Labor and Delivery Prep Questions

1. Describe the stages and phases of labor and key nursing care for each stage.

Stage 1
Latent phase - onset of regular contractions; mild lasting 20-40 sec with freq of 3-30min; women are not too uncomfortable yet; responsive to teaching about breathing and other tech for coping w/labor contractions; as long as there are no contraindications (vaginal bleeding) women are encouraged to ambulate b/c upright positions shorten labor; nurse should offer clear liquids or ice chips at freq intervals; encourage freq position changes; orient family to room, equipment, and procedures; not uncommon for women to vomit during first stage just reassure the women and provide oral care.

Active phase - contractions have freq of 2-3min a duration of 50-60 sec and moderate intensity; contractions need to be palpated every 10-15 min; the cervix dilates from 4-7cm and vaginal discharge and bloody show increase; women should be encouraged to void every 1-2hrs b/c full bladder can interfere w/fetal descent; FHR is ascultated every 30min and 15min for high risk; if water hasn’t broke yet then CNM may do so during this phase; the fluid should be clear with no odor; encourage pt to maintain breathing patterns, quiet environment, give back rubs, cool cloth to forehead, support with pillows.

Transition Phase - contractions are every 2-3min, duration 60-90sec, and intensity is strong, cervical dilation 8-10cm and heavy amount of bloody show is usually present; contractions are palpated every 15min, maternal BP, pulse and respirations are taken every 30 min and FHR every 15min; pt becomes less aware of what’s going on and intensely aware of contractions, women’s ability to speak in coherent sentences can be impaired; women’s mouth can become dry due to rapid breathing so encourage to breathe in through nose and out mouth; encourage rest between contractions, encourage and ensure her that she is doing a good job.

Stage 2 (complete) - cervix is completely dilated (10cm) and ends with birth of infant; completed w/in 2 hrs; women have urge to push and crowning occurs, women feel burning sensation as the perineum distends; feels out of control, helpless, panicky, or happy that she can take more active role in pushing; assist women in pushing, assume position of comfort, provide encouragement and praise for efforts and keep couple informed of progress.

Stage 3 - focuses on providing initial newborn care and assisting with delivery of the placenta; first priority is to maintain respirations so newborn is placed in side position to aid drainage of mucus form the nasopharynx and trachea and also suctioned with bulb syringe; second priority to maintain warmth so newborn is dried immediately with warmed soft infant blankets.

Stage 4 - period immediately following expulsion of the placenta, usually lasts 1-4 hrs after birth or until vitals are stable, immediately after placenta is expelled, the episiotomy or vaginal lacerations are repaired; uterus palpated every 15min for an hour until bleeding is with in normal limits; cold pack may be placed on perineum to decrease swelling/bruising, if mom prefers to shower after birth, the nurse can assist her as needed and change the bed linens while mother is up; nurses responsibility to assess moms BP, pulse, firmness and position of fundus and amount and character of vaginal blood flow every 15min for first 1-2hrs; fundus should be firm and below the umbilicus, the umbilicus should not be messaged unless boggy (pooling of blood occurs in the vaginal vault and may result in formation of clots or heavy flow when the mother ambulates for the first time).
2. Describe the maternal systemic response to labor.

System response to labor

**Cardiovascular**-in pregnancy resting pulse rate increases by 10-18bpm; during labor significant increase in cardiac output; each strong contraction greatly decreases the blood flow in the branches of the uterine artery that supply the placenta, this leads to redistribution of about 300-500ml of blood into peripheral circulation resulting in increasing of systolic and diastolic pressure, slowing of pulse rate, and increase of about 30% in cardiac output; women will have elevated cardiac output for at least 24hrs after birth

**Blood pressure**-systolic BP rises during uterine contractions, may also rise as a result of fear, apprehension and pain

**Fluid and electrolyte balance**-diaphoresis occurs during labor, hyperventilation also occurs from insensible water loss; muscle activity elevates body temp, which increases sweating and evaporation from the skin, with increased water loss, maintaining adequate oral fluids is important

**Respiratory system**-approx 50% of increased oxygen is used by the placenta, uterus and fetus; as anxiety and pain for contractions increase, hyperventilation freq occurs; by end of first stage women have developed metabolic acidosis compensated by respiratory alkalosis and by time baby is born there is metabolic acidosis uncompensated by respiratory alkalosis; acid base levels return to pregnancy levels by 24hrs after birth, and nonpregnant values are attained a few weeks after birth

