



Medical Protocol for Sexual Violence Care

2nd edition
2014¹

MSF Reproductive health and sexual violence care working group²
Approved by DirMed (BD, JH) May 2014, EDITED

The document provides an overview of the medical interventions required as part of the care for victims of sexual violence.

Each medical intervention is presented in the form of a specific treatment sheet.

The main changes introduced in the 2014 revision are related to post exposure prophylaxis of HIV (Sheet 1), prophylaxis of sexually transmitted diseases (Sheet 2), Termination of pregnancy (Sheet 5), vaccination (Sheets 6 and 7) and treatment of physical injuries (Sheet 8).

Apart from the medical treatments outlined in this document, MSF care to victims of sexual violence includes mental health support and a medical legal certificate.

Guidance for the implementation of sexual violence response and specifically on issues such as consent for medical examination, confidentiality, data collection, writing and storage of the medical certificate, patient flow, active outreach to victims and community involvement, is available in the different MSF Operational Centers (OC).

For comments and questions please contact the referent following reproductive health care and sexual violence care in one of the MSF operational centres.

¹ Original text July 2011.

² In collaboration with the working groups HIV/AIDS, Paediatrics, Vaccination and the Pharma Network and in accordance with the MSF Clinical guidelines and the Obstetric guidelines.

Sheets	Interventions	Specifics
1	Post-exposure prophylaxis for HIV infection	Within the first 72 hours
2	Prophylaxis of sexually transmitted infections (STIs)	As soon as possible.
3	Management of unwanted pregnancy	Address potential of pregnancy for all girls/women. Ensure pregnancy test and discuss possible options.
4	Emergency contraception (CU)	Give within 72 hours after rape to girls/women to avert unwanted pregnancy.
5	Termination of pregnancy (ToP)	Counsel, discuss options. Provide or refer ToP. Provide contraception post-ToP.
6	Tetanus prophylaxis	According to risk and pre-exposure vaccination status.
7	Hepatitis B prophylaxis	Vaccinate according to protocol.
8	Treatment of physical injuries	Physical examination (ensure patient consent). Clean/repair wounds. For traumatic fistulas, simple treatment measures or reference to specialist care.

Note

Even if patients come months after the assault, vaccination and STI treatment should be ensured up to 6 months after the assault.

Logistics

Drugs and diagnostics proposed in the above outlined interventions can be ordered as part of the “post rape kit” (for 35 adults and 15 children), which is a module of MSF **KMED part 3: Modular hospital kit / MODULES HOSPITAL DIVERS**

KMEDMHMI13A (mod hospital divers) MEDICINES RAPE MANAGEMENT, 50 part A

KMEDMHMI13B (mod hospital divers) MEDICINES RAPE MANAGEMENT, 50 C-CHAIN

SHEET 1: POST-EXPOSURE PROPHYLAXIS (PEP) FOR HIV INFECTION

Rape, compared to consensual sexual intercourse, presents a higher risk of HIV and STIs transmission, because the use of violence can entail traumatic lesions of the STIs vaginal, anal and/or oral mucous membranes. Pre-existing genital lesions (genital ulcers, STIs) or menstruation can increase the risk of HIV transmission.

1.1 Risk assessment for HIV transmission³

Not all acts of assault warrant PEP. Based on the best available epidemiological data, the estimated risk of acquiring HIV infection from a single episode of consensual receptive vaginal intercourse is between 0.1% (1 in 1000) and 1% (1 in 100) and, from a single episode of consensual receptive anal sex, is between 1% and 5% (1 to 5 in 100). The provision of PEP is recommended according to a risk/no-risk assessment:

No risk of transmission ⇒ No PEP

- Kissing
- Digital penetration or penetration of vagina, anus or mouth with foreign object (without injury)
- Ejaculation on intact skin

Risk of transmission ⇒ PEP⁴

- Penetration vaginal, anal or oral
- Bite involving bleeding (the victim has bitten the aggressor or was bitten by him)
- unknown violent act

1.2 Consideration regarding HIV testing

Rape is a traumatic event. Addressing the risk of HIV infection, either as a pre-existing condition OR as a result of the sexual assault requires a careful approach, counselling on HIV testing and related implications.

An HIV baseline test is recommended but is NOT a requirement to start PEP.

