Antenatal Checkup

- Helps in identifying complications of pregnancy on time and their management
- Ensures healthy outcomes for the mother and her baby
- Necessary for well-being of pregnant woman and foetus

**Supplementation during Pregnancy**

- Folic acid tab 400 µg daily in 1st trimester
- Iron Folic acid tab daily from 14 weeks onwards
- For Anemic women, Iron Folic acid tab twice daily

**Registration and 4 minimum Antenatal Checkups during pregnancy and more if indicated**

<table>
<thead>
<tr>
<th>Registration &amp; 1st ANC</th>
<th>In first 12 weeks of pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd ANC</td>
<td>Between 14 and 26 weeks</td>
</tr>
<tr>
<td>3rd ANC</td>
<td>Between 28 and 34 weeks</td>
</tr>
<tr>
<td>4th ANC</td>
<td>Between 36 weeks and term</td>
</tr>
</tbody>
</table>

**First Visit**

- Pregnancy detection test
- Fill up MCP Card and ANC register
- Give filled up MCP Card and Safe Motherhood booklet to the woman
- Past and present history of any illness/complications in this or previous pregnancy
- Physical examination (weight, BP, respiratory rate) and check CVS/Resp system, breast, pallor, jaundice and oedema
- Two doses of Inj. TT 4 weeks apart whenever pregnancy is detected

**Investigations**

- Hb%, urine examination
- Blood group including Rh factor
- RPR/VDRL, HBsAg, HIV screening
- RDK test for malaria (in endemic areas)

**Information for pregnant woman and her family**

- Encourage institutional delivery/ensure delivery by identification of SBA
- Explain entitlement under JSSK & JSY
- Identify the nearest functional PHC/FRU for delivery
- High risk pregnancy to be attended in District Hospital and Medical College
- Pre-identification of referral transport and blood donor

**At All Visits**

- Physical examination
- Abdominal palpation for foetal growth, foetal lie and auscultation of foetal heart sound

**Investigations**

- Hemoglobin estimation
- Urine exam for protein, sugar and micro exam
- At 24–28 weeks blood sugar (OGCT)– 2nd or 3rd visit

**Counselling for**

- Adequate rest, nutrition and balanced diet
- Recognition of danger signs during pregnancy, labour and after delivery or abortion and signs of normal labour
- Initiation of breastfeeding immediately after birth
- Counselling for small family norm
- Use of contraceptives (birth spacing or limiting) after birth/abortion

For use in medical colleges, district hospitals and FRUs
Universal Infection Prevention Practices

Use of protective attire

Hand Washing

Ensuring general cleanliness (walls, floors, toilets and surroundings)

Waste Disposal

Bio-Medical Waste Disposal

1. Segregation
2. Disinfection
3. Proper storage before transportation
4. Safe disposal

Bio-Medical Waste Disposal

Yellow Bag
Human tissue, placenta, products of conception, used swabs/gauze/ bandage, other items (surgical waste) contaminated with blood

Red Bag
Used mutilated catheters, I.V bottles and tubes, syringes, disinfected plastic gloves, other plastic material

Black Bag
Kitchen waste, paper bags, waste paper/ thermocol, disposable glasses and plates, left over food

Proper handling & disposal of sharps
All needles/sharps/I.V. cannulae/broken ampules/ blades in puncture proof container

All plastic bags should be properly sealed, labeled and audited before disposal

Liquid Medical Waste (LMW) Disposal

- Avoid splashing
- Treat the used cleaning/disinfectant solution as LMW
- Pour LMW down a sink/drain/flushable toilet or bury in a pit
- Rinse sink/drain/toilet with water after pouring LMW
- Pour disinfectant solution in used sink/drain/toilet at the end of each day (12 hrly)
- Decontaminate LMW container with 0.5% bleaching solution for 10 minutes before final washing

PEP (Post Exposure Prophylaxis)
To be given in case of accidental exposure to blood and body fluid of HIV +ve woman

For use in medical colleges, district hospitals and FRUs
Management of PPH

- Shout for help, Rapid Initial Assessment - evaluate vital signs: PR, BP, RR and Temperature
- Establish two I.V. lines with wide bore cannulae (16-18 gauge)
- Draw blood for grouping and cross matching
- If heavy bleeding P/V, infuse RL/NS 1 L in 15-20 minutes
- Give O₂ @ 6-8 L /min by mask, Catheterize
- Check vitals and blood loss every 15 minutes, monitor input and output

