# Disclosures by Licensed Midwives for High-Risk Pregnancy Conditions Virginia Board of Medicine

The Code of Virginia (Law) requires that licensed midwives "disclose to their patients, when appropriate, options for consultation and referral to a physician and evidence-based information on health risks associated with birth of a child outside of a hospital or birthing center." Regulations for Licensed Midwives specify that:

Upon initiation of care, a midwife shall review the client's medical history in order to identify pre-existing conditions or indicators that require disclosure of risk for home birth. The midwife shall offer standard tests and screenings for evaluating risks and shall document client response to such recommendations. The midwife shall also continually assess the pregnant woman and baby in order to recognize conditions that may arise during the course of care that require disclosure of risk for birth outside of a hospital or birthing center.

The risk factors or conditions that require disclosures are listed in regulation. If any of these conditions or factors are presented, the midwife is to:

- 1) Request and review the client's medical history, including records of the current or previous pregnancies;
- 2) Disclose to the client the risks associated with a birth outside of a hospital or birthing center; and
- 3) Provide options for consultation and referral.

Regulations require that if the risk factors or criteria have been identified that may indicate health risks associated with birth of a child outside a hospital or birthing center, the midwife must provide evidence-based information on such risks and must document in the client record the assessment of all health risks that pose a potential for a high risk pregnancy and, if appropriate, the provision of disclosures and evidence-based information. The disclosure for intrapartum risk factors should be given to a client at the first prenatal visit.

For each of the risk factors or conditions identified, this guidance document provides evidence-based information and a format to record in a client's record the disclosure of information and options for consultation and referral.

To access the evidence-based information and disclosure for a particular conditions or risk factor, click on the link in the index below. The midwife may then print the form for that condition or risk factor for presentation and discussion with the client and have the form signed for inclusion in the client record.

# **Intrapartum Risk Factors**

- 1. Abnormal fetal cardiac rate or rhythm
- 2. Active cancer
- 3. Acute or chronic thrombophlebitis
- 4. Anemia (hematocrit less than 30 or hemoglobin less than 10 at term)
- 5. Any pregnancy with abnormal fetal surveillance tests
- 6. Blood coagulation defect
- 7. Body Mass Index (BMI) equal to or greater than 30
- 8. Cardiac disease
- 9. Chronic obstructive pulmonary disease or other pulmonary disorders
- 10. Ectopic pregnancy
- 11. Essential chronic hypertension over 140/90
- 12. Genital herpes or partner with genital herpes
- 13. History of hemoglobinopathies
- 14. HIV positive status or AIDS
- 15. Inappropriate fetal size for gestation Macrosomia (Large for gestational age)
- 16. Inappropriate fetal size for gestation IUGR (Small for gestational age)
- 17. Incomplete spontaneous abortion
- 18. Isoimmunization to blood factors
- 19. Multiple gestation
- 20. Persistent severe abnormal quantity of amniotic fluid
- 21. Platelet count less than 120,000
- 22. Position presentation other than cephalic at term or while in labor
- 23. Pre-eclampsia/eclampsia
- 24. Pregnancy lasting longer than 42 completed weeks with an abnormal non-stress test
- 25. VBAC (vaginal birth after cesarian) previous uterine incision or myomectomy
- 26. Mental Health Issues
- 27. Rupture of membranes 24 hours before the onset of labor
- 28. Seizure disorder requiring prescriptive medication

- 29. Severe liver disease -- active or chronic
- 30. Severe renal disease active or chronic
- 31. Significant 2nd or 3rd trimester bleeding
- 32. Significant glucose intolerance (Preexisting diabetes, gestational diabetes, PCOS)
- 33. Uncontrolled hyperthyroidism
- 34. Uterine ablation (endometrial ablation)
- 35. Uterine anomaly

# **Intrapartum Risk Factors**

#### Preamble:

The Midwives Model of Care® recognizes the client/patient as the primary decision maker in all aspects of her care and respects her autonomy. This is supported within a model of well-informed, shared decision-making in order to achieve optimal clinical outcomes. Disclosure of risks is an integral part of the informed consent process, as outlined by NARM (the North American Registry of Midwives).

