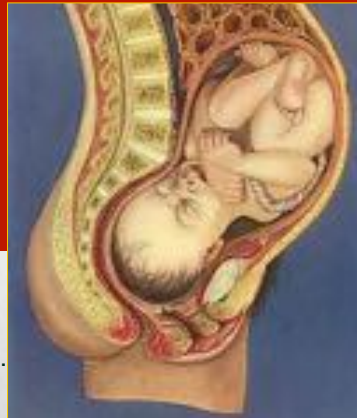


Module 17: Episodic and Chronic Conditions in Pregnancy



2018 Revision by
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Peer Reviewed by Gabrielle Ene B.Sc.H.



CANADIAN HEALTH CARE AGENCY
EXPERIENCE THE NORTH

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1. Common Discomforts/Self Care
2. Topics for Teaching
3. Safe Prescribing for Pregnant Patients
4. Danger Signs in Pregnancy
5. Common Chronic Illness in Pregnancy: Diabetes/Depression

Module 14: Objectives/ Topics

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Part 1

Common Discomforts of Pregnancy

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- *Hyperemesis Gravidarum (4th-14th week)*

Common medical condition, affecting 50-90% of all pregnant women. This condition can greatly and negatively impact a woman's life

CPG Rx: Dicletin (doxylamine/ vitamin B₆) – 2 tablets @ HS, 1 tab in am, 1 tab Q 1600. Can add Gravol 50mg PO Q4-6 hr prn.

- Other options
 - Ginger 250mg PO Q 6 hrs
 - B6 250 mg Q 8 hr,
 - Small meals, avoid fatty foods
 - If Dicletin is not available; Dimenhydrinate 50-100mg PO/PR q4-6h prn not to exceed 400 mg/day.

Nausea & Vomiting

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- Evaluate – ensure nothing more serious is going on (eg. Intracranial bleed)
- Reduce stress
- Adequate sleep
- Eat regular meals
- Alternate heat/cold
- Tylenol prn



Headache

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- Void frequently
- ↓ fluids in the evening
 - Initially, as uterus grows, puts pressure on the bladder.
 - As baby grows, bladder continues to be under pressure.
 - Encourage Kegel Exercises practice to help prevent urinary incontinence.



Urinary Frequency

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- Plan naps and rest
- Seek assistance
- Avoid caffeine
- No screens 1 hour before bed



Fatigue

- Wear well-fitting, supportive bra



Breast Tenderness

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Epistaxis/nasal stuffiness

- Cool air vaporizer may help
- Avoid nasal sprays and decongestants
- Sea spray
- Apply ice packs to nose



Ptyalism

- Astringent mouthwashes
- Chew gum or suck hard candy
- Good oral hygiene



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- Small, frequent meals
- Low-sodium antacids/Tums
- Avoid overeating, fatty and fried foods
- Refer to CPG: can initiate a course of Ranitidine 75 mg daily- bid.



Pyrosis

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- Foot exercises
- Maternity support hose
- Elevate feet and legs
- Avoid prolonged standing
- Drink 6-8 glasses of water daily



Dependent Edema


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- Elevate legs frequently
- Support hose
- Avoid standing for prolonged periods
- Avoid crossing legs
- Avoid excessive weight gain



Varicose Veins

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- Constipation**
 - ↑fluids, fiber and exercise
 - Regular bowel habits
 - Stool softeners
- Faintness**
 - Avoid sudden changes in position
 - Avoid prolonged standing
 - Wear compression stockings
- Abdo/ Round ligament pain**
 - Avoid stretching/ twisting
 - Flex knee/ hip on affected side
 - Heat
 - Avoid excessive exercise
- Dyspnea**
 - Evaluate for severity
 - Avoid restrictive clothing
 - Posture
 - Avoid warm environments
 - Pillows for sleeping

Other common issues...

