



# APT-Sepsis Programme Pocket Reference

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## Acknowledgments

**The APT-Sepsis Programme has been designed in collaboration with the Ministries of Health in Malawi and Uganda and the World Health Organization (WHO), working together to actively prevent and treat maternal sepsis**





# The APT-Sepsis Programme

The programme focuses on three central goals, aiming to reduce maternal and neonatal morbidity and mortality from infection and sepsis



Together, achieving these goals can help prevent unnecessary death and disease

## Why perform hand hygiene?



Organisms that cause infection, such as bacteria, can spread in hospitals between patients and staff

Regular, effective hand hygiene can help protect women you care for in the maternity setting from infection and sepsis. It can also protect you and your colleagues

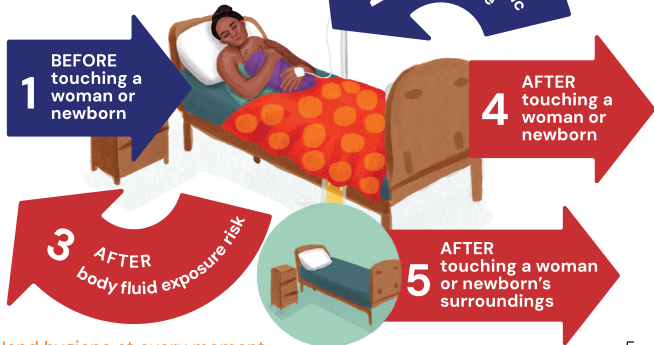
Performing hand hygiene at every WHO moment for hand hygiene in the maternity setting saves lives







## The WHO 5 moments for hand hygiene



Hand hygiene at every moment

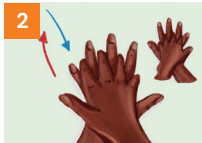


# How to perform hand hygiene effectively

After applying soap and water, or alcohol-based handrub:



Rub your hands palm to palm



Rub your right palm over the back of your left hand with interlaced fingers and vice versa



Rub your hands back and forth, palm to palm with fingers interlaced

Hand hygiene at every moment



Note

Handwashing: 40-60 seconds

Handrub: 20-30 seconds

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Hook the backs of your fingers in the opposite palm, with fingers interlocked, and rub

5



Rotationally rub your left thumb clasped in your right palm and vice versa

6



Rotationally rub fingertips clockwise and anti-clockwise with clasped fingers of right hand in left palm and vice versa

Hand hygiene at every moment

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## When to handwash with soap and water instead of using alcohol-based handrub



Sometimes, it is best to use soap and water, rather than alcohol-based handrub:

- ✓ **When your hands are visibly soiled**
- ✓ **After your personal use of a toilet**
- ✓ **When you care for patients with diarrhoea**

Some procedures, for example preparing for surgery in theatre, require a higher level of hand cleansing: always follow the WHO recommendations

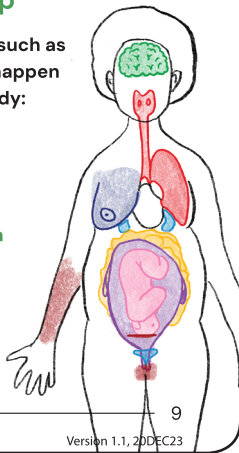


## How infections develop

Infections develop when pathogens, such as bacteria, invade the body. This can happen in many different parts of the body:

- The respiratory tract
- The urinary tract
- The genital tract
- Post-abortion complications
- The skin
- The breast
- The brain and neurological system
- The abdomen

Many infections can be prevented by using safe clinical practice during delivery and appropriate antibiotic prophylaxis



Prevent and treat infection using best practice



## Improving safety during delivery

Follow the WHO recommendations for safe clinical practice



For caesarean section, routine vaginal preparation **MUST** be performed using chlorhexidine or povidone-iodine solution (ideally aqueous-based)



For caesarean section, the abdominal skin **MUST** be prepared with alcohol-based chlorhexidine (or povidone-iodine if not available)



