Follow **Obstetrical and Gynecologic Emergencies Protocol 4608** and **MAMP Protocol 1201/2201,** as applicable, with the following additions:

A. Preterm Labor.

1. General Supportive Measures
   a. Transport patient on left side.
   b. Monitor vital signs every 15 minutes
   c. Verify and record fetal heart rate every 15 minutes.
   d. Frequently assess labor pattern (intensity, duration, and frequency of contractions).
   e. Ask physician to assess cervical status prior to departure from referring facility to verify safety of transfer. *Patients in active labor who are dilated > 5 cm are generally not candidates for air medical transfer*.
   f. Assess for vaginal discharge (bloody show, amniotic fluid, meconium).

2. Medical Treatment. Treatment of a patient in *active, pre-term labor with contractions* is based upon what has already been done at the sending facility. If treatment has not been started, consider the following:
   a. Hydrate with 500 ml bolus of 0.9% normal saline, then maintain IV at 125 ml/hour. If tocolytic is needed, proceed as follows.
   b. Terbutaline (*Brethine*) 0.25 mg SQ and every 2 hours as needed. (Terbutaline may be used in addition to magnesium sulfate.)

   c. **CCT Class 1:**
   If still contracting, consider magnesium sulfate load and drip. *Note: If already on magnesium sulfate drip, skip to [Step 2.d.] below.* Magnesium sulfate loading dose is typically 4 gm IV over 10-15 min; then, magnesium sulfate drip of 2 gm/hour, increase by 0.5 gm/hour every 15 – 30 min if contractions persist. Stop increases in infusion rate if significant side effects develop,* loss of deep tendon reflexes (DTRs), if contractions stop, or when max dose of 4 gm/hour is reached.
   **Note: If patient develops magnesium sulfate toxicity [decreased mental status or respiratory depression], stop magnesium sulfate drip and consider calcium gluconate 10% 1 gm IVP slowly over 3-5 minutes until depressive effects are reversed.*

   d. If already on magnesium sulfate infusion, continue infusion per Step 2.c. above. Titrate as in Step 2.c. above if needed.

B. Premature Rupture of Membranes.

1. General Supportive Measures.

Perform the General Supportive Measures as in Step A.1. above.

2. Medical Treatment

a. IV 0.9% normal saline at 125 ml/hour via large bore IV

b. Consider the need for tocolysis if contractions are present (see Preterm Labor Guideline above).

C. Pre-Eclampsia.

1. General Supportive Measures

a. Transport patient on her left side.

b. Monitor vital signs and DTRs every 15 minutes.

c. Monitor ECG

d. Verify and record fetal heart rate every 15 minutes

e. Assess patient for level of consciousness, visual disturbances, nausea, headache, pupillary reaction, edema, pulmonary status, peripheral perfusion, and recent urinary output.

f. Assess patient for labor.

g. Protect patient from excessive stimuli, like from sirens (or rotor noise in aeromedical environment) using headphones, eye shields if available).

2. Medical Treatment

General principles:

a. Elevated blood pressure should not be treated unless diastolic > 110, and ideally treatment should not drop diastolic <90.

b. Only 5% of pre-eclamptics develop eclampsia, but all should have magnesium sulfate therapy initiated as seizure prophylaxis.

c. Transport patient with 2 IV's, large bore, with total fluids at 100 ml/hour using normal saline.

CCT Class 1:

d. If ***not*** already on magnesium sulfate, consider magnesium sulfate loading dose of 4 gm slow IV push over 10-15 minutes, using 20% solution**.** Assess vital signs, DTRs, and patient response every 5 minutes during IV push. After load is given, then consider magnesium sulfate drip at 2 gm/hour on pump.

e. If diastolic blood pressure > 110, consider Hydralazine (*Apresoline*) 5 mg slow IV push. May repeat every 15 minutes if needed to maintain diastolic BP at approximately 90-100.

f. If eclampsia develops, implement **Eclampsia Guideline** below.

D. Eclampsia (Pre-eclampsia with seizure).

1. General Supportive Measures

a. Monitor vital signs every 15 minutes
b. Monitor ECG
c. Place patient on left side if possible to prevent aspiration, and enhance uterine blood flow.
d. Protect patient from excessive stimulation (use headphones if available).
e. Assess mental status, pulmonary status, and peripheral perfusion.
f. Maintain airway: Consider oral airway. Consider intubation if seizing continuously, or at risk for aspiration, or hypoxic, or if respiratory depression. Use 100% oxygen.
g. Prevent patient from self-injury during seizure.
h. Verify and record fetal heart rate every15 minutes.

2. Medical Treatment

a. IV normal saline via 2 large bore IV's, KVO.

b. Eclamptic seizure (tonic-clonic):

CCT Class 1:

If not already on magnesium, consider magnesium sulfate loading dose of 4 gm slow IV push at rate not to exceed 1 gm/min., using 20% solution, then magnesium sulfate drip at 2 gm/hour on pump**.** If seizure continues after above, or reoccurs, consider additional magnesium sulfate 2 gm slow IV push at rate not to exceed 1 gm/min and if reflexes still brisk, increase magnesium sulfate drip to 3 gm/hour.

c. If seizure continues, give diazepam (*Valium*) 5 mg IV push.

d. Observe closely for drop in BP and hypoventilation. Be prepared to intubate and/or fluid resuscitate.

E. Emergency Delivery. Follow **Ob/Gyn Emergencies Protocol 4608** with the following addition:

1. Post partum hemorrhage. If postpartum hemorrhage occurs
   a. Massage uterus bimanually.

CCT Class 1:

b. Consider oxytocin (*Pitocin*) 20-40 units in 1000 ml of normal saline, wide open.

c. Assess uterine tone and massage as needed to maintain a firm fundus.