"If a midwife supports a client's choices that are outside of her Plan of Care, she must be prepared to give evidence of informed consent. The midwife must also be able to document the process that led to the decision and show that the client was fully informed of the potential risks and benefits of proceeding with the new care plan. It is the responsibility of the midwife to provide evidence-based information, clinical expertise, and when appropriate, consultation or referral to other providers to aid the client in the decision making process." – NARM

Licensed midwives are trained experts in the management of low-risk pregnancy and birth outside of the hospital. Certain conditions may present increased risk to mother and/or baby. The risks listed below apply to birth in any setting, and are not all-inclusive. The condition/risk factor listed may require medications and treatments outside of the scope of practice of Virginia Licensed Midwives and, thus may necessitate consultation with a physician, additional testing, and careful consideration for the appropriateness of birth in an out-of-hospital setting. Some conditions in pregnancy should be optimally managed and supported by a multidisciplinary team that may include midwives, obstetricians, perinatologists, family physicians, psychologists, social workers, and spiritual advisors.

# Conditions requiring on-going medical supervision or on-going use of medications

Clients with chronic medical conditions, on prescribed medications, or under medical care for a time-limited problem that coincides with pregnancy should be advised to consult with their treating healthcare providers regarding the impact of these conditions and medications on pregnancy, as well as any impact pregnancy may have on their other diagnosed conditions. Women who choose not to disclose information regarding any medical conditions they have or medications that they are taking may increase their risk of complications.

## **Current substance abuse (including alcohol and tobacco)**

Obstetrical complications of cigarette smoking include:

- Growth restriction (IUGR)
- Spontaneous abortion (miscarriage)
- Sudden infant death syndrome (SIDS)

# Alcohol abuse leads to:

- Nutritional deficiencies
- Fetal alcohol syndrome

In addition to increased risk of preterm labor and baby being small for gestational age, complications resulting from abusing other drugs include:

- Heroin and cocaine consumption result in medical, nutritional and social neglect
- Cocaine and amphetamine cause hypertension, placental abruption
- Intravenous abuse also increases the risk of contracting infectious disease.<sup>1</sup>
- Maternal substance use of opioids, benzodiazepines, barbiturates, and alcohol can cause NAS (Neonatal abstinence syndrome).<sup>2</sup> NAS is a set of drug withdrawal symptoms that affect the central nervous, gastrointestinal, and respiratory systems in the newborn when separated from the placenta at birth.

# Documented Intrauterine growth retardation (IUGR)/small for gestational age (SGA) at term

Complications<sup>3</sup> for the growth-restricted fetus include:

- Prematurity
- Perinatal morbidity
- Stillbirth

"IUGR is a serious problem, regardless of why the baby is small. About 20% of stillborn babies are IUGR, and perinatal mortality for growth-restricted infants may be 6 to 10 times higher than for those of normal size. Most IUGR stillbirths occur after the 36<sup>th</sup> week of pregnancy and before labor begins."<sup>4</sup>

## Suspected uterine rupture

Consequences of uterine rupture:

- There have been no reported maternal deaths due to uterine rupture
- Overall, 14 percent to 33 percent of women will need a hysterectomy when the uterus ruptures
- Approximately 6 percent of uterine ruptures will result in perinatal death
- This is an overall risk of intrapartum fetal death of 20 per 100,000 women undergoing trial of labor after previous cesarean section
- "For term pregnancies, the reported risk of fetal death with uterine rupture is less than 3 percent. Although the risk is similarly low, there is insufficient evidence to quantify the neonatal morbidity directly related to uterinerupture."<sup>5</sup>

#### Prolapsed cord or cord presentation

Prolapsed cord is a term describing a cord that is passing through the cervix at the same time or in advance of the fetal presenting part. This occurs in approximately 1.4-6.2 per 1000 of pregnancies. Although uncommon, it is considered a true obstetrical emergency most often necessitating a caesarean delivery. Prolapsed cord is associated with other complications of pregnancy and delivery as well.