It is **NOT** recommended to routinely shave the pubic area for vaginal birth or caesarean section



**LIMIT** routine vaginal assessments in the first active stage of labour to **NO MORE THAN** every four hours, unless there is a clinical indication to do so

Prevent and treat infection using best practice

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# When to use antibiotic prophylaxis

1st Trimester	✓		Abortion or miscarriage surgery (MVA / EVAC / D&C)
2nd & 3rd trimester	✓		Preterm pre-labour rupture of membranes (PPROM)
		✗	Uncomplicated 2nd or 3rd trimester
		✗	Preterm labour with intact amniotic membranes
1st & 2nd stages of labour	✓		Vaginal Group B Streptococcus (GBS) colonisation
		✗	Meconium-stained amniotic fluid
		✗	Uncomplicated vaginal birth
3rd stage of labour	✓		Manual removal of the placenta
	✓		Operative vaginal birth (forceps or vacuum-assisted delivery)
	✓		3rd or 4th degree perineal tears (torn anal sphincter, anus or rectum)
		✗	Episiotomy
Caesarean section	✓		Elective / emergency caesarean section (antibiotics should be given 15-60 minutes BEFORE skin incision)



## How to perform vaginal preparation



1 Put on an apron, perform hand hygiene and put on gloves



2 Pick up the gauze swab with the sponge holder, soak the gauze swab in cleaning solution

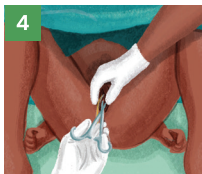


3 With one of your gloved hands, gently spread the labia apart and open the vagina

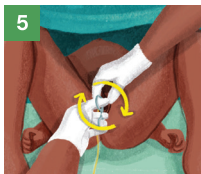




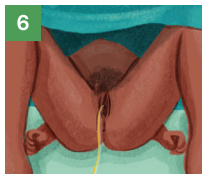
## Perform vaginal preparation before caesarean section to prevent deep surgical site infection and peritonitis



With your other gloved hand, carefully insert the forceps and gauze to reach the level of the cervix



Gently rotate the forceps and gauze for 30 seconds, ensuring coverage of the cervix and upper vagina



Remove the forceps & dispose of the gauze appropriately (remember to include in the swab and instrument count)

## Signs of infection

Unfortunately, good hand hygiene, safe clinical practice around delivery and antibiotic prophylaxis cannot prevent all infections

Signs of infection to look out for include:

- A high temperature
- A fast heart rate of the woman or fetus
- A low blood pressure
- A fast respiratory rate
- Pain or pus from a wound
- Foul smelling vaginal discharge
- Abdominal pain
- Hot, red, painful skin
- Feeling generally unwell





## Treat infections quickly and target the source of infection



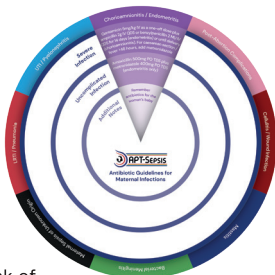
The source of the infection can change your choice of antibiotics and your management of the infection

Follow local guidelines to choose the correct treatment for each infection. Always seek senior help if you are uncertain



Note

Women are at particular risk of infection after caesarean section



Prevent and treat infection using best practice



## Using the MEOWS Chart

Use the Modified Early Obstetric Warning System (MEOWS) Chart for all women on admission and at least once every 24 hours throughout their stay at your facility

 Note

Whenever you take a woman's vital signs, use the MEOWS Chart to record them and check that there are no **RED** or **YELLOW** flag triggers needing urgent assessment