The benefits of knowing the HIV status prior to starting PEP are:

- Avoid unnecessary PEP if the patient is already HIV positive.
- Allow appropriate referral for treatment and care if HIV is diagnosed.
- Confirm the HIV negative status; this can be motivating to taking and completing the PEP.

³ Children's account of sexual violence may not reflect details permitting an adequate assessment of HIV infection transmission risks. When in doubt, offer HIV testing and PEP.

⁴ If MSF recommended prophylaxis is not available the regimen will depend on local guidelines and availability.

If the **patient presents within 72 hours** after the assault and is too traumatized to discuss an HIV test, there is no need to push for a test in the first encounter. The next reasonable opportunity should be taken instead. In all cases, if indicated, PEP should be started at the *earliest opportunity* within the first 72 hours. HIV testing should be offered and discussed during the earliest follow-up visit.

If the **patient presents after 72 hours**, HIV testing should be offered, with careful explanation that PEP will not be provided, as it is not proven effective after 72 hours.

HIV test results and recommendations for PEP	
HIV test is NOT done	PEP for 28 days.
HIV test is done	
Negative test result	PEP for 28 days.
Positive test result	<ul style="list-style-type: none"> • No PEP. • If PEP was started prior to test results, discontinue PEP. • Discuss outcome with the patient and inform on recommended medical care. • Provide HIV care or refer as needed and feasible in the context.
Undetermined test result	PEP until conclusive result.

1.3 Routine laboratory tests

No baseline laboratory tests are needed to start PEP.⁵

⁵ If available, the following monitoring tests can be helpful:

- zidovudine (AZT) – haemoglobin level to detect anaemia.
- protease inhibitors (PI) – ALAT to assess a clinical suspicion of hepatitis.
- tenofovir (TDF) – baseline creatinine clearance in patients with diabetes, hypertension, renal dysfunction or patients receiving nephrotoxic drugs (including NSAIDs).

1.4 PEP treatment guidance

PEP for ADULTS and CHILDREN > 35 kg			
Drugs	Dose/ tablet	Dosage	Duration
TDF*/3TC + atazanavir/ritonavir**	300 mg/300 mg	1 tablet x 1/day	28 days
	300 mg/100 mg	1 tablet x 1/day	
* If TDF not available: AZT/3TC	300 mg/150 mg	1 tablet x 2/day	
**If atazanavir/ritonavir not available: lopinavir/ritonavir (LPV/r)	200 mg/50 mg	2 tablets x 2/day	

Adverse effects

- Nausea, vomiting, headache. While uncommon and not very serious, these effects may compromise treatment adherence. Inform the patients that they may occur and stress the importance of continuing the treatment.
- Atazanavir may cause jaundice: this is not due to hepatitis and the drug can be continued.
- Tenofovir (TDF) is contraindicated if the patients with pre-existing renal impairment (creatinine clearance < 50 ml/min). However short term administration (28 days) is unlikely to cause significant renal toxicity. If creatinine testing is not available, avoid use in case of diabetes, hypertension and in patients receiving nephrotoxic drugs.
- Avoid zidovudine (AZT)/lamivudine (3TC) if there are clinical signs of anaemia and/or if haemoglobin is < 8 g/dl.

Other considerations

- The biggest challenge is adherence: counselling regarding ART has to be ensured.
- It is recognized that victims of sexual assaults have a higher rate of therapy defaulting than HIV patients receiving ART.
- If the patient is unable to decide about PEP, offer the first doses of medication and re-open the discussion about treatment within the next 24 hours.
- In case of any doubt on the PEP regimen to be used contact your HIV advisor BUT it is better to start the first dose of PEP AS SOON AS POSSIBLE. If the regimen indicated in these guidelines is not available, start with drugs that are immediately available. Ideally this should be 2 nucleotide reverse transcriptase inhibitors (NRTIs) + 1 protease inhibitor (PI). If a PI is not available, start with 2 NRTIs + efavirenz (EFV).