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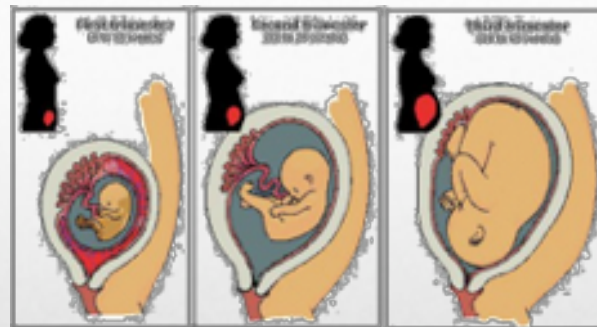
- **How does asthma change when you're pregnant?**
 - 1/3 women have asthma symptoms that get worse when pregnant.
- **Risks of uncontrolled asthma when pregnant**
 - Premature Birth
 - Low Birth Weight
 - Maternal BP changes (i.e. pre-eclampsia)
- **Prevention of asthma while pregnant**
 - Avoid environmental triggers
 - Take regular asthma medications
 - Get your flu shot!
 - Exercise carefully
 - Don't smoke & avoid second-hand smoke

Asthma During Pregnancy

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Part 2: Topics for Teaching

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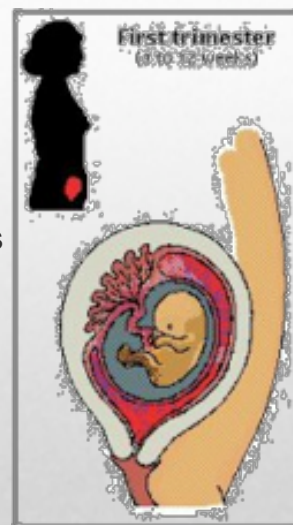


- **All Three Trimesters**
 - Discomforts of pregnancy
 - Danger signs
 - Nutrition and weight gain
 - Fetal growth and development
 - Sexual activity
 - Sibling preparation

Topics for Patient Teaching

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- **First Trimester**
 - Attitude toward pregnancy
 - Weight gain
 - 25-35 lbs; 10 pounds by 20 weeks
 - If obese, 15-20 lbs
 - Exercise and rest
 - Substance use/misuse
 - Traveling



Topics for Patient Teaching – 1st Trimester

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- **Second Trimester**

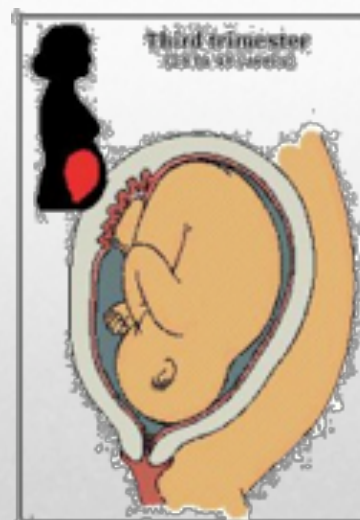
- Concerns related to body changes
- Fetal movement
- Clothing
- Care of skin and breasts
- Decisions about infant feeding



Topics for Patient Teaching – 2nd Trimester ©CHCA 2018

- **Third Trimester**

- Exercise and rest
- Traveling for birth
- Preparation for labor and birth
- Decision-making about early postpartum
 - Assistance at home
 - Contraception



Topics for Patient Teaching – 3rd Trimester ©CHCA 2018

- **Nutrition**

- Increase daily caloric intake by 300 kcal in second and third trimesters
 - If twin gestation, double this
- Increase complex carbohydrates
 - Primary source of energy



Self-Care During Pregnancy

©CHCA 2018

- **Nutrition (cont.)**

- **Increase proteins**
 - Fetal development
 - Growth of maternal tissues
- **Healthy Fats**
- **Minerals**
 - Iron needs increase
 - Supplements recommended
- **Vitamins**
 - Folic acid needs increase
 - Supplements recommended



Self-Care During Pregnancy

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Due to risky levels of mercury:

- Orange Roughy, Swordfish, Shark, King Mackerel, & Tile Fish
- Raw fish, especially shellfish (oysters, clams, sushi)



Can eat:

- Up to 12 ounces of: shrimp, salmon, Pollock, catfish and canned light tuna
- Albacore (white tuna): ***DON'T EAT more than 6 ounces in one week!***



Foods to Avoid

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Due to risk of food-borne illness:

- Undercooked meat, poultry and seafood
- Hot dogs or luncheon meats
- Refrigerated pates or meat spreads
- Refrigerated smoked seafood
- Soft- scrambled eggs
- All foods made with raw or lightly cooked eggs
- Soft cheeses made with unpasteurized milk
- Unpasteurized milk and any foods made from it
- Unpasteurized juices
- Raw vegetable sprouts
- Atypical Herbal supplements and teas (grocery store herbal tea is ok)

Foods to Avoid

©CHCA 2018

- **Fetal Monitoring**

- Kick counts beginning at 28 weeks gestation

- **Clothing**

- Loose and non-constricting
- Supportive girdle is sometimes helpful for women with large, pendulous abdomens
- Low-heeled, comfortable shoes



Self-Care During Pregnancy

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- **Activity and Rest**

- Continue to do whatever she did before pregnancy
- Encourage to do regular exercise
 - Pregnancy is not the time, however, to take up strenuous exercise for the first time
- High-risk activities that require balance and coordination should be avoided or done with caution (e.g. snowmobile, ATV)



Self-Care During Pregnancy

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- **Sexual Activity**

- General rule
 - As long as it is comfortable and desirable for both partners, it is OK
- Exceptions: Pre Term Labor, Bleeding, ROM
- Either or both may have a change in sexual desire (↑ OR ↓) - communication is the key
- May need alternate positions



Self-Care During Pregnancy

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- **Dental Care**

- Important
- General dental repair and extractions can be done, preferably under local anesthesia
- Dental x-rays and extensive dental work should be avoided
- **Immunizations:** Use of attenuated live viruses (measles, mumps) is contraindicated
 - Flu vaccine safe any time.

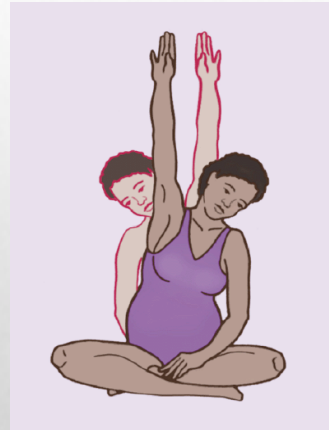


Self-Care During Pregnancy

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Exercises to Prepare for Childbirth

- Abdominal tightening
- Partial sit-ups
- Kegel exercises
- Tailor-sitting



Self-Care During Pregnancy

©CHCA 2018

Tobacco

- Infants of mothers who smoke tend to have lower birth weight and a higher incidence of perinatal deaths
- Any decrease in smoking during pregnancy improves fetal outcome

Alcohol

- Fetal Alcohol Spectrum Disorder



Management of Addictions in Pregnancy

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Caffeine

- No evidence of teratogenic effects
- Does decrease maternal iron absorption
- Up to 12 ounces of caffeinated coffee a day may be okay during pregnancy.
- There is also caffeine in chocolate, tea, cola, some carbonated beverages other than cola, coffee ice cream and some non-prescription medications.

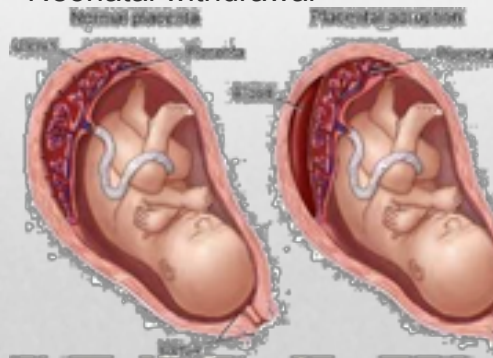


Management of Addictions in Pregnancy

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Cocaine/Opiates

- Severe congenital anomalies, including genitourinary, cardiac and CNS
- Higher incidence of abruptio placentae, preterm birth, fetal distress, LBW
- Neonatal withdrawal



Management of Addictions in Pregnancy

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- Inform women of your responsibility, consult with NIC.
- Reporting Regulations
- Do NOT call protective services prenatally without prior discussion and consent from the woman.
- Encourage women to self-report prenatally, while promoting open and informed decision-making;
- Speak to child protection after the child is born and in the presence of the woman, if you have concerns.
- Consider earlier referral if woman has children in her care.