**MODIFIED EARLY OBSTETRIC WARNING CHART (MEOWS CHART)**

**APT-SEPSIS**

**IF THE CHARTER SUGGESTS A RED FLAG OR TWO OR MORE YELLOW FLAGS, CALL FOR HELP AND START THE FAST-M ACTION PLAN**

**WOMEN VALUES RECORDED FREQUENCIES**

Parameter	Normal Range	Caution Range	Red Flag Range
Respiratory rate (per minute)	12-20	21-24	25 or more
Temperature (°C)	36.0-38.0	38.1-38.5	38.6 or more
Heart rate (per minute)	50-100	101-140	141 or more
Blood pressure (mmHg)	90/60-120/80	121/81-160/100	161/101 or more
Oxygen saturation (%)	95-100	91-94	90 or less
Urine output (ml/hr)	30 or more	20-29	19 or less

**Summary Section:**

**TOTAL YELLOW FLAGS:** [ ]

**TOTAL RED FLAGS:** [ ]

**ACTION PLAN (FAST-M):**

**SUSPECT SEPSIS, START FAST-M**

Suspect sepsis, start FAST-M



## Abnormal vital signs: the **RED** and **YELLOW** flag system

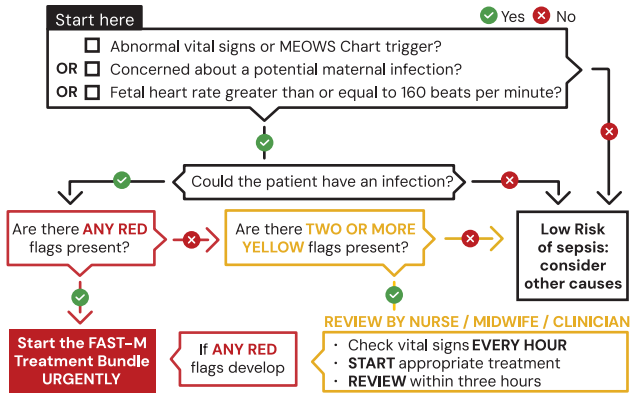
The MEOWS Chart can be used to flag abnormal vital signs of concern

Vital signs	Red flags	Yellow flags
Respiratory rate:	25 or more and 10 or less breaths each minute	21–24 breaths each minute
Temperature:	–	38°C or more and 35.9°C or less
Heart rate:	120 or more and 39 or less beats each minute	100–119 or 40–49 beats each minute
Systolic blood pressure:	160 or more* and 89 or less mmHg	140–159* or 90–99 mmHg
Diastolic blood pressure:	110 or more* and 39 or less mmHg	90–109 mmHg
Hours since last passed urine:	18 hours or less	12–18 hours
Urine output:	Less than 0.5ml/kg/hr	–
Appearance:	The patient has an altered mental state	The patient looks unwell

\*Although sepsis does not cause a high blood pressure, it still requires urgent attention

If a patient has **ANY RED** or **TWO OR MORE YELLOW** flags, they should be assessed urgently for sepsis using the **FAST-M Decision Tool**

# Using the FAST-M Decision Tool





## Treating sepsis using the FAST-M Treatment Bundle

In suspected sepsis, start treatment using the FAST-M Bundle:  
starting treatment early saves lives

When sepsis is  
suspected, use  
the FAST-M  
Treatment  
Bundle



Fluids



Antibiotics



Source  
control



Transfer  
if required



Monitoring



▶ Note

**The above treatments must  
be completed within one hour**

Suspect sepsis, start FAST-M

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## Other causes of abnormal vital signs

If sepsis is not suspected after using the **FAST-M Decision Tool** and clinical assessment, it is important to consider and treat other causes for abnormal vital signs that have triggered **RED** and **YELLOW** flags

### Common causes in pregnancy include:

Haemorrhage	Pulmonary embolism	Heart failure
Pre-eclampsia	Hypoglycaemia	



**Note**

**Considering and treating these conditions can also save lives. Always seek senior help if you are uncertain**





## Together, we can actively prevent and treat maternal sepsis and save lives



Speak to your APT-Sepsis champions if you have any questions about APT-Sepsis or ideas on how to improve the care of women and their babies at your facility

Visit **[www.apt-sepsis.org](http://www.apt-sepsis.org)** for more information and resources



## ACTIVELY PREVENT AND TREAT MATERNAL SEPSIS