PEP for CHILDREN < 35 kg								
Dosage per regimen and weight category								
Weight	Morning/ evening	AZT/3TC 60 mg/30 mg	LPV/r tab 100 mg/25 mg		LPV/r syrup 80 mg/ml/20 mg/ml	AZT/3TC 300 mg/150 mg		
3-3.9 kg	☼	1 tab			+	1 ml		
	☾	1 tab			+	1 ml		
4-5.9 kg	☼	1 tab			+	1.5 ml		
	☾	1 tab			+	1.5 ml		
6-9.9 kg	☼	1½ tab			+	1.5 ml		
	☾	1½ tab			+	1.5 ml		
10-13.9 kg	☼	2 tab	+	2 tab	or	2 ml		
	☾	2 tab	+	1 tab	or	2 ml		
14-19.9 kg	☼	2½ tab	+	2 tab	or	2.5 ml		
	☾	2½ tab	+	2 tab	or	2.5 ml		
20-24.9 kg	☼	3 tab	+	2 tab	or	3 ml		
	☾	3 tab	+	2 tab	or	3 ml		
25-34.9 kg	☼			3 tab			+	1 tab
	☾			3 tab			+	1 tab

Special considerations for children

If a child vomits within 30 minutes of intake of the medication, give the same dose.

- AZT/3TC tablets for children are dispersible in water and can be split. They can be dispersed into a small volume of water or crushed and mixed with food.
- Lopinavir/ritonavir (LPV/r) tablets cannot be crushed or split and can be difficult to swallow.
- Lopinavir/ritonavir (LPV/r) is currently available as syrup for children < 10 kg. It will also soon be available as pellets. Pellets will be the preferred formulation as they are easier to give and have a less bitter taste.
- Clinicians must be aware of issues of consent for children and children's specific problems of adherence and should therefore take time for thorough counselling to children and their parents/caregivers.

1.5 Follow up

If feasible, patients should ideally be re-tested after 3 months to assess for HIV sero-conversion. If positive, they should be referred for appropriate treatment and care.

SHEET 2: PROPHYLAXIS OF SEXUALLY TRANSMITTED INFECTIONS (STI)

As soon as possible after the rape, all patients should receive systematic prophylactic treatment for sexually transmitted infections (chlamydia, gonorrhoea, syphilis, chancroid, trichomoniasis).

For patients coming 6 months after the assault:

- If asymptomatic: ensure full prophylactic treatment.
- If symptomatic for one or several STIs: follow standard treatment protocol⁶.
- For syphilis: perform a test if feasible.

ADULTS (> 35 KG)		
Prophylactic treatment for gonorrhoea, chlamydia, syphilis ⁷		
	Drugs	Dosage/Duration
First line	ceftriaxone 250 mg vial + azithromycin 250 or 500 mg tablet	250 mg IM single dose + 2 g single dose
If ceftriaxone not available	Replace with cefixime 200 mg tablet	400 mg single dose

ADULTS (> 35 KG)	
Prophylactic treatment for trichomoniasis	
Drugs	Dosage/Duration
tinidazole 500 mg tablet	2 g single dose
or if tinidazole not available	
metronidazole 250 mg or 500 mg tablet	2 g single dose

⁶ MSF Clinical Guidelines or relevant national protocol used by MSF in the context.

⁷ When using 2 g azithromycin single dose, the patient is covered for both incubating and post-incubating syphilis. There is then no need for syphilis testing to determine if prophylaxis or treatment is required. If the patient presents with genital ulcers the patient should receive 2 g azithromycin as a single dose regardless of hours passed since the rape (or alternatively, benzathine benzylpenicillin IM: 2.4 MIU as a single dose).

CHILDREN (< 35 KG)			
Prophylactic treatment for gonorrhoea, chlamydia, syphilis			
First line treatment			
Drugs	5 to < 12 kg	12 to < 25 kg	25 to < 35 kg
ceftriaxone 250 mg vial	125 mg single dose	125 mg single dose	125 mg single dose
+	+	+	+
azithromycin 200 mg/5 ml oral suspension or 250 mg tablet	20 mg/kg single dose	500 mg single dose	1 g single dose
If ceftriaxone is not available			
Drugs	5 to < 12 kg	12 to < 25 kg	25 to < 35 kg
cefixime 100 mg/5 ml oral suspension or 200 mg tablet	8 mg/kg single dose	200 mg single dose	400 mg single dose
+	+	+	+
azithromycin 200 mg/5 ml oral suspension or 250 mg tablet	20 mg/kg single dose	500 mg single dose	1 g single dose

CHILDREN (< 35 KG)	
Prophylactic treatment for trichomoniasis	
Drugs	Dosage/Duration
tinidazole 500 mg tablet	50 mg/kg (max. 2 g) single dose
or if tinidazole not available	
metronidazole 125 mg/5 ml oral suspension or 250 or 500 mg tablet	15 mg/kg/day in 3 doses 7 days

Contraindications

- Ceftriaxone and cefixime are contraindicated in patients allergic to penicillins (cross-allergy to cephalosporins in 5-10% of cases).
- No contraindication for cephalosporins and azithromycin for pregnant and lactating women.
- For pregnant and lactating women, tinidazole or metronidazole must be divided into smaller doses.