**Renal**-increase in maternal rennin, plasma rennin activity and angiotensinogen, polyuria is common during labor which results from increase in cardiac output which causes an increase in glomerular filtration rate and renal plasma flow; hematuria may be present due to trauma of lower Urinary tract

**GI**-during labor gastric motility and absorption of solid food are reduced; gastric emptying time is prolonged and gastric volume remains over 25ml regardless of the time the last meal was taken

**Immune system**-WBC increases to 25,000 to 30,000 during labor and early postpartum, due mostly to increased neutrophils resulting from a physiologic response to stress, glucose levels can drop significantly during a prolonged or difficult labor
3. Describe the fetal heart rate assessment: Baseline, variability, accelerations, and the 3 most common decelerations, what they mean, and the nursing care to implement when these occur.

The baseline fetal heart rate (FHR) refers to the range of fetal heart rate observed between contractions during a continuous 10-minute period of monitoring. The normal baseline is between 110 and 160bpm.

FHR Variability is one of the most important parameters of fetal well-being. Baseline variability is a measure of the interplay between the sympathetic (acting to increase HR) and parasympathetic (acting to decrease HR). Long-term variability is the difference between the lowest FHR and highest FHR in each cycle within 1 minute. Normal long-term variability is between 6 to 10 cycles per minute, but it is increased during fetal movement and decreased during fetal sleep. Saltatory pattern variability, characterized by rapid variations in FHR with a bizarre appearance and amplitude greater the 25 bpm, does not indicate fetal compromise in the absence of other FHR concerns. A sinusoidal pattern, which oscillates between 120 and 160 bpm without variability, is associated with severe asphyxia, Rh isoimmunization, severe anemia, abruption placenta, severe fetal acidosis, or fetal-maternal hemorrhage. If a sinusoidal pattern is noted, internal fetal monitoring should be instituted and fetal blood should be drawn for pH and hematocrit. An ultrasound should also be performed. Short-term variability refers to the actual differences between one heart beat to the next; it indicates appropriate CNS function. The patient must have an internal fetal scalp electrode on to assess whether short term variability is present or absent – the beat to beat variability in the fetal heart beat.

Accelerations are transient increases in FHR. Nonperiodic accelerations are caused by fetal movement and periodic movements are caused by contractions. Periodic accelerations are thought be a sign of adequate oxygen reserve and fetal well-being.

Decelerations are periodic decreases in FHR from baseline.

- **Early decelerations** are due to pressure on the fetal head as it progresses down the birth canal, beginning at the onset of contraction and ending as the contraction finishes. Early decelerations are generally considered benign, and rarely fall below 100 bpm.

- **Variable decelerations** are associated with umbilical compression and are usually innocuous. A significant dip is considered below 70 bpm for longer than 60 seconds. Nursing actions for variable decelerations include reporting the condition to the physician, changing maternal positioning, perform a vaginal exam to assess for a prolapsed cord, give oxygen if needed, stop oxytocin if indicated, prep for a cesarean section if indicated.

- **Late decelerations** are due to uretoplacental deficiency and are an ominous sign. Late decelerations begin at the peak of contraction and nadir at the end of contraction, but stay within normal heart range. Immediate nursing interventions include #1 placing the mother on her left side, #2 stopping oxytocin, #3 administration of IV fluids, and #4 providing oxygen to the mother (I would reorder these in order of the easiest things to do that require the least amount of time and can make the biggest impact in promoting circulation to the mother/fetal unit). The physician/HCP should be notified immediately. The nurse should also prepare the mother for the possibility of a cesarean birth.
4. Describe the uterine assessment; what is normal and what to do if problems occur.

**Frequency** - time between the beginning of one contraction and beginning of next contraction

**Duration** - beginning of contraction to completion of contraction

**Intensity** - strength of uterine contraction during acme

**Resting tone** - between contractions; 10-12mm Hg of pressure

**Normal Labor** - At the beginning of labor, contractions are mild, short in duration, and relatively infrequent. As labor progresses, duration and intensity increase and frequency is every 2 to 3 minutes.