Pregnancy and substance abuse, G. Fischer, M. Bitschnau, A. Peternell, H. Eder, A. Topitz. Archives of Women's Mental Health. August 1999, Volume 2, Issue 2, pp 57-65.

Casper, Tammy, and Megan W. Arbour. "Identification of the Pregnant Woman Who Is Using Drugs: Implications for Perinatal and Neonatal Care." Journal of Midwifery & Women's Health (2013).

Lerner, Jodi P. "Fetal growth and well-being." Obstetrics and gynecology clinics of North America 31.1 (2004): 159-176.

Frye, Anne, Holistic Midwifery, Volume I, Labrys Press, Portland, OR, 2006, p. 990

Guise, Jeanne-Marie, et al. "Vaginal birth after cesarean: new insights." (2010).

#### Fetal risks:

- Hypoxia
- Stillbirth/death

#### Suspected complete or partial placental abruption

Placental abruption results from a cascade of pathophysiologic processes ultimately leading to the separation of the placenta prior to delivery. Pregnancies complicated by abruption result in increased frequency<sup>6</sup> of:

- Low birth weight
- Preterm delivery
- Stillbirth
- Perinatal death

## Suspected placental previa

Pregnancies complicated with placenta previa had significantly higher rates<sup>7</sup> of

- Second-trimester bleeding
- Pathological presentations
- Placental abruption
- Congenital malformations
- Perinatal mortality
- Cesarean delivery
- Apgar scores at 5 minutes lower than 7
- Placenta accreta
- Postpartum hemorrhage
- Postpartum anemia
- Delayed maternal and infant discharge from the hospital

## Suspected chorioamnionitis

Chorioamnionitis is a potentially serious complication:8

- Chorioamnionitis is a major risk factor in the event of preterm birth, especially at earlier gestational ages, contributing to prematurity-associated mortality and morbidity
- Increased susceptibility of the lung for postnatal injury, which predisposes for bronchopulmonary dysplasia.
- Chorioamnionitis is associated with cystic periventricular leukomalacia, intraventricular hemorrhage and cerebral palsy in preterm infants
- Prenatal inflammation/infection has been shown a risk factor for neonatal sepsis

Ananth, Cande V., et al. "Placental abruption and adverse perinatal outcomes." JAMA: the journal of the American Medical Association 282.17 (1999): 1646-1651. Sheiner, E., et al. "Placenta previa: obstetric risk factors and pregnancy outcome." Journal of Maternal-Fetal and Neonatal Medicine 10.6 (2001): 414-419. Thomas, Wolfgang, and Christian P. Speer. "Chorioamnionitis: important risk factor or innocent bystander for neonatal outcome?" Neonatology 99.3 (2010): 177-187.

# Pre-eclampsia/eclampsia

Complications of preeclampsia include:

- Eclampsia
- HELLP (hemolysis, elevated liver enzymes, low platelets) syndrome
- Liver rupture
- Pulmonary edema
- Renal failure
- Disseminated intravascular coagulopathy (DIC)
- Hypertensive emergency
- Hypertensive encephalopathy
- Cortical blindness

Maternal complications occur in up to 70% of women with eclampsia and include: 9

- DIC
- Acute renal failure
- Hepatocellular injury
- Liver rupture
- Intracerebral hemorrhage
- Cardiopulmonary arrest
- Aspiration pneumonitis
- Acute pulmonary edema
- Postpartum hemorrhage
- Maternal death rates of 0-13.9% have been reported

Fetal complications in preeclampsia are directly related to gestational age and the severity of maternal disease and include increased rates of: 10

- Preterm delivery
- Intrauterine growth restriction
- Placental abruption
- Perinatal death

# Thick meconium stained amniotic fluid without reassuring fetal heart tones and birth is not imminent

Meconium staining of the amniotic fluid is a common occurrence during labor. Although a large proportion of these pregnancies will have a normal neonatal outcome, its presence may be an indicator of fetal hypoxia and has been linked to the development of:

11

Cerebral palsy

Norwitz, Errol R., Chaur-Dong Hsu, and John T. Repke. "Acute complications of preeclampsia." Clinical obstetrics and gynecology 45.2 (2002): 308-329. de Souza Rugolo, Ligia Maria Suppo, Maria Regina Bentlin, and Cleide Enoir Petean Trindade. "Preeclampsia: effect on the fetus and newborn." Neoreviews 12.4 (2011): e198-e206.

