathy
PID	Pelvic Inflammatory Disease
PMTCT	Prevention of Mother to Child Transmission (of HIV)
RF	Rheumatic Fever
RHD	Rheumatic Heart Disease
RPM	Rotations per Minute
STIs	Sexually Transmitted Infection
Td	Tetanus Diphtheria
TB	Tuberculosis
TT	Tetanus Toxoid
ZDV	Zidovudine

Process description for IMAI Acute Care Revision 3

This publication is the result of a great deal of work and the contributions of many contributors.

The cough, difficult breathing and fever sections of the IMA I Acute Care algorithm were developed as part of the STB Practical Approach to Lung Health in 1998-2001. The sections were based on expert group meeting recommendations, evidence review, and validation studies.

The expanded IMAI Acute Care algorithm was based on simplification and operationalization of existing WHO normative guidelines on tuberculosis case detection and treatment; STIs; diarrhoeal disease; malaria; cholera; HIV testing and counselling; the evidence existing at that time; and the input of many WHO and external experts with clinical experience and knowledge of the relevant published and unpublished literature.

The draft algorithm was adjusted based on several validation studies; two expert meetings in 2003; clinical pretesting in Ethiopia (with clinicians at Black Lion Hospital); and Zambia (with IMCI-trained nurses at Lusaka health centres).

Revisions 1 and 2 were based on country experience with adaptation and training of nurses; a WHO mental health and HIV expert group meeting in Johannesburg in 2004; review by the mental health, alcohol and substance use expert groups of the second-level learning programme in their meetings in March and October 2006; and by subsequent e-mail exchange. For each section of the guideline module, an adaptation guide section is in development, summarizing the key references and other relevant evidence supporting the recommendations, and possible country adaptations. The drugs included in the treatment sections have been limited to those on the WHO essential drug list.

Experts involved in the initial evidence reviews, revisions, reviews of drafts, and expert meetings included Elijah Chailah, Miriam Rabkin, Veerle Huyst, Lut Lynen, Bob Colebunders, Basil Vareledzis, Charlie Gilks, Papa Salif Sow, Phil Hopewell, KJ Seung, Rose Pray, Liz Corbett, Eric Simoes, Jos Perriens, Virginia O'Dell, Julie Maggi, Zenebe Melaku Yirsaw, Steve Collins, Peter Berthold, Paul Erik Petersen, Lorenzo Savioli, Julie Maggi, and Jose Bertolote.

This third revision is based on country experience with adaptation and use of the algorithm, and treatment summaries (based on adaptation review meetings with country experts in more than 20 countries). An acute care expert review meeting to consider revisions was held in December 2006, and a meeting to review relevant validation data in October 2007.

Revision 3 of IMAI Acute Care guideline module incorporates changes based on updated WHO normative guidance on HIV provider-initiated testing and counselling, smear negative tuberculosis management, STI guidelines, malaria guidelines, the addition of fluoxetine to the WHO essential drug list, and suggestions from an expert review group in December 2006 that MSM clinical management be improved by the addition of a classification table on management of proctitis. The draft proctitis guidelines were reviewed in a session of the Gay and Lesbian international meeting in Geneva in November 2006, and by a subgroup attending the WHO MSM meeting in September 2008 who later constituted themselves as an

expert group, and produced the final draft for the Acute Care guideline module (Evan Collins, Edmond Coleman, Sarah Hawkes, Kevin Moody, Rafael Mazin Reynosa, Eduard Sanders, Jeffrey Stanton, and Jamie Uhrig).

For revision 3, some members of the second-level learning programme expert subgroups on adult ART/OI/acute care, TB-HIV, mental health, substance use, and the general review group reviewed the updated guideline module (Eric Goosby, Fareed Ramzi Asfour, Matthew Chersich, Robin Flam, Samuel Habte, Melanie Little, Lut Lynen, John Stephen, Miriam Taegtmeyer, Robert Colebunders, Chris Behrens, Nicolas Clark, Emanuele Pontali, John Saunders, Jose Bertolote, Francine Cournos, Mark Halman, Pamela Collins, John Palen, Fatu Forna, Kelly Curran, Jean Anderson, Nathalie Broutet, Matthews Mathai, Sarah Johnson, Luc de Bernis, Bruce Dick, Venkatraman Chandra-Mouli, Laura Ciaffi, Eyerusalem Negussie, Kwonjune Seung).

A group of experts from IMEESC and IMPAC also reviewed it including Meena Nathan Cherian, Lawrence Sherman, and Matthew Mathai.

No experts declared a conflict of interest.

It is anticipated that IMAI Acute Care will be updated again in 2010 to reflect updated WHO normative guidelines, further experience using this guideline module, related tools to improve acute care at primary care level, and results of further validation studies.

1 *Guidelines for Cholera Control , (1993) WHO http://www.who.int/foodsafety/publications/foodborne_disease/cholera/en/index.html*

2 *Guidance on provider initiated HIV testing and counselling in health facilities, (2007) UNAIDS, WHO, http://whqlibdoc.who.int/publications/2007/9789241595568_eng.pdf*

3 *Improving the diagnosis and treatment of smear-negative pulmonary and extrapulmonary tuberculosis among adults and adolescents: recommendations for HIV-prevalent and resource-constrained settings (2007) WHO. http://www.who.int/tb/publications/2006/tbhiv_recommendations.pdf*

4 *Guidelines for the management of sexually transmitted infections, (2003) WHO. http://www.who.int/entity/hiv/pub/sti/en/STIGuidelines2003.pdf; and the updated STI guidelines as determined at the "STI Guideline review meeting, April 2008, Montreux"*

5 *Guidelines for the treatment of malaria, (2006) WHO http://www.who.int/malaria/docs/TreatmentGuidelines2006.pdf*

6 *Clinical Management for Sexual Health Care for Men who have sex with men, IUSTI, 2006 http://sexologyasiaoceania.org/library/MSM/MSM.Clinical.Guidelines.IUSTI.AP.Nov.2006.pdf*

7 *Surgical Care at the District Hospital, http://www.who.int/surgery/publications/en/SCDH.pdf and the "Integrated Management for Emergency and Essential Surgical Care (IMEESC) toolkit, http://www.who.int/entity/surgery/*

8 *Human papillomavirus and HPV vaccines: technical information for policy-makers and health professionals. Geneva, WHO, 2007; http://whqlibdoc.who.int/hq/2007/ WHO_IVB_07.05_eng.pdf; accessed 25 September 2008*

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