**Hyperstimulation** - Hyperstimulation is defined as a persistent pattern of more than five contractions in 10 minutes, uterine contractions lasting at least two minutes, or contractions of normal duration occurring within one minute of each other, with or without fetal heart rate changes. Abnormal or excessive uterine contractions can occur with the use of prostaglandin compounds or Pitocin. If Pitocin is being infused, it should be discontinued or the dose decreased to quickly achieve a reassuring fetal heart rate pattern. Placing the woman in the left lateral position, administering oxygen, and increasing intravenous fluids may also be of benefit. Removing the PGE2 vaginal insert will usually help reverse the effects of hyperstimulation and tachysystole.

5. Describe non-pharmacological comfort measures used to help the patient cope with labor and delivery.

Breathing techniques, focusing, guided imagery, feedback relaxation, effleurage, counterpressure/tennis ball messaged in lower back area and water therapy all serve to comfort the laboring mother without using medication. Some measures such as the focusing or guided imagery use the idea of out of sight, out of mind. If the mom isn’t focusing on her pain and putting her energy into something else, the pain will become less and less. Water therapy and counter pressure are hands on approaches to ease the tension and pain of labor by relaxing the muscle groups responsible for pain. Effleurage is a light stroking movement of the fingertips across the abdomen during labor that is used as a distraction during contractions. Reassurance, support, information (keeping patient and family informed of their progress, options for pain relief, and other aspects of care help them feel part of the process, decrease their fear and apprehension, and some control over their situation.)
Newborn Prep Questions

1. Describe the physiologic changes that occur in the newborn period. Describe normal findings that occur immediately after delivery, what causes these changes, and what to expect over the next few weeks.

Respiratory:
* surfactant, pulmonary ventilation must be established through lung expansion and increase in pulmonary circulation (gasp).
* removal of fluid from lungs when fetus is passed through birth canal and replaced with air
* inspiratory gasp triggered by elevation in CO2 and a decrease in O2.
* decrease temperature from 37 C-21-23.9 C
* numerous tactile, auditory, visual stimuli

Cardiovascular:
* increase aortic pressure and decrease venous pressure, increase systemic pressure and decrease pulmonary artery pressure, closure of foramen ovale and ductus arteriosus and ductus venosus.
* Heart Rate increase to 175-180 BPM
* BP is 72/47

Hematopoietic:
* physiologic anemia of infancy due to fetal red blood cells and easy destruction/short life span.

Temperature:
* homeothermic- stabilize internal body temperature-heat loss from baby’s surface by convection, radiation, evaporation, and conduction.

Hepatic:
* iron storage, RBC production, carbohydrate metabolism, conjugation of bilirubin, physiological jaundice, breastfeeding and milk jaundice, and coagulation.

GI:
* enzymatic activity, lactose is primary carbohydrate in breast milk
* pancreatic amylase is lacking at birth and develops in first week of life.

Urinary:
* newborns need to void within 48 hours of birth

Immunological:
* no production of antibodies in response to antigen so prone to infection first 2 weeks
* Immunize at 2 months so can develop antibodies

Behavioral and sensory:
* alert, hungry, motor activity.
* closely monitor for apnea, decrease in HR, gagging, and check on sleep and alert states.
* sensory development
  - tactile/vestibular: All their senses are intact at birth
  - olfactory/gustatory: Can smell and taste breastmilk
  - auditory/visual: Can hear and respond to familiar voices and like the face-see 6-8” away
2. Define key terms used in the newborn assessment.

**Plethoric**: referring to an abnormal amount of blood

**Jaundice**: yellow pigmentation of body tissues caused by presence of bilirubin pigments

**Cyanosis**: a condition of blueness of the skin, generally caused by lack of oxygen

**Acrocyanosis**: cyanosis of the extremities – hands and feet (glove and booty cyanosis)

**Desquamated**: referring to shedding of the epithelial cells of the epidermis

**Vernix**: white, cheesy substance normally found on newborns; abundant (preterm), absent (post-term)

**Lanugo**: fine, downy hair found on all body parts of the fetus, with the exception of the palms of the hands and the soles of the feet, after 20 weeks gestation

**Milia**: tiny, white papules appearing on the face of a newborn as a result of unopened sebaceous glands; disappear spontaneously within a few weeks