Rahman, Shimma, Jeffrey Unsworth, and Sarah Vause. "Meconium in labour." Obstetrics, Gynaecology & Reproductive Medicine 23.8 (2013): 247-252.

- Seizures
- Meconium aspiration syndrome

# Abnormal auscultated fetal heart rate pattern unresponsive to treatment or inability to auscultate fetal heart tones

Sustained abnormal fetal heart rate patterns include bradycardia (abnormally low heart rate) and decelerations in the baby's heart rate. Additionally, tachycardia (abnormally high heart rate) is abnormal, and can also be an indication for the need for further evaluation. Historically, a 30-minute rule from decision-to-incision time for emergent cesarean delivery in the setting of abnormal FHR pattern has existed; however, the scientific evidence to support this threshold is lacking.

# Excessive vomiting, dehydration, or exhaustion unresponsive to treatment

- Sufficient fluid intake during labor may prevent hemoconcentration, starvation, and activation of the thrombogenic and fibrinolytic system<sup>12</sup>
- · With extreme exhaustion, the chances of fetal distress and non-progressive labor are greatly increased
- Bleeding during or after the placental birth, followed by shock, are much more likely to occur when the woman and her uterus are exhausted<sup>13</sup>
- Maternal exhaustion is diagnosed with a combination of ketonuria, elevated temperature, and elevated pulse. This condition is also known as ketoacidosis, in that the mother's blood becomes abnormally acidic and less able to carry oxygen. Unless this condition is reversed, fetal distress will result<sup>14</sup>

# Blood pressure greater than 140/90 which persists or rises and birth is not imminent

Women with chronic hypertension are at increased risk of: 15

- Superimposed preeclampsia (25% risk)
- Preterm delivery
- Fetal growth restriction or demise
- Placental abruption
- Congestive heart failure
- Acute renal failure
- Seizures
- Stroke
- Death

# Maternal fever equal to or greater than 100.4°

Fever can indicate infection. Fever in labor is associated with: 16

- Early neonatal and infant death
- Hypoxia

Watanabe, Takashi, et al. "Effect of labor on maternal dehydration, starvation, coagulation, and fibrinolysis." Journal of perinatal medicine 29.6 (2001): 528-534. Frye, Anne, Holistic Midwifery, Volume II, Labrys Press, Portland, OR, 2004, p. 1055.

Davis, Elizabeth, Heart and Hands: A Midwife's Guide to Pregnancy and Birth, Celestial Arts, New York, NY, 2004, p. 141.

Hypertension. 2003; 41: 437-445 Published online before print February 10, 2003, doi: 10.1161/01.HYP.0000054981.03589.E9 PETROVA, Anna, et al. "Association of maternal fever during labor with neonatal and infant morbidity and mortality." Obstetrics and gynecology 98.1 (2001): 20-27.

Guidance document: 85-10	Effective:
<ul> <li>Infection-related death. These associations wer</li> <li>Meconium aspiration syndrome</li> <li>Hyaline membrane disease</li> <li>Neonatal seizures</li> <li>Assisted ventilation</li> </ul>	e stronger among term than preterm infants
Labor or premature rupture of membrane (PROM) less	than 37 weeks according to due date
Premature rupture of membranes before 37 weeks' ges the onset of contractions and labor) can have conseque	tation (and where there is at least an hour between membrane rupture and notes for both the mother and the baby:
Risks to Baby:	
<ul> <li>Neurologic injury</li> <li>Infection</li> <li>Respiratory Distress</li> <li>Death</li> <li>Increased need for neonatal intensive care serv</li> </ul>	rices
Maternal Risks:	
<ul><li>Infection</li><li>Prolonged Labor</li><li>C-Section</li><li>Death</li></ul>	
physician, there may be increased risks to mother a communities, the lack of availability of a seamless, con transfer.	vide for immediate access to medications, surgery, and consultation with a nd/or baby if any of these conditions present during the birth. In some operative hospital transfer process adds additional risk during intrapartum parent until labor, and my opportunity for referral to a physician, should
i unuerstaniu tilat tile ilitrapartum risks may not be ap	parent until labor, and my opportunity for referral to a physician, should

ı choose that, would be limited to hospital transfer and transfer of care to the physician on call at that facility.