Adverse effects

Gastrointestinal disorders, especially vomiting; headaches, dizziness, allergic reactions (rash, pruritis, fever).

Precautions

- **PEP has priority.**
- If the patient is taking EC and/or PEP, delay STI treatment for a few hours, especially if the patient takes the 2 g of azithromycin (this dose is known to provoke vomiting).
- If the patient vomits within 2 hours of receiving the treatment, the dose should be repeated.

SHEET 3: MANAGEMENT OF UNWANTED PREGNANCY

Rape can result in pregnancy. A girl/woman who has been victim to sexual violence may want to know whether she has become pregnant as a result of the rape or whether she was pregnant at the time of the rape, especially if she considers seeking interruption of the pregnancy or adoption for the child.

However determination of pregnancy is **NOT a pre-requisite for:**

- **Using emergency contraceptives**, as these will not harm a pre-existing pregnancy (Sheet 4).
- **A termination of pregnancy** requested by the woman; as it is provided for independently of whether the pregnancy is result of the rape or not (Sheet 5).

In absence of clinical signs of pregnancy, a pregnancy test can be indicated, but is limited in its capacity to predict whether a pregnancy is result of rape or not.

Pregnancy test	Timing of test	Conclusion and information to the patient
Positive	< 2 weeks after the rape	Is she pregnant? YES Is the pregnancy the result of the rape? NO The pregnancy is most likely not the result of the rape.
	> 2 weeks after the rape	Is she pregnant? YES Is the pregnancy the result of the rape? UNKNOWN In sexually active patient, it is not possible to determine if the pregnancy is result of the rape or not.
Negative	2 weeks after the rape	Is she pregnant? UNKNOWN Repeat test 2 and 6 weeks later.

Medical professionals must be aware that being pregnant at this time, and deciding what to do about it, may be emotionally very difficult for the patient and she may need support and counselling:

- If the patient wishes to continue her pregnancy, antenatal and obstetrical care should follow its usual course.
- If patient wishes to interrupt the pregnancy: provide information about criteria and possible methods for termination according to her situation (Sheet 5) and address and provide for future contraceptive needs.
- If the patient does not wish to keep the infant nor to interrupt the pregnancy: Ensure pregnancy follow-up in ANC and refer the patient to an organisation (religious, women's group, NGO, orphanage) with a view to adoption later.

SHEET 4: EMERGENCY CONTRACEPTION (EC)

EC is NOT an abortion method and is permitted in practically all countries. EC should be discussed with all girls/women in reproductive age, from first signs of puberty or onset of first menstrual period onwards.

4.1 Methods

There are two types of emergency contraception:

- **Emergency contraceptive pill (ECP)**
- **Intrauterine device (IUD)**

Prior to a decision about the EC method, it is useful to determine whether the patient was already pregnant (Sheet 3). If it is not possible to determine a pregnancy:

- ECP will NOT harm an established pregnancy.
- IUD is contraindicated, as it can harm an established pregnancy.

The patient should be counselled to return to the clinic if she has any queries about the EC, needs time for reflexion or if she does not have her menstrual period within 21 days after taking the EC. The latter could mean she is pregnant and will require further medical care.

4.2 Emergency contraceptive pill

ECP can effectively prevent pregnancy within the first 72 hours after unprotected sexual intercourse. From 72 to 120 hours (5 days) ECP should still be offered, but the effectiveness is reduced to less than 50%.

Emergency contraceptive pills					
Drug ⁸	Brand names	Strength	Dosage	Duration	Number of tablets
levonorgestrel	Levonelle, Norlevo, PlanB, Postinor-2, Vikela	0.75 mg	1.5 mg	Single dose (or 2 x 1 tab 12 h apart)	2

Considerations

- Doses apply to women with body weight ≤ 75 kg.
- A double dose of EC is recommended (3 mg levonorgestrel) in patient taking an enzyme inducing drug: e.g. ARVs like efavirenz (EFZ) or rifampicin.
- If the patient is given PEP, a double dose of EC is recommended (3 mg levonorgestrel). EC pills are best given 2 hours before the start of PEP.