- Give Inj. Oxytocin 10 IU IM (if not given after delivery)
- Start Inj. Oxytocin 20 IU in 500 ml RL @ 40-60 drops per minute
- Check to see if placenta has been expelled

**Placenta not delivered**

- Continue Oxytocin
- Do P/V examination to rule out inversion of uterus
- Attempt controlled cord traction

**Placenta delivered**

- Massage uterus
- Examine placenta and membranes for completeness (if available)
- Explore uterus for retained placental bits – if present, evacuate uterus
- P/A for uterine consistency

- Uterus well contracted (Traumatic PPH)
  - Look for cervical/ vaginal/ perineal tear - repair tear, continue Oxytocin
  - Scar dehiscence / rupture uterus – Laparotomy
- Manage as Atonic PPH Chart

**Placenta not delivered**

- Do manual removal of placenta under anesthesia
- Give IV antibiotics

**Placenta delivered**

- Continue uterine massage and Oxytocin drip

**Uterus soft flabby (Atonic PPH)**

- Give IV antibiotics

**If bleeding continues check for Coagulopathy**

Blood transfusion if indicated

*For use in medical colleges, district hospitals and FRUs*
Processing of Items for Reuse
Instruments, Gloves and Glass Syringes

DECONTAMINATION
Soak in 0.5% chlorine solution for 10 min
Thoroughly wash and rinse instruments

Preferred Method
Sterilization

Chemical
- Soak for 10-24 hrs in 2% Gluteraldehyde
- Rinse with sterile water and dry
- Used for endoscopes

Autoclave
- 106 kPa pressure, 121°C
- 20 minutes unwrapped
- 30 minutes wrapped
- Used for linen, rubber tubing, gloves, cotton, instruments, and surgical dressing etc.

Hot Air Oven
- 160°C
- Holding time 1 hour
- Used for glassware and sharps

Acceptable Method
High Level Disinfection (HLD)

Boil or Steam
- Lid on, 20 minutes after water boils
- Articles should be completely immersed in water
- Used for gloves, instruments and glass syringes

Chemical
- Soak for 20 minutes in 2% Gluteraldehyde
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Chemical
- Soak for 20 minutes in 2% Gluteraldehyde
- Rinse with sterile water and dry
- Used for endoscopes

Preparation of 1 Litre Bleaching Solution

Wear utility gloves and plastic apron

Take 1 L water in a plastic bucket
Make thick paste in plastic mug with 3 level teaspoons (15 g) bleaching powder and some water from bucket
Mix paste in water to make 0.5% of chlorine solution

Maintain same ratio for large volumes
Make fresh solution in every shift and preferably keep covered

For use in medical colleges, district hospitals and FRUs
Postnatal Care

Postnatal care ensures well-being of the mother and the baby

**Service Provision During Check Up(s)**

<table>
<thead>
<tr>
<th>1st Check up</th>
<th>1st day of delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Check up</td>
<td>3rd day of delivery</td>
</tr>
<tr>
<td>3rd Check up</td>
<td>7th day of delivery</td>
</tr>
<tr>
<td>4th Check up</td>
<td>6 weeks after delivery</td>
</tr>
</tbody>
</table>

**Additional check ups for Low Birth Weight babies on 14th, 21st and 28th days**

**Mother**
- Heavy bleeding
- Breast engorgement
- Pallor, pulse, BP and temperature
- Urinary problems and perineal tears
- Excessive bleeding (PPH)
- Foul smelling discharge (Puerperal sepsis)
- Danger signs
- Correct position of breast feeding and care of breast and nipples
- Exclusive breast feeding for 6 months
- Nutritious diet and calcium rich foods
- Maintaining hygiene and use of sanitary napkins
- Choosing contraceptive method
- Hb% estimation
- Give IFA supplementation to the mother for 3 months

**Newborn**
- Confirm passage of urine (within 48 hours) and stool (within 24 hours)
- For convulsions, diarrhea and vomiting
- Activity, color and congenital malformation
- Temperature, jaundice, cord stump and skin for pustules
- Breathing, chest in drawing
- Suckling by the baby during breast feeding
- Keeping the baby warm
- No bathing on first day
- Keep the cord stump clean and dry
- Additional check up for the Low Birth Weight babies
- On importance of Routine Immunisation
- Danger signs in baby
- Give 0 dose BCG, OPV, Hepatitis B
- Give Inj. Vitamin K 1 mg IM