**Mongolian spot**: dark, flat pigmentation of the lower back and buttocks noted at birth in some infants; usually disappears by the time the child reaches school age

**Erythema toxicum**: innocuous pink popular rash of unknown cause with superimposed vesicles; it appears within 24-48 hrs after birth and resolves spontaneously within a few days

**Ecchymosis**: a discoloring of skin caused by the seepage of blood beneath the skin

**Petechiae**: tiny, perfectly round purplish red spots that appear on the skin as a result of minute intradermal or subcutaneous hemorrhage

**Nevi**: birthmark

**Caput succedaneum**: swelling or edema occurring in or under the fetal scalp during labor due to pressure of the presenting part that usually resolves in 1-3 days.

**Cephalhematoma**: subcutaneous swelling containing blood found on the head of an infant several days after birth; usually disappears within a few weeks to 2 months. Infant may be more prone to jaundice due to increased RBC destruction.

**Subconjunctival hemorrhage**: hemorrhage on the sclera of a newborn’s eye, usually caused by changes in vascular tension during birth

**Candida albicans**: yeast infection (ex. Thrush) that has a white patchy appearance that can not be scraped off easily. Need to treat the infant’s mouth and mom’s nipples with Nystantin.

**Epstein’s pearls**: small, white blebs found along the gum margins and at the junction of the hard and soft palates; commonly seen in the newborn as a normal manifestations

**Point of Maximal Impulse (PMI)**: where the heart beat is best heard; fifth intercostal space, left sternal boarder (apex of the heart)

**Pilonidal dimple**: dimple at the bottom of the spine that could indicate neural tube defects

**Hymenal tag**: membrane fold located at the entrance to the female sex organ

**Simian crease**: a single palmar crease frequently found in children with Down syndrome

**Metatarsus varus**: a congenital deformity causing inversion of the metatarsals (forefoot).
**Postpartum Prep Questions**

1. **What is the most common complication immediately after delivery and the nursing care to implement?**

   The most common complication immediately following birth that nurses are aware of is postpartum hemorrhage. This is due to the separation of the placenta from the uterus which exposes many blood vessels. It is critical that fundus stay well contracted to prevent bleeding. The nurse is responsible for first and foremost - assessing the uterine fundus for firmness, messaging fundus if it is atonic, calling for help as needed, assessing the bladder for fullness and emptying if needed, and determining the cause (atony, full bladder, lacerations of the birth canal, hematoma. Oxytocin should be infusing, the mainline IV can be opened to increase intravascular volume, a second IV line may be needed, O2 can be given as needed. The firmness and position of the fundus, and the amount and character of vaginal blood flow, the mother’s blood pressure, pulse, should be assessed every 15 minutes for the first 1-2 hours or until stable.

2. **Describe the physiological changes that occur in the postpartum period and involution. Use the BUBBLE-HE assessment guide to describe normal finding, changes, and what to expect over the next few weeks.**

   **Breasts:** will be smooth, even in color, one breast may be larger than the other. The breasts are palpated to assess if they are soft and non-tender. The milk comes in about the 3-5th day depending on the frequency, strength, and duration of breastfeeding. Then breasts may feel full or engorged. Nipples should be supple, pigmented, intact and erect when stimulated. The mother should be encouraged to nurse as soon as possible after delivery and to wear a bra to her breasts to prevent sagging later in life and for comfort.

   **Uterus:** should be the size of a large grapefruit, firm, not soft or boggy and palpable 2/3 of the way between the symphysis pubis and umbilicus immediately after delivery. Rises to the umbilicus within 1-2 hours after birth and descends 1 fingerbreath/day until 9-10 days postpartum when you can not feel it abdominally anymore.

   **Bladder:** A significant void every 4-6 hours, bladder should not be palpable. Assess for signs and symptoms of UTI (urgency, frequency, dysuria). Encourage the mom to void every 2-3 hours to promote involution of the uterus, decrease afterpains, and decrease postpartum bleeding. Voids ~3000cc/day PP.

   **Bowel:** should be passing flatus and experience a normal bowel movement by 2nd or 3rd day after birth. If patient has hemorrhoids, encourage sitz bath, side lying position, tucks pads or stool softeners.