⁸ There are products that are specially packaged for emergency contraception, but they are not available in all countries.

Counselling and follow-up for ECP

- There are no contraindications to the use of ECP.
- Discuss possible adverse effects and the effect of the pills on her next menstrual period. ECP's do not prevent pregnancy from sexual intercourse occurring after their use.
- ECP can be used a second time in the same menstrual cycle. There is no limit to the number of times a woman can take ECP in her lifetime
- Advise on condom use.
- Discuss future contraceptive needs and provide as relevant.

Alternative ECP

If pre-packaged ECP's are not available in your setting, emergency contraception can be provided using **regular oral contraceptive pills**:

- Levonorgestrel-only regimen (greater efficacy and fewer adverse effects but a high pill burden)
or
- Combined estrogen-progestogen regimen (Yuzpe) 2 doses at 12 hour-interval.

Regular oral contraceptives for use as emergency contraceptives			
Drugs	Brand names	Strength	Number of tablets
levonorgestrel (progestogen only)	Microlut, Microval, Norgeston	3 mg	50 single dose
	Ovrette	37.5 µg	40 single dose
combined (estrogen- progestogen)	Eugynon 50, Fertilan, Neogynon, Noral, Nordiol, Ovidon, Ovral, Ovran, Tetragynon/PC-4, Preven, E-Gen-C, Neo-Primovlar 4	EE 50 µg + LNG 250 µg or EE 50 µg + LNG 500 µg	2 (and after 12 hours another 2)
	Lo/Femenal, Microgynon, Nordete, Ovral L, Rigevidon	EE 30 µg + LNG 150 µg or EE 30 µg + LNG 300 µg	4 (and after 12 hours another 4)
EE = ethinylestradiol LNG = levonorgestrel			

Adverse effects

- Nausea: to reduce risk of nausea, have the patient eat something before taking the pills.
- Vomiting: if the woman vomits within 2 hours after taking ECP, she should take another dose (and consider adding an anti-emetic). If vomiting occurs **more** than 2 hours after taking the ECP she does not need extra pills.
- Inform the patient that her next menstrual period may start several days earlier or later than expected. If her next period is very different from normal she should come back for consultation.
- Discuss the options of a possible pregnancy if there is no menstruation within 21 days, or within 5 to 7 days after the expected date, if the date is known. Instruct

the patient to return if headache, dizziness, or abdominal pain, continue for longer than 1 week after taking the ECP.

4.3 Intrauterine device (IUD)

Copper-bearing IUD becomes effective immediately after insertion. The method is highly effective in preventing pregnancy, if the patient presents **within five days** after aggression, if there was no known pregnancy prior to the rape.

When the time of ovulation can be estimated the patient can have an IUD inserted up to 5 days after ovulation (note that sometimes ovulation leading to pregnancy can occur *after* the sexual intercourse).

A skilled provider should counsel the patient and insert the IUD. If an IUD is inserted ensure complete STI treatment (Sheet 2).

The IUD may be removed at the time of the woman's next menstrual period or left in place as contraception.

Contraindications

- Known or suspected pregnancy prior to rape.
- Active genital infection: postpartum endometritis, purulent cervicitis with chlamydia or gonorrhoea, etc.
- Immediate post-septic abortion.
- Unexplained vaginal bleeding.
- Gynaecologic malignancy: untreated cervical cancer; endometrial cancer, etc.
- Distorted uterine cavity (any abnormality interfering with IUD insertion).
- Current malignant gestational trophoblastic disease.

Adverse effects

- Changes in bleeding patterns (especially during the first 3 to 6 months) including: prolonged and heavy monthly bleeding, irregular bleeding, increased cramping and pain during monthly menstruation.
- Miscarriage, preterm birth or infection in the rare case that the woman becomes pregnant with the IUD in place.
- Perforation risk during insertion (rare) and pelvic inflammatory disease (rare).