For use in medical colleges, district hospitals and FRUs
Management of Atonic PPH

- Placenta expelled, uterus soft and flabby
- Traumatic causes excluded

- Shout for help, Rapid Initial Assessment to evaluate vital signs: PR, BP, RR and Temperature
- Establish two I.V. lines with wide bore cannulae (16-18 gauge)
- Draw blood for grouping and cross matching

- Perform continuous uterine massage
- Give Inj. Oxytocin 20 IU in 500 ml RL/NS @ 40 drops/minute
- Do not give Inj. Oxytocin as IV bolus

- If heavy bleeding, infuse NS/RL 1L in 15-20 minutes
- Give O₂ @ 6-8 L/min by mask, Catheterize
- Check vitals & blood loss every 15 minutes, Monitor input & output

Uterus still not contracted

- If bleeding P/V not controlled
  - Inj Ergometrine* 0.2 mg IM or IV slowly (contraindicated in high BP, severe anemia, heart disease)
  - Inj Carboprost* (PGF2) 250 µg IM (contraindicated in Asthma)
  - Tab Misoprostol (PGE1) 800 µg Per rectal

Bleeding not controlled by drugs

- Explore uterine cavity for retained placental bits
- Perform bimanual compression
- If fails perform compression of abdominal aorta

Bleeding controlled by drugs

- Repeat uterine massage every 15 minutes for first 2 hours
- Monitor vitals closely every 10 minutes for 30 minutes, every 15 minutes for next 30 minutes and every 30 minutes for next 3-6 hours or until stable
- Continue Oxytocin infusion (Total Oxytocin not to exceed 100 IU in 24 hours)

- Check for coagulation defects
- If present give blood products

- Uterine Tamponade (Indwelling Catheters/Condom/Sangstaken tube/Ribbon gauze packing) as life saving measure

- Surgical intervention
  - Uterine compression suture (B-Lynch)
  - Uterine/Ovarian A ligation
  - Hysterectomy

- Continue vital monitoring
- Transfuse blood if indicated
- Monitor Input/Output

* Wherever needed

Inj. Ergometrine can be repeated every 15 minutes (max 5 doses = 1 mg)
Inj Carboprost can be repeated every 15 minutes (max 8 doses = 2 mg)

For use in medical colleges, district hospitals and FRUs
Neonatal Resuscitation

Birth

- Term gestation?
- Amniotic fluid clear?
- Breathing or crying?
- Good muscle tone?

Yes

Routine care

- Place baby on mother's abdomen
- Dry and cover mother and baby
- Wipe mouth and nose
- Clamp and cut cord (after 1-3 minutes of birth)
- Watch color and breathing
- Initiate breastfeeding

If any no

- Cut cord
- Shift to newborn corner, provide warmth
- Position the baby
- Clear airway (oropharyngeal suction)*
- Dry, stimulate, reposition

Evaluate respiration, heart rate and color

- Breathing, HR > 100
- But Cyanotic

Give supplemental oxygen by face mask

- Persistent cyanosis

Post-Resuscitation Care

- Place baby on mother's abdomen
- Dry and cover mother and baby
- Wipe mouth and nose
- Clamp and cut cord (after 1-3 minutes of birth)
- Watch color and breathing
- Initiate breastfeeding

Approximate time

30 secs

- Breathing
- HR > 100 and Pink

Observe

- Continue bag and mask ventilation*
- Administer chest compression

HR < 60

- Administer epinephrine if needed 1 in 10000, 0.1-0.3 ml/kg IV/umbilical vein
- Vol expander NS/RL 10 ml/kg in 5-10 minutes through umbilical vein

Post-Resuscitation Care

- Place baby on mother's abdomen
- Dry and cover mother and baby
- Wipe mouth and nose
- Clamp and cut cord (after 1-3 minutes of birth)
- Watch color and breathing
- Initiate breastfeeding

*Endotracheal Intubation can be done at these stages by Pediatrician/Anesthetist if available

For use in medical colleges, district hospitals and FRUs
Active Management of Third Stage of Labour (AMTSL)

- Mandatory for all deliveries (vaginal and abdominal)
- Exclude presence of another baby after delivery of first baby

**Step 1**
Inj. Oxytocin 10 units IM immediately after birth

**Step 2**
- Controlled cord traction once uterus is contracted and cord is cut
- Apply cord traction (pull) downwards and give counter-traction with other hand by pushing uterus up towards umbilicus