   **Lochia:** discharge caused by debris from endometrial tissue in the uterus after birth, shouldn’t have a foul odor or be bright red. Discharge may be greater in the AM and when breastfeeding (uterine contractions)
   - Lochia rubra: dark red, experienced first 1-3 days, shouldn’t have large clots
   - Lochia serosa: pinkish brown, 4th – 10th days
   - Lochia alba: creamy yellowish, last 1-2 weeks up to 6 weeks

   **Episiotomy:** a surgical incision in the perineal body. **Lacerations:** Some edema may be present but skin edges should look glued together so that gentle pressure does not separate them. Check for redness, edema, ecchymosis, drainage, and approximation (REEDA). Palpate for increased warmth, tenderness, firmness of tissue and report any abnormal findings. Teach proper peri-care with warm water, wiping front to back, and changing peri-pad after each void or stool. Sitz baths should be encouraged to promote healing and prevent infection. Ice packs, Tucks and Dermaplast spray can help decrease pain and swelling to area.

   **Homan’s sign:** assess for signs of blood clots in lower extremities by performing a passive dorsiflexion and assessing for pain in calf/legs, difference in temperature or color in lower extremities. Tautness of skin, redness or paleness, swelling, area in leg hot to touch and painful with palpation, elevation in pt’s temperature and signs of blood clot that need to be reported to the health care provider. Encourage ambulation in hall TID and prn and/or active range of motion exercises to promote circulation.

   **Emotional State:** assessment focuses on the mother’s general attitude, feelings of competence, available support systems, care giving skills, her fatigue level, sense of satisfaction and ability to accomplish her developmental tasks. Clues that may indicate a problem include excessive, continued fatigue, marked depression, excessive preoccupation with physical status or discomfort, evidence of low self esteem, lack of support systems, marital problems, inability to care for or nurture the newborn, and current family crisis (such as illness or unemployment.)
**Involution:** Rapid reduction of the uterus after childbirth, eventually almost back to prepregnancy size
- immediately after expulsion of the placenta, the uterus shrinks down to the size of a large grapefruit.
- the fundus should be palpated midline, 2/3 of the way between the symphysis pubis and the umbilicus immediately after delivery. It then rises to the umbilicus and descends 1 fingerbreadth/day until 9-10 days postpartum when it can no longer be palpated abdominally.
- if the woman is breastfeeding, the uterus involutes faster but she will also notice afterpains during breastfeeding more than the mother who is not breastfeeding.

After birth the cervix is spongy, flabby and formless and may appear bruised. It should go back down to normal size within a week. Shape of external os is permanently changed by the first vaginal birth. Characteristic dimplelike os of the nulliparre changes to the lateral slit os of the multiparre.

The vagina will be very sore, bruised and edematous. It will return to normal color and size at around 6 weeks. If the woman is breastfeeding, the vaginal mucosa may be pale and sexual intercourse may be painful. Tone and contractibility may be improved with Kegel exercises.

Menstruation usually returns 6-8 weeks after birth if the baby is bottle-fed. In women that are breastfeeding, it may take 12 weeks or longer.

Stretched abdominal muscles will appear loose and flabby but will respond to exercise within 2 to 3 months.

After birth the woman should loose 10-12 lbs immediately as a result of the birth of infant, placenta and amniotic fluid and by the 6th to 8th week postpartum, most women are at or near their prepregnancy weight, if they gained the average 25 to 30 lbs. For others, return to prepregnancy weight takes longer or does not occur.

After the first 24 hours all vitals should return to normal. Within the 24 hours though, it may be normal for the woman to have a fever around 38°C as a result of the exertion and dehydration of labor. Puerperal bradycardia of 50-70 bpm are normal during the first 6-10 days after birth and may be related to decreased cardiac strain, decreased blood volume following placental separation, contraction of uterus, and increased stroke volume.

Postpartum women may experience postpartum chills. These may be related to a neurological response or to vasomotor changes.

Postpartum mothers may experience postpartal diaphoresis or night sweats. This is the body’s way of getting rid of excess fluid and wastes so it is good to inform the mother this is normal and to take frequent showers as needed.