Tikinagan
Child & Family Services

Approach to Care - Child Protection

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- Suicidal Ideation
- Acute Psychosis
- Alcohol withdrawal
- Opiate withdrawal
- Benzodiazepine withdrawal
- Desire to undergo detox

Indications for Inpatient Management

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Part 3: Safe Prescribing in Pregnancy

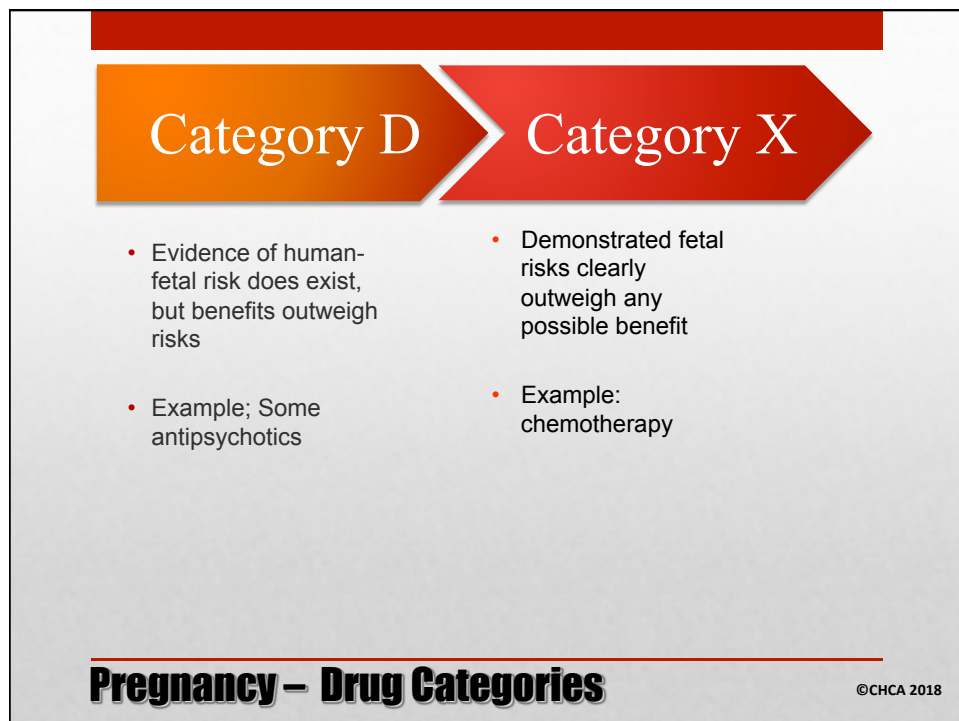
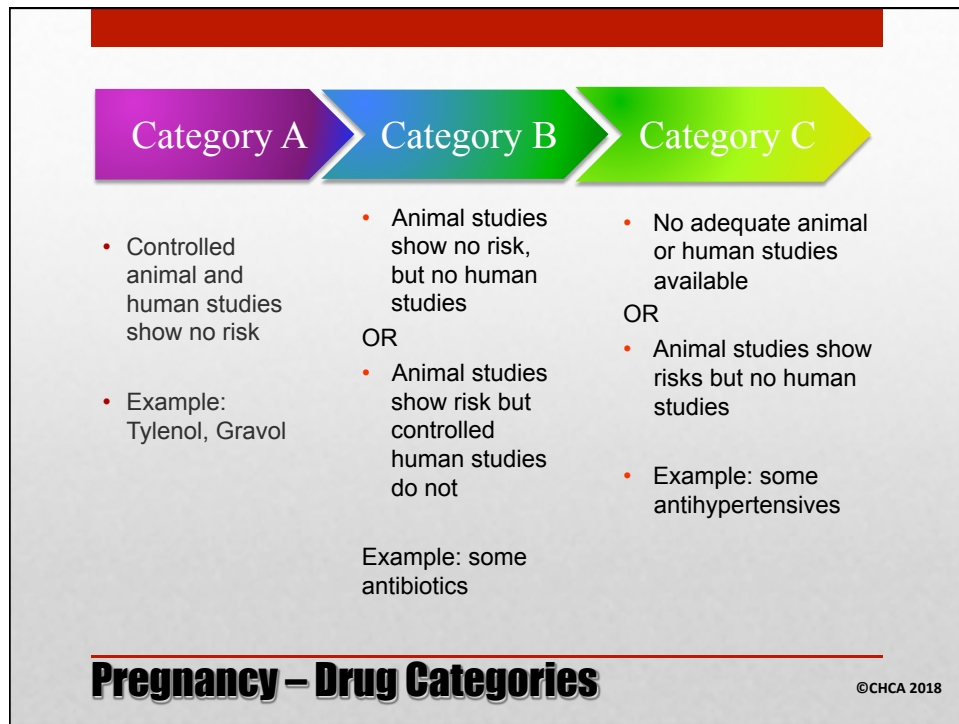
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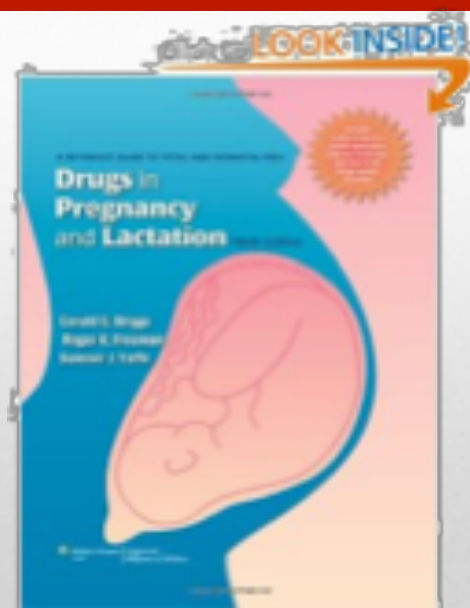
Teratogenic Substances (cont.)