SHEET 5 : TERMINATION OF PREGNANCY (TOP)

Victims of rape may present too late for emergency contraception (more than 120 hours) or EC may fail. If the victim is pregnant and requests to interrupt the pregnancy, inform about the criteria and methods for ToP.

MSF policy stipulates provision of ToP, or else, referral⁹ of the woman to a quality provider, as part of the organizations effort to reduce maternal mortality and suffering. Termination of pregnancy on request in MSF projects is supported until the end of the first trimester¹⁰.

In contexts where legislation for ToP is restrictive, the mission should be well informed about and take into consideration the law, its customary interpretation, and potential implications of providing ToP – notably in regards to the safety of the patient and the medical staff.

5.1 Methods (up to 12-14 weeks)

Methods	Remark	Advantages/Disadvantages
Medical (misoprostol, mifepristone)	Sensitivity of the uterine musculature to misoprostol progressively increases with the evolution of the pregnancy → risk of excessive bleeding increases after 9 weeks of gestation	<i>Advantages:</i> non-invasive, no anaesthesia, less pain <i>Disadvantages:</i> bleeding, cramps, nausea, uncertainty, repeated visits for follow up
Manual vacuum aspiration (MVA)	Also treatment of choice for incomplete spontaneous abortions	<i>Advantages:</i> faster, result more certain, regional anaesthesia <i>Disadvantages:</i> invasive
Dilatation and curettage	Only when other methods are not applicable	<i>Advantages:</i> faster, result more certain <i>Disadvantages:</i> invasive, general anaesthesia, need for skilled surgeon/obstetrician, risk of uterine/cervical perforation, risk of infection

5.2 Counselling and follow-up

- Explain options and ToP procedures (what to expect, adverse effects, etc.)¹¹
- The patient should be advised to use a condom with all partners for a period of 6 months (or until syphilis/HIV status has been determined).
- A contraceptive method should be discussed¹² and provided.

⁹ Referral of patients to another health provider involves MSF to validate the provider, to ensure access (including covering related costs) and patient follow-up.

¹⁰ ToP at a later gestational age may be considered in exceptional cases. The conditions for care and methods differ.

¹¹ Termination of pregnancy, Feb 2008.

¹² An IUD can be inserted immediately after medical abortion or MVA.

SHEET 6: TETANUS PROPHYLAXIS

Every patient should be immunised for tetanus unless he or she can show that they are fully immunised.

Indication

Prevention of tetanus in wound management depends on risk and pre-exposure vaccination status:

- **Tetanus vaccine:** any person, who presents with breaks in skin or mucosa, based on immunisation status.
- **Human tetanus immunoglobulin (HTIG):** in case of dirty wounds as there is a high risk of tetanus, unless the patient is fully immunised. Provide HTIG in patients non-immunised or incompletely immunised or in patients whose immunisation status is unknown, in combination with tetanus vaccine.

Dosages and schedule

Tetanus vaccine

Children and adults¹³: 0.5 ml/injection IM

The first two doses (Day 0 and Day 30) are priority, as they provide protection from potential infection related to lesions from the assault. Two doses alone are however of short duration.

The patient should be refer to the existing health structure were tetanus vaccination is regularly provided to receive the three additional doses (TT3, TT4, and TT5) required to achieve a long lasting protection.

Tetanus vaccination schedule (children and adults)			
Dose	Schedule	Effectiveness of protection	Duration of protection
TT1	Day 0	0%	None
TT2	Day 30 (≥ 28 days after TT1)	80%	1 to 3 years
TT3	6 months after TT2	95%	5 years
TT4	1 year after TT3	99%	10 years
TT5	1 year after TT4	99%	10 years

¹³ Children ≤ 6 years who received the DTP-Hib-HepB are already covered and need no further TT protection.

HTIG

Children and adults: 250 international units (IU) in 1 ml by IM injection into the deltoid or gluteus region (buttock).

If more than 24 hours has elapsed between being injured and seeking medical care, administer 500 IU. If TT and HTIG are given at the same time, different needles, syringes and injection sites must be used.

Tetanus vaccine and HTIG schedule				
RISK	Complete vaccination (≥ 3 doses)			Incomplete vaccination (< 3 doses) or no vaccination/ unknown vaccination status
	Time since administration of latest dose:			
	< 5 years	5-10 years	> 10 years	
Clean, minor wounds	none	none	TT: one booster	Start* or complete TT
Dirty, major wounds (deep wounds, substantial tissue loss, foreign bodies, necrosis)	none	TT: one booster	TT: one booster	Start* or complete TT AND administer HTIG

*At least 2 doses administered 4 weeks apart. For long lasting immunity add 3 additional doses.