Afterpains may also be felt for 2-3 days following the birth. The pains may be worse for multiparas and for breastfeeding mothers because of the uterine contractions. Also, oxytocic agents may make the pains worse. Motrin should be given to help decrease afterpains and encourage the mother to keep her bladder empty by voiding every 2-3 hours to prevent the bladder from interfering with uterine involution.
Antepartum Prep Questions

1. Describe what the following tests are and why they are performed.

1. **Non-stress test (NST):** Monitors fetal heart rate (FHR) and any acceleration of the FHR during fetal movement using electronic fetal monitor. An increase in FHR indicates that the central and autonomic systems are intact and the fetus is free of hypoxia. The test is relatively quick, inexpensive, and easy to interpret, can be done in outpatient settings, and has no known side-effects. It takes at least 20-30 minutes to complete but can take longer if the fetus is asleep and not reacting. If this occurs, a vibroacoustic stimulator (VAS) can be applied to the fetal head for ~1-3 seconds to wake the fetus to obtain a response. Fetal heart baseline, accelerations, decelerations, and contractions are assessed with the NST and interpreted.

   **Reactive NST:** Two or more FHR accelerations of 15 beats above baseline for 15 seconds within a 20 minute period, with or without fetal movement.

   **Non-reactive:** Lack of FHR accelerations over a 40 minute period. Consider gestational age as fetal movements and accelerations increase with gestational age so this is taken into account with interpretation. A vibroacoustic stimulator (VAS) can be used to wake the baby as described above. Since quite sleep can last up to 70 minutes.

   **Unsatisfactory (CST and a BSST promote uterine contractions):** An unsatisfactory test has less than 3 contractions or hyper stimulation during a CST (Contraction Stress test) or BSST (Breast stimulation test). Note* If fetal oxygenation is marginal at rest (very little O2), it will transiently worsen with uterine contractions and result in hypoxemia, which will lead to late decelerations.

2. **Biophysical profile:** This test measures FHR acceleration (NST), fetal breathing, fetal movements, fetal tone, and the amount of amniotic fluid volume. These measures are done to prevent risk such as compression of the umbilical due to maternal or fetal factors compression can lead to a decrease in blood flow and O2 administration. This can cause the fetal respirations and heart rate to decrease, which could lead to death. A score of 0-2 is given for each of the 5 tests.

   **Ultrasound:** Using a transducer to direct sound waves into the maternal abdomen. These ultrasonic waves reflect off underlying structures of varying densities, which then allow identification of various maternal and fetal tissues, bones, and fluids. Identification will help point out any abnormalities in the fetal’s tissues, bones, and the amount of fluid.

   **Fetal Kick Counts (FKC’s):** Is a test that monitors the fetal movement. This test is performed by the mother. The monitoring normally takes place during the mom’s resting period after breakfast and dinner. During this time the baby receives more oxygen. The baby then kicks in result to the increased oxygen. To count write the date and time that the baby first kicked. Have the women count three times a day for 20-30 minutes each session. If there are fewer than 3 movements in a session, have her count for an hour or more. Report to physician, if there are fewer than 10 movements in 3 hrs., if the fetus’s movements are slowing and it takes longer each day to note the 10 movements, if there are no movements in the morning, or if there are less than 3 movements in 8 hrs. Make an X next to the minutes it took the baby to kick ten times. If having trouble the mother should get up a walk around and maybe drink some juice. If walking round does not stimulate the baby and movement is still absence after lying down she should call her health care provider.
4. Explain the nursing care needed for patients related to their high-risk situation. What are the hazards of bed rest and what do nurses need to do to decrease that risk?

Bleeding during Pregnancy
- Monitor BP and pulse frequently
- Observe for shock – pallor, clammy skin, perspiration, dyspnea, or restlessness
- Count and weigh pads to assess bleeding, save tissue or clots
- If pregnancy is over 12 wks, assess fetal heart tones
- Prepare for IV therapy
- Prepare equip for exam
- Obtain order for type and cross-match for blood
- Assess coping
- Assess family response to situation

Incompetent Cervix
- bed rest
- avoid heavy lifting
- cervical cerclage- a heavy suture used to reinforce the cervix at the level of internal os
- broad spectrum antibiotics
- anti-inflammatory agents

Hyperemesis Gravidarum
- control vomiting
- correct dehydration
- restore electrolyte balance
- maintain adequate nutrition
- Ginger tx for nausea
- Acupuncture
- TPN