**Step 3**
Uterine massage to keep uterus contracted
Breastfeeding

Correct Attachment
Baby well attached to the mother’s breast
- Chin touching breast
- Mouth wide open
- Lower lip turned outward
- More areola visible above than below the mouth

Wrong Attachment
Baby poorly attached to the mother’s breast

- Start breastfeeding within 1 hour of delivery
- Feed on demand
- Feed completely on one breast, then shift to other breast

Exclusive breastfeeding for 6 months; continue breastfeeding for 2 years

For use in medical colleges, district hospitals and FRUs
Antenatal Examination

Preliminaries

- Respect woman’s rights
- Explain procedure and ensure privacy
- Ensure bladder is empty
- Examiner stands on right side
- Abdomen is fully exposed from xiphisternum to pubis symphysis
- Keep woman’s legs straight
- Centralise uterus

FUNDAL HEIGHT

Symphsio-fundal height in cms corresponds to weeks of gestation after 28 weeks

- 36wk
- 40wk
- 32wk
- 28wk
- 24wk
- 20wk
- 16wk
- 12 wk

- Xiphisternum
- Umbilicus
- Pubis Symphysis (Uterus becomes an abdominal organ)

Correct dextrorotation

Ulnar border of left hand is placed on upper most level of fundus and marked with pen

Measure distance between upper border of pubic symphysis and marked point

GRIPS

Legs are slightly flexed and separated for obstetrical grips

- Fundal Grip
- Lateral Grip
- First Pelvic Grip
- Second Pelvic Grip

Foetal heart sound is usually located along the lines as shown

For use in medical colleges, district hospitals and FRUs
For use in medical colleges, district hospitals and FRUs
**Vaginal Bleeding (Before 20 Weeks)**

**Light Bleeding**
- Mild pain
- No H/O expulsion of Product of Conception
- Uterus size corresponds to Period of Gestation
- Os closed

**Heavy Bleeding**
- H/O expulsion of Product of Conception
- Uterus normal size/bulky
- Tenderness in fornix/mass

**Any Bleeding with**
- H/O passage of vesicles
- Vesicular mole
- Septic abortion

### Light Bleeding
- Threatened abortion
  - USG
  - Foetus viable
    - Bleeding persists – repeat USG for foetal viability after 1 week
    - Foetus not viable
      - Missed abortion
        - Uterus < 12 wk size
          - Manual Vacuum Aspiration/Electric Vacuum Aspiration
        - Uterus > 12 wk size
          - Misoprost 400 mcg oral 4 hourly max 5 doses (2000 mcg)
            - Check for completeness
              - If still bleeding-MVA/EVA/check curettage
  - Threatened abortion
    - Reassure
    - Rest and abstinence
    - Bleeding stops – routine ANC

### Heavy Bleeding
- Complete abortion
  - USG
  - Observe and follow up
    - Ectopic pregnancy
      - Confirm by UPT and USG
        - Manage as ectopic pregnancy

### Any Bleeding with
- H/O passage of vesicles
  - Vesicular mole
  - Septic abortion
    - Septic abortion
      - Rapid Initial Assessment
      - Resuscitate if in shock
      - Transfuse blood if needed
      - Incomplete / Inevitable abortion
        - Uterus < 12 wk size
          - Manual Vacuum Aspiration
          - Misoprost 400 mcg oral 4 hourly max 5 doses (2000 mcg)
            - Check for completeness
              - If still bleeding-MVA/EVA/check curettage
        - Uterus > 12 wk size
          - Manual Vacuum Aspiration
          - Evacuate uterus
            - Start 10-20 U Oxytocin in 500 ml NS/RL @ 40-60 drops/min
            - Evacuate uterus

---

Counsel to avoid pregnancy for at least 6 months
Advise contraception

For use in medical colleges, district hospitals and FRUs
# Antepartum Haemorrhage
(Vaginal bleeding after 20 weeks)

**Rapid Initial Assessment**
- monitor PR, BP, RR
- Resuscitate if necessary and start IV fluids

**Ask for pain; check for uterine contour/tenderness**
- Exclude local causes by P/S examination

**Arrange & transfuse blood if needed**
- Confirm diagnosis by USG if available

---

**Placenta Previa**
**No PV to be done**

**Immediate LSCS**
- Bleeding PV heavy and continuous irrespective of gestational age
- Term pregnancy with Type II post, III, IV placenta
- Dead/Malformed foetus (irrespective of POG) with Type III and IV placenta
- Term pregnancy with malpresentation or other obstetric indication