Contraindications, adverse effects, precautions

- Do not administer to patients with known allergy to tetanus toxoid vaccine or HTIG.
- May cause rare and mild local reaction: redness and pain at the injection site.
- No contraindications in pregnant and breastfeeding women and in cases of symptomatic or asymptomatic HIV infection.

Storage

- Between 2 and 8°C (never freeze).
- After opening, the 10 dose vial (with rubber stopper) of vaccine may be kept refrigerated at 2 and 8°C for 4 weeks¹⁴.

¹⁴ WHO Policy Statement: The use of opened multi-dose vials of vaccine in subsequent immunization sessions (2000). https://www.spc.int/phs/pphsn/Outbreak/Vaccine_Management/WHO-Multi_Dose_Vial_Policy.pdf

SHEET 7: HEPATITIS B PROPHYLAXIS

The transmission of hepatitis B is significantly higher than that of HIV. Every patient should be offered prophylaxis for hepatitis B as soon as possible after the incident, preferably within 24 hours, but also up to 6 months after the assault.

In healthy adults < 40 years hepatitis B vaccine induces a protective antibody response in approximately 30 to 55% after the first dose, in 75% after the second dose, and in more than 90% after the third dose. Response to the vaccine declines at older age (approx. 75% antibody response at age 60). The primary vaccination series (3 doses) can prevent infection for more than 20 years, a booster dose at the moment is not recommended.

The recommended dose varies according to age and immune status. Knowledge of the immune status is not a precondition for starting hepatitis B vaccination immediately. Testing is not a priority, but is possible in specific setting (e.g. urban).

Dosages and schedule

Children^{15,16}: 10 µg and adults: 20 µg

In HIV positive patients a double dose (40 µg) is required to achieve good protection.

Vaccine is administered by IM injection in the anterolateral aspect of the thigh (children < 2 years) or in the deltoid muscle (adults and older children). Administration in the buttock is not recommended, as the immune reaction is insufficient.

The vaccine does not interfere with the immune response to any other vaccine and may be given simultaneously with other vaccines. It may be administered at the same time as the tetanus vaccine, but do not combine the vaccines in the same syringe and ensure different injection sites.

The accelerated schedule below provides early protective immunity, lasting up to 1 year. For life-long protection, advise the patient that a 1 year booster is necessary.

¹⁵ For hepatitis B vaccination, a patient is considered a child when he is < 10 years. However, refer to product information to confirm this as there is some variance between companies.

¹⁶ Children ≤ 6 years who received the DTP-Hib-HepB are already covered and need no further TT protection.

Hepatitis B vaccination schedule (children and adults)	
HBs1	Day 0
HBs2	Day 7 (≥ 7 days after HBs1)
HBs3	Day 28 (≥ 14 days after HBs2)
HBs4	12 months after HBs3

Contraindications, adverse effects, precautions

- Do not administer to patients with history of hypersensitivity reaction to any component of the vaccine.
- May cause:
 - Minor local or systematic reactions: pain or redness at injection site, fever, headache, myalgia, etc;
 - Very rarely: anaphylactic reaction, serum-disease-like reaction, lymphadenopathy, peripheral neuropathy.
- Assess risk/benefit if known multiple sclerosis.
- No contra-indication in pregnancy and breastfeeding and in cases of symptomatic or asymptomatic HIV infection.

Storage

- Between 2 and 8°C (never freeze).
- After opening, the 10 dose vial (with rubber stopper) of vaccine may be kept refrigerated at 2 and 8°C for 4 weeks¹⁷ (see open vial policy).

¹⁷ See open vial policy statement (page 15, footnote 13)

SHEET 8: TREATMENT OF PHYSICAL INJURIES

Patients often sustain wounds, cuts and bruises as a consequence of the violence. Ensure **patients consent**¹⁸ prior to proceeding with any physical examination (including vaginal, anal, breasts). For minors, a legal representative can (and must) provide consent, however children may not be examined against their will; their assent is also required and noted in the medical file.