I have received and read this document, discussed it with my midwife, and my midwife has answered my questions to my satisfaction.

Client	Date
Midwife	Date

Guidance document: 85-10	Effective:
1. ABNORMAL FETAL CARDIAC RATE OR RHYTHM	
Preamble:	
	rimary decision maker in all aspects of her care and respects her autonomy. naking in order to achieve optimal clinical outcomes. Disclosure of risks is an (the <i>North American Registry of Midwives</i> ).
The midwife must also be able to document the process potential risks and benefits of proceeding with the new o	her Plan of Care, she must be prepared to give evidence of informed consent. that led to the decision and show that the client was fully informed of the are plan. It is the responsibility of the midwife to provide evidence- based ultation or referral to other providers to aid the client in the decision making
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# Disclosure of risks related to: Abnormal fetal cardiac rate or rhythm

Fetal rhythm abnormalities (fetal heart rates that are irregular, too fast or too slow):

- occur in up to 2% of pregnancies
- usually identified by the obstetrical clinician who detects an abnormal fetal heart rate or rhythm using a Doppler or stethoscope
- majority have isolated premature atrial contractions which may spontaneously resolve
- sustained tachyarrhythmia (rapid) or bradyarrhythmia (slow) may be of clinical significance
  - o may indicate severe systemic disease
  - o may have the potential to compromise the fetal circulation
  - o May require intensive antepartum and/or neonatal care

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

<u> </u>	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.	
Client		Date
Midwife		Date
Congenita	   heart disease: Rhythm abnormalities of the fetus. Lisa K Hornberger, David J Sahn. H	Heart 2007;93:10 1294-1300 doi:10.1136/hrt.2005.069369

Guidance document: 85-10	Effective:
2. ACTIVE CANCER	
Preamble:	
• • • • • • • • • • • • • • • • • • • •	e primary decision maker in all aspects of her care and respects her autonomy. n-making in order to achieve optimal clinical outcomes. Disclosure of risks is an RM (the North American Registry of Midwives).
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Disclosure of risks related to: Active Cancer	
Maternal risks:	
<ul> <li>maternal infection due to immune suppression,</li> <li>deep vein thrombosis and pulmonary embolism dur</li> <li>hemorrhage at delivery.</li> </ul>	ring pregnancy and especially after delivery
Fetal risks:	
Intrauterine growth restriction	
<ul><li>Preterm birth</li><li>Fetal health effects from exposure to maternal med</li></ul>	lications
As required by the regulations for practice as a Virginia Lice	ensed Midwife, my midwife has discussed this information with me and

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Client_		Date
Midwife	<u> </u>	Date
http://ww	vw.nlm.nih.gov/medlineplus/cancerandpregnancy.html J Obstet Gynaecol Can. 201	3 Mar;35(3):263-80.

# 3. ACUTE OR CHRONIC THROMBOPHLEBITIS

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Deep vein thrombosis (DVT) and pulmonary embolism (PE) are collectively known as venous thromboembolism (VTE). VTE occurs more frequently in pregnant women, with an incidence of 0.5 to 2.0 per 1000 pregnancies, four to five times higher than in the non-pregnant population. The risk for VTE is further elevated in the postpartum period.