- *Medications*
 - Greatest potential for gross abnormalities is in the first trimester
 - classic period is days 31-71 after LMP

Drugs During Pregnancy

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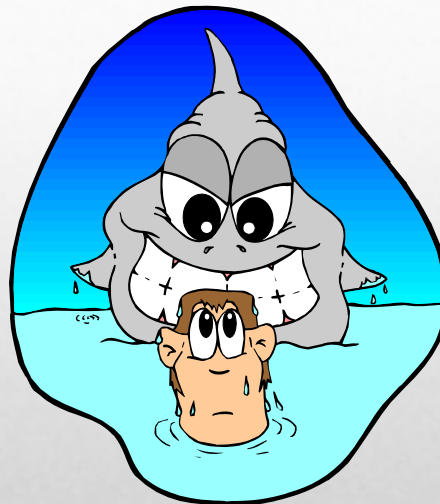




Important Reference

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Part 4 : Danger Signs During Pregnancy



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- **A**bdominal pain
- **B**leeding
- **C**hills and fever
- **D**ysuria
- **E**dema
- **F**etal movements change
- **G**ush of fluid from vagina

ABC's of Danger

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Visual Disturbances

Blurred Vision
Blurred Vision
Blurred Vision

Double Vision
Double Vision

Blurry Spots

Halos

Danger Signs in Pregnancy

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Edema

- Generalized
- Face
- Fingers
- Sacrum

Headaches

- Severe
- Continuous
- Unrelieved

Danger Signs in Pregnancy

©CHCA 2018

Headaches

- Severe
- Continuous
- Unrelieved



Danger Signs in Pregnancy

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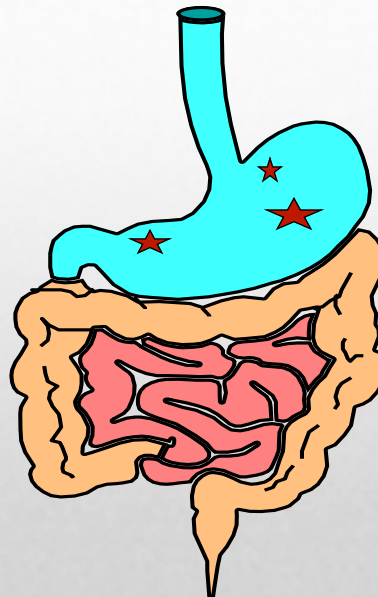
- Muscular irritability
- Seizures



Danger Signs in Pregnancy

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- Epigastric pain



Danger Signs in Pregnancy

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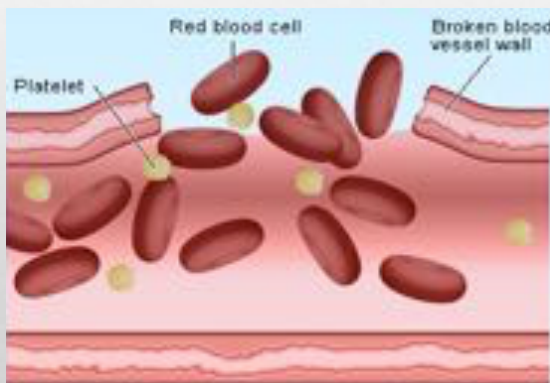
- Check BP
- Check reflexes
- Check clonus
- Order baseline labs:
 - Urinalysis to assess for Proteinuria
 - CBC (incl. Platelets)
 - Serum creatinine, LDH, AST, ALT
- Often, a woman who develops HELLP syndrome has already been followed up for pregnancy induced HTN or suspected to develop pre-eclampsia 8% of cases occur after
- Up to 8% of women with HELLP syndrome often "do not look very sick."
- Early symptoms can include:
 - Epigastric pain described as heartburn or RUQ pain (90%)
 - Malaise (90%)
 - Nausea or vomiting. (50%)

Danger Signs in Pregnancy

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- *A life threatening syndrome, a variant of pre-eclampsia.*

H - Hemolytic Anemia
E - Elevated
L - Liver enzymes and
L - Low
P - Platelet count



HELLP Syndrome

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Fluid discharge from
vagina

- Bleeding
- Amniotic fluid



Danger Signs in Pregnancy

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- **Bleeding**
 - Threatened, missed, spontaneous abortion
 - β Hcg
 - U/S
 - Bedrest/ Pelvic rest/ expectant management
- Placenta previa
- Abruptio placenta
- Ectopic Pregnancy
- Determine last sexual intercourse

Danger Signs in Pregnancy

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Amniotic fluid: Premature Rupture of Membranes

- Nitrazine paper (pH) test
- Amnicator (POC test)



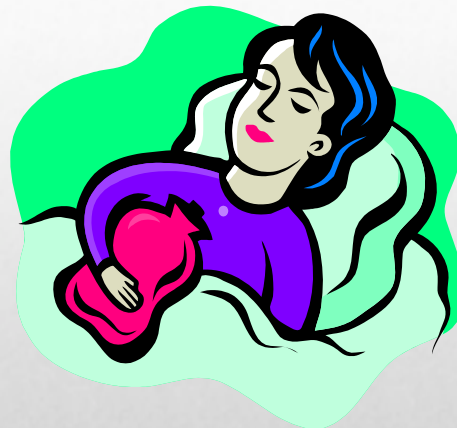
Collect vaginal fluid during speculum exam. Place a drop or two onto paper strip, to assess pH of vaginal fluid. If the pH is greater than 6.5, then membranes have likely ruptured.