**Expectant Management**
- Bleeding PV light/stopped
- POG < 37 weeks
- Live baby, no gross foetal anomaly
- Women not in labor

**Monitor for**
- Hospitalize
- Correct Anemia
- Arrange Blood
- Feto-maternal surveillance
- Steroids if POG < 34 weeks

**Type I, II Ant**
- ARM + Oxytocin
- Deliver vaginally

**Type II post, III and IV**
- LSCS

**Terminate if 37 weeks or persistent/heavy bleeding PV**
- P/V under double set up in OT

---

**Abruptio Placentae**

**LSCS**
- Heavy bleeding PV with vaginal delivery not imminent
- Fetal distress

**ARM + Oxytocin**
- Bleeding PV light/moderate
- FHS normal
- Dead foetus

**Monitor for**
- Hemorrhage and shock
- Coagulopathy
- Renal failure

**Type I, II Ant**
- ARM + Oxytocin
- Deliver vaginally

**Type II post, III and IV**
- LSCS

---

**Rupture Uterus**

**Bleeding PV light/moderate**
- H/o labor followed by sudden cessation of pains
- Pous LSCS
- Tender abdomen
- Loss of uterine contour
- FHS absent
- Foetal parts superficially palpable

**Laparotomy and repair of uterus/Hysterectomy**

**If previous LSCS with Placenta previa keep Placenta accreta in mind**

**Be prepared for PPH in all cases of APH**

*For use in medical colleges, district hospitals and FRUs*
**Hand Washing**

**Routine Hand Washing**

- Using plain soap and water for about 30 – 60 seconds
  - Before touching (or handling) neonate
  - Before and after examining any patient
  - When hands visibly soiled
  - After removing gloves

0. Wet hands with water
1. Apply enough soap. Cover all hand surfaces
2. Rub hand palm to palm
3. Right palm over left dorsum with interlaced fingers and vice versa
4. Palm to palm with fingers interlaced
5. Backs of finger to opposing palms with fingers interlocked
6. Rotational rubbing of left thumb clasped in right palm and vice versa
7. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice-versa
8. Rinse hands with water
9. Dry hands thoroughly with a single use towel
10. Use towel to turn off faucet
11. Your hands are now safe

**Surgical Hand Washing**

- Medicated soap and water for about 3-5 minutes
  - Before all invasive procedures including surgery
  - Repeat after 4 cases/1 hour which ever is earlier

1. Remove all jewelry on your hand and wrists. Adjust the water to a warm temperature and wet your hands and forearms thoroughly
2. Rub hand palm to palm
3. Clean each fingernail with a stick or brush. It is important for all surgical staff to keep their fingernails short
4. Holding your hands up above the level of your elbow, apply the antiseptic. Using a circle motion, begin at the fingertips of the hand and lather and wash between the fingers, continue the fingertip to elbow. Repeat this with the second hand and arm. Continue washing in this way for 3-5 minutes
5. Rinse each arm separately, fingertips first, holding your hands above the level of your elbow
6. Using a sterile towel, dry your hands and arms from fingertips to elbow using a different side of the towel on each arm
7. Keep your hand above the level of your waist and do not touch anything before putting on surgical gloves

**Alcohol Hand Rub**

- With Alcohol for about 20 – 30 seconds
  - Alternative for routine hand wash in between examination and procedures if hands not visibly soiled

For use in medical colleges, district hospitals and FRUs.
**Eclampsia**

**Pregnancy with Convulsion; BP≥140/90 mmHg; Proteinuria**

### Immediate Management

1. Keep her in quiet room in bed with padded rails on sides
2. Position her on left side, Oropharyngeal airway to be kept patent.
3. Ensure preparedness to manage maternal and foetal complications

Oxygen by mask at 6-8 l/min, Start IV fluids-RL/NS at 60 ml/hr, Catheterize with indwelling catheter

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### Anti Hypertensive

- If Diastolic BP ≥ 100 mmHg
- Strict BP monitoring
- Oral Nifedipine 10 mg stat, repeat after 30 minutes if needed (if pt unconscious through ryles tube) OR
- Inj Labetalol 20 mg IV bolus, repeat 40 mg after 10 minutes again repeat 80 mg every 10 minutes if needed (maximum 220 mg) with cardiac monitoring