8.1 Life threatening situation

- If severe haemorrhage (including from the genital tract or rectum) is present after rape, the patient should be stabilized (to prevent or correct hypovolaemic shock), and, if necessary, transfused.
- For severe wounds from the genital tract or rectum or mouth, depending on the health structure, an examination under anaesthesia (ketamine) can be carried out rapidly to stop active bleeding and to pack the vagina and/or rectum.
- If bleeding persists (after this procedure, or if it is not possible to do the examination under anaesthesia), the damage is likely to be extensive and once stabilized, the patient should be referred immediately for surgery (with family members as potential blood donors, according to the context).

8.2 General wound care¹⁹

The goal of wound treatment is to assure rapid wound healing and to avoid infection, complications and sequelae. Treat wounds according to general surgical wound care principles:

- Clean tears, cuts and abrasions and remove foreign bodies, faeces, dead or damaged tissue.
- Clean wound with sodium chloride 0.9%, starting with the cleanest area of the wound and progressing to the dirtiest.
- Decide if there are any wounds that require suturing.
 - Clean wounds must be sutured within 6 hours - 24 hours in case of wounds of the face, scalp, upper limbs and hands - after this time healing occurs by secondary intention or delayed primary suture.
 - Do not suture dirty wounds.

For more information, see *MSF Clinical Guideline*.

- Change dressings *every 3 days*. More frequent changes are required only *on indication* (increased pain or redness around wound; bad smell; seeping wound).
- Use antibiotics only if indicated.
- Provide analgesics routinely. If needed, provide additional analgesics *on demand*.
- Ensure tetanus vaccination (Sheet 6).

¹⁸ Patient consent is noted in the medical file, can be a tick-box or a signed statement.

¹⁹ Ensure pain management for physical examination, especially in children.

8.3 Vaginal wounds

Superficial and non-penetrating wounds

Follow the same wound care principles as above. The vagina is vascular; if debridement is necessary, proceed with caution. Superficial wounds usually heal well spontaneously without topical treatment.

Deep wounds

Irrigate them thoroughly with 0.9% sodium chloride.

Vesico-vaginal or recto-vaginal fistula

Serious injuries result from violent rape or from objects thrust into the vagina. This may cause a (urethra-) vesico-vaginal fistula (VVF) or a recto-vaginal fistula (RVF) or a combination.

In the absence of a specialist with specific training in fistula surgery, field teams *without* fistula experience but with basic surgical skills can take simple measures that may be beneficial *for some* patients with uncomplicated traumatic:

- Insert an indwelling catheter to bridge the time until a specialist surgeon is available (referral centre or MSF fistula team), as long as fistula seems to decrease in diameter. Check this weekly. In practice, spontaneous healing should take no longer than 4-6 weeks, if not, surgery will be required.
- Treat anaemia, any concurrent infection, and a poor nutritional status as these conditions will hamper the process of spontaneous healing of the fistula.
- Facilitate an oral fluid intake of 4-6 litres per day. Urine produced should be colourless and odourless.
- Promote mobilization of patient with *any* type of fistula as this will facilitate drainage of urine and faeces.
- Routine antibiotics are not required unless indicated - for example in case of sepsis or possible immune suppression.
- If possible, debride under general anaesthesia, following general wound care principles – taking into consideration the delicacy of intra-vaginal procedures in particular for a victim of sexual violence.

8.4 Ano-rectal wounds

Superficial wounds and lacerations

Superficial wounds and lacerations can be cleaned with sodium chloride 0.9%. Provide analgesics. No antibiotic treatment.

Deep wounds with involvement of anal sphincter

These wounds are difficult to assess. If evidence or doubt of lesions of the anal sphincter, patient should be rapidly referred to surgical facility. Wounds can be cleaned, analgesics provided, no antibiotic treatment.

Rectal perforations

Perforations of rectum are a life threatening situation (leading to septic acute abdomen). Patients should be referred in emergency after stabilisation (fluid replacement intravenously) and antibiotic therapy (amoxicillin/clavulanic acid + metronidazole + gentamicin).

Note that lesions in anus and rectum are difficult to assess for non surgical staff even under anaesthesia. In case of doubts, it is always better to refer.

8.5 Mouth wounds**Superficial wounds and lacerations**

Clean with 0.9% sodium chloride.

Deeper wounds

Deeper wounds can be sutured with resorbable suture. Provide antibiotic treatment.