http://www.mcno.org/webresources/Waived/fern/fern_image%201.jpg

Danger Signs in Pregnancy

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- Persistent vomiting



Danger Signs in Pregnancy

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Danger Signs in Pregnancy

Signs of infection

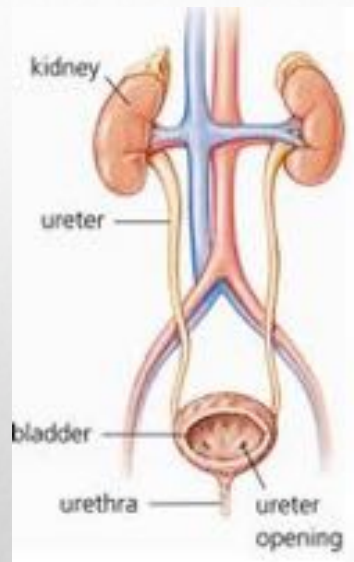
- Fever
- Chills
- Dysuria



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Acute UTI:

- First Line Tx
 - Cephalexin 250-500mg QIDx7days
 - Amoxicillin 500mgTID x 7 days
- Second line TMP/SMX 2 tabs BID x 3 days (not to be used in the first trimester and last 6 weeks)



Danger Signs in Pregnancy

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Abdominal pain

- Severe
- Unusual

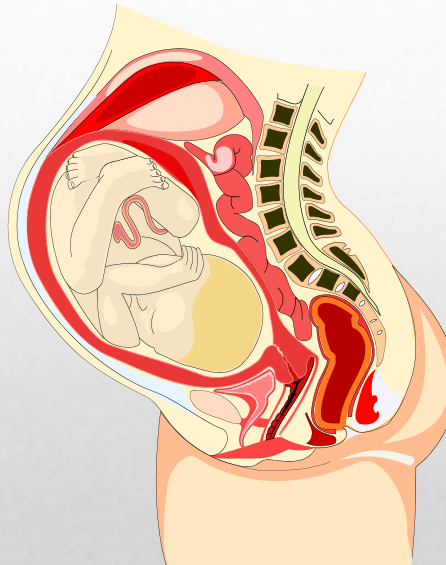


Danger Signs in Pregnancy

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Change in fetal
movements

- Absence
- Pattern
- Count



Danger Signs in Pregnancy

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Part 5: Chronic Illnesses in Pregnancy: Diabetes and Depression

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Gestational Diabetes Mellitus (GDM) – Defined as hyperglycemia with onset or first recognition during pregnancy

- Treatment
 - Strive to obtain the following glycemic targets for best pregnancy outcomes:
 - Fasting/ Preprandial glucose 3.8-5.2 mmol/L
 - 1 hour postprandial <7.8 mmol/L
 - 2 hour postprandial <6.7 mmol/L
 - * Women not meeting glycemic targets within 2 weeks of diagnosis with GDM will need to start insulin.

Gestational Diabetes

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A pregnant woman is diagnosed with depression if she experiences disturbing moods, feelings and behaviors nearly every day for 2 weeks, interfering with her ability to care for herself/other children/home/work.

- Treatment
 - Counseling (Providing education, reassurance & support)
 - Anti-anxiety and antidepressant medication are safe to use during pregnancy with minimal or no effect on the fetus.

Depression In Pregnancy

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- <http://ocfp.on.ca>
- <http://www.perinatalervicesbc.ca/NR/rdonlyres/FE14A0F8-1B67-454E-9B24-68029CDC762A/0/GuideAntenatalland119Nov2012.pdf>
- <http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal/index-eng.php>
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- <http://www.mayoclinic.org/diseases-conditions/down-syndrome/basics/definition/con-20020948>
- http://www.hopkinsmedicine.org/healthlibrary/test_procedures/gynecology/chorionic_villus_sampling_cvs_92,P07769/
- [The Lung Association – Pregnancy & Asthma](#)
- [Canadian Pediatric Society – Fetal Alcohol Syndrome](#)
- http://www.phac-aspc.gc.ca/mh-sm/preg_dep-eng.php

References

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