### Anti Convulsants

- Magnesium Sulfate is drug of choice

  **Loading dose:**
  1. 50% of 4 gm diluted to 20% (8 ml drug with 12 ml NS) to be given slowly IV in 5 minutes
  2. 5 gm IM (50%) each buttock with 1 ml of 2% Xylocaine (Total 10 gm)
  3. If recurrent fits after 30 minutes of loading dose – repeat 2 gm 20% (4 ml drug with 6 ml NS) slow IV in 5 minutes

  **Maintenance dose:**
  1. 5 gm IM (50%) alternate buttocks after monitoring every 4 hourly

  **Monitor:**
  1. Presence of patellar jerks
  2. Resp. rate (RR) ≥ 16/min
  3. Urine output ≥ 30 ml/hr in last 4 hours

  **Continue till** 24 hours after last fit/delivery which ever is later

  - If Patellar jerk absent or urine output < 30 ml/hr withhold Magsulf and monitor hourly – restart maintenance dose if criteria fulfilled
  - If RR < 16/min, withhold Magsulf, give antidote – Calcium Gluconate 1 gm IV 10 ml of 10% solution in 10 minutes

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### LSCS:

- If fits not controlled/ status eclampticus
- Failed Induction
- Foetal distress
- Any other obstetric indication
- Deteriorating maternal condition

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For use in medical colleges, district hospitals and FRUs
# Labour Room Sterilization

**General Measures**
- Unnecessary entries to the Labour Room must be restricted
- Labour Room doctors and paramedics should wear mask all the time
- Proper clothing of Labour Room personnel necessary including cap, mask, shoes/slippers and gown at the time of delivery
- Individual autoclaved instrument set should be provided for each delivery
- Random swab sampling to be taken from surfaces and disinfected articles monthly
- Air quality sampling to be done by Settle plate method monthly

**Labour Room Sterilization**

- Sterilization is a process which should be practised and adhered to by all individuals at all times
- Labour Room should be centrally air conditioned with air handling unit
- Alternatively cross ventilation with exhaust is required if air conditioning is not present

### Cleaning and Disinfection

- Cleaning and disinfection daily at beginning of day after wearing utility gloves

#### Cleaning after each delivery

- Cleaning after each delivery
- Clean table top with Phenol/ Bleaching solution

#### Fogging

- Fogging
- Need based
  - Following construction/renovation work
  - Any infectious outbreak
- 
  - \( \text{H}_2\text{O}_2 \) based commercially available disinfectant for fogging and mopping
  - If fogger not available spray or mop liberally in room, table tops etc
  - Allowing 30 minutes contact time (shut down of Labour Room not required)

### Cleaning and Disinfection Daily

- Clean the floor and sinks with detergent (soap water) and keep floor dry
- Clean table tops and others surfaces like light shades, almirahs, lockers, trolley etc with low level disinfectant Phenol (Carbolic Acid 2%)
- Clean monitor machines with 70% alcohol
- In case of spillage of blood, body fluids on floor, absorb with newspaper (discard in yellow bin), soak with bleaching solution for 10 minutes and then mop
- Discard placenta in yellow bins
- Discard waste and gloves in proper bins and not on floor
- Discard soiled linen in laundry basket and not on floor. Disinfect with bleaching solution followed by washing and autoclaving
- Mop the floor every 3 hours with disinfectant solution

### General Measures
- Cleaning and disinfection daily at beginning of day after wearing utility gloves
- Clean table top with Phenol/ Bleaching solution
- Fogging

- **Cleaning after each delivery**
  - Clean table top with Phenol/ Bleaching solution

- **Fogging**
  - Need based
    - Following construction/renovation work
    - Any infectious outbreak
  - \( \text{H}_2\text{O}_2 \) based commercially available disinfectant for fogging and mopping
  - If fogger not available spray or mop liberally in room, table tops etc
  - Allowing 30 minutes contact time (shut down of Labour Room not required)
Operation Theatre Sterilization

- Sterilization is a process which should be practised and adhered to by all individuals at all times
- OT should be centrally air conditioned with air handling unit
- Alternatively cross ventilation with exhaust is required if air conditioning not present

**General Measures:**
- Access to OT should be through ‘Buffer Zone’
- Unnecessary entries to the OT must be restricted
- Proper occlusive clothing of OT personnel necessary
- Instruments to be sterilized by autoclaving
- Each case should have separate instrument sets