Premature rupture of membranes (PROM)
- Assessment of fluid
- Sterile speculum exam – based on pooling of fluid in vaginal vault
- Amniocentesis performed to instill indigo or blue dye then tampon placed later removed for observance of blue tinge
- Fetal well being assessed
- Hospitalization with bedrest, CBC, CRP, urinalysis obtained
- Maternal BP, HR, Temp assessed q4h
- Broad spectrum antibiotics

Preterm Labor
- maintain good uterine perfusion
- detect uterine contractions
- assess fetal well being
- administer tocolysis – meds used to stop labor
- promote bed rest
- monitor VS and I&O
- Place mother on left side to facilitate fetal circulation
- Vaginal exams kept to minimum

HTN disorder
- Bed rest on left lateral recumbent position to decrease pressure on vena cava
- Well balanced diet with moderate sodium
- Tests to evaluate fetal status increase with progressing preeclampsia
- Meds – anticonvulsants, corticosteroids, and antihypertensives administered
- Fluid and electrolytes replaced

Rh Sensitization
- early birth or intrauterine transfusion
- injection of Rh immune globulin after birth

Surgery during pregnancy
- Similar to non-pregnant women but some exceptions
- Fetus shielded from radiation of x-rays
- Stomach emptying time delayed so risk of vomiting increases so NG tube prior to surg
- Indwelling catheter
- Support stockings to prevent venous stasis
- Fetal heart tones monitored before, during and after surg.
- ET tube for respiratory support
- Wedge placed under hip to tip uterus and avoid pressure on vena cava
- Monitor for apnea and/or HTN due to anesthesia
- Monitor blood loss carefully

Trauma from an accident
- ensure airway
- wedge placed under right hip
- fetal monitoring for 4 hrs if no vaginal bleeding, tenderness, contractions or leaking of fluids
- 24-48 hr monitoring if the above is present
- Check blood type and give RhoGAM if Rh-
- If CPR performed, perimortem C/section advocated if CPR unsuccessful in first 4 min.

Battered pregnant woman
- provide safety for woman and unborn child
- determine immediate safety of the woman
- implement social service consult
- provide support

Perinatal infection affection fetus
- Dx made and proper medications prescribed
- For rubella if the mother infected in 1st trimester, therapeutic abortion may be an alternative
- Cytomegalovirus has no cure and the baby is often mentally retarded

The hazards of bed rest include:
Risk of DVT/venous stasis
Nursing Care – support hose used to promote blood flow, active and passive ROM promoted, Anticoagulation therapy

Risk of Pneumonia/Resp infection
Nursing Care – turn, cough, and deep breath, IS, pain relief to promote deep breathing, dependant drainage pm

Risk of Muscle atrophy
Nursing Care – Active and passive ROM, encourage activities that work upper body muscles

Risk of skin breakdown
Nursing care – Have pt. turn pt q2h, provide adequate nutrition and vitamins for healthy skin

Risk of orthostatic HTN
Nursing Care – encourage pt to move slowly when sitting or standing up and keep feet moving to promote blood return, discourage patient from dangling feet as this can aggravate the condition

Risk of anxiety/depression related to high risk situation and/or ineffective coping/and/or family support.
Nursing Care – allow/encourage pt. to vent feelings, concerns, questions….
Provide support, comfort measures, back rubs, time with pt., humor, small talk, get to know pt. and her situation. Give her information on Sidelines: [http://www.sidelines.org/](http://www.sidelines.org/) National web site for women who have high-risk pregnancies to access for information, support, and connection to others who can help. – chat rooms, information…. Provide diversional activities; cards, needlepoint, videos, games, books…. Assess how family coping at home and encourage her to vent feelings. Provide support.
Give pt. and family the option of a tour of NICU to show the unit, a baby about her gestational age, and to meet nurses…Answer any questions. Make sure she understands high-risk situation and self-care measures to implement.
Give patient some control over her environment – knock on door before entering, let her plan the day, her shower, if she wants to sleep or not be disturbed, put up a sign on her door indicating to check at nurses desk…

Risk for inadequate nutrition related to bedrest/hospital food… Offer nutritional referral, frequent snacks. Favorite foods, encourage family to bring in treats

Risk for UTI, Constipation: Increase foods high in fiber, and fluids and explain why important.