**Quality Control:**
- Microbiological sample should be taken randomly at 2 months interval by Settle plate method
- Random microbiological sampling to be done by Settle plate/Air sampling method
  - Following construction/renovation work
  - Any infectious outbreak
- Any colony of Fungus/Staph aureus needs to be reported. If found positive, servicing of air handling unit and/or AC duct recommended

- Microbiological sample should be taken randomly at 2 months interval by Settle plate method
- Random microbiological sampling to be done by Settle plate/Air sampling method
  - Following construction/renovation work
  - Any infectious outbreak
- Any colony of Fungus/Staph aureus needs to be reported. If found positive, servicing of air handling unit and/or AC duct recommended

**Cleaning and disinfecting daily at beginning of day after wearing utility gloves**
- Clean the floor and sinks with detergent (soap water) and keep floor dry
- Clean table tops and others surfaces like light shades, almirahs, lockers, trolley etc with low level disinfectant Phenol (Carbolic acid 2%)
- Clean monitor machines with 70% alcohol
- In case of spillage of blood, body fluids on floor, absorb with newspaper (discard in yellow bin), soak with bleaching solution for 10 minutes and then mop
- Discard waste and gloves in proper bins and not on floor
- Discard soiled linen in laundry basket and not on floor. Disinfect with bleaching solution followed by washing and autoclaving
- Mop the floor every 3 hours with disinfectant solution

**Fogging weekly**
- Aldehyde based spray is used
- Sprayed or mopped liberally in room, table tops etc
- Allowing 30 minutes contact time (shut down of OT not required)
Pre Eclampsia

**Mild Pre eclampsia**
- BP ≥ 140/90 mm Hg
- Proteinuria ≥ traces to 2+ or ≥ 300 mg/24 hrs

- Hospitalize to evaluate and investigate
- Reassure, no restriction on routine salt intake
- Rest with limited activity
- Start anti hypertensive when DBP ≥ 100 mm Hg
- Tab Alpha Methyl Dopa 250–500 mg 6-8 hourly (max 2 gm/day) OR
- Tab Labetalol 100 mg BD (max 2.4 gm/day)
- Investigate — Hgm, LFT, KFT, S Uric acid, S LDH and fundus exam
- BP and urine output monitoring

- Continue OPD management in mild disease
- Continue hospitalization in worsening hypertension/proteinuria
- Regular foetal + maternal surveillance (foetal movement count, NST, AFI, wt gain, BP and urine output monitoring, weekly Hgm, LFT, KFT, S Uric acid and S LDH)
- Maintain DBP 90-100 mm Hg
- No foetal compromise
- Deliver at 38-39 weeks

**Severe Pre eclampsia**
- BP ≥ 160/110 mm Hg
- Proteinuria ≥ 3+ by dipstick or ≥ 5 gm/24 hrs
- Headache, epigastric pain, blurring of vision, oliguria, pulmonary oedema, thrombocytopenia, IUGR. Creatinine > 1.2 mg/dl, ↑ serum transaminase levels, S LDH> 600 IU/L

- Urgent hospitalization
- Start anti hypertensive
- Oral Nifedepine 10 mg stat, repeat after 30 minutes if needed OR
- Inj Labetalol 20 mg IV bolus, repeat 40 mg after 10 minutes if BP not controlled again repeat 80 mg every 10 minutes (max 220 mg) with cardiac monitoring

- Continue Tab Nifedepine 10 mg TDS (max 80 mg/day) OR Tab Labetalol 100 mg BD (max 2.4 gm/day)
- Investigate — Hgm, LFT, KFT, S Uric acid, S LDH and fundus exam
- Urine output charting
- BP Monitoring

**BP controlled**
- Explain maternal and foetal adverse effect to relatives
- Regular maternal + foetal surveillance

**BP uncontrolled**
- Worsening of clinical / biochemical parameters
- Signs of foetal compromise

**Foetal salvage difficult**
- Inj. Betamethasone 12 mg IM
- Repeat 12 mg after 24 hours

- Treatment should be individualised

- < 24 weeks
- ≥24 -<34 weeks
- ≥34 weeks
- ≥37 weeks

- No role of diuretics

- If disease severe, manage as severe pre eclampsia

- Deliver at 38-39 weeks

- Terminate at 37 weeks

- Terminate pregnancy
- Induction of labor as per Bishop score and give Magsulf as in Eclampsia

- For use in medical colleges, district hospitals and FRUs