# The risk for VTE in pregnancy is increased in women with:

- Prior history of VTE
- Advanced maternal age
- Collagen-vascular disease, especially antiphospholipid antibody syndrome
- Obesity (BMI > 30)
- Multiparity
- Hypercoaguable state
- Nephrotic syndrome
- Operative delivery
- Prolonged bed rest
- Hematologic disorders (hemoglobin SS and SC disease, polycythemia, thrombotic thrombocytopenic purpura, paroxysmal nocturnal hemoglobinuria, and some dysfibrinogenemias).
- Maternal medical conditions (diabetes, heart disease, inflammatory bowel disease)
- Smoking
- Preeclampsia

#### **Maternal complications:**

Revised: 5/21

Guidance document: 85-10

# 4. Anemia (HEMATOCRIT LESS THAN 30 OR HEMOGLOBIN LESS THAN 10 AT TERM)

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# Disclosure of risks related to: Anemia (hematocrit less than 30 or hemoglobin less than 10 at term)

The World Health Organization (WHO) estimates that worldwide, 42% of pregnant women are anemic. 17

Current knowledge indicates that iron deficiency anemia in pregnancy is a risk factor for preterm delivery and subsequent low birth weight, and possibly for inferior neonatal health. Data are inadequate to determine the extent to which maternal anemia might contribute to maternal mortality.<sup>18</sup>

...a woman who is already anemic is unable to tolerate blood loss that a healthy woman can. 19

# Maternal Risks related to severe or untreated anemia:

- need for blood transfusion(s), resulting from a hemorrhage (significant blood loss) during delivery
- postpartum depression

#### Fetal/Neonatal Risks related to maternal severe or untreated anemia:

- prematurity
- low-birth-weight
- anemia
- developmental delays

Benoist B, McLean E, Egli I, et al. Worldwide Prevalence of Anaemia 1993-2005. Geneva, Switzerland: World Health Organization; 2008.

Allen, Lindsay H. "Anemia and iron deficiency: effects on pregnancy outcome." The American journal of clinical nutrition 71.5 (2000): 1280s-1284s.

McCormick, M. L., et al. "Preventing postpartum hemorrhage in low-resource settings." International journal of gynecology & obstetrics 77.3 (2002): 267-275.

As required by the regulations for practice as a Virginia Licensed Midw has provided me with options for consultation and referral to a physicial	•
<ul> <li>Consult with a physician regarding my risk factors.</li> <li>Decline consultation with a physician regarding my risk factors</li> </ul>	i.
Client	Date
Midwife	Date

Revised: 5/21

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Guidance document: 85-10

# 5. Any Pregnancy with abnormal Fetal Surveillance Tests

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# Disclosure of risks related to: Pregnancy with abnormal Fetal Surveillance Tests

There is no benefit in continuing a pregnancy at or post term after fetal surveillance is found to be non-reassuring. The recommendation is delivery (Price, 2014)." Abnormal stress tests at any point in pregnancy are associated with an increased risk of poor outcomes in pregnancy and during labor and delivery. Babies with diagnosed or undiagnosed anomalies are more likely to have abnormal test results requiring specialized care before or after delivery. Antepartum testing results, with regard to the overall clinical picture, should be taken seriously.

#### Risks to fetus:

- Stillbirth
- Asphyxia
- Fetal Acidosis
- Low Apgar scores
- Respiratory distress
- Surgical delivery
- Meconium Aspiration
- Death

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Client	Date
Midwife	Date
O'Noill F. T. (2012). Antonartum avaluation of the fatus and fatal well being. Clin	ical Obstatrics and Gynasology, 55 (2), 722
O'Neill, E. T. (2012). Antepartum evaluation of the fetus and fetal well-being. <i>Clin</i> Preboth, M. (2000). Practice Guidelines ACOG Guidelines on Antepartum Fetal Su	, 3,, ( ),

Singh, T. (2008). The prediction of intra-partum fetal compromise in prolonged pregnancy. Journal of Obstetrics and Gynecology, 28 (8), 779-782

Price, A. (2014, January). MSN CNM. Assistant Clinical Professor VCUMC. (B. Sheets, Interviewer)

Revised: 5/21

Guidance document: 85-10

#### 6. BLOOD COAGULATION DEFECT

#### Preamble:

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## Disclosure of risks related to: Blood coagulation defect

Hereditary thrombophilia, or predisposition to thrombosis, ranges from the common (Factor V Leiden heterozygosity, present in 1-15% of pregnant women) to the rare (antithrombin deficiency occurring in 0.02%). The risk of deep vein thrombosis or pulmonary embolism (collectively known as venous thromboembolism or VTE) ranges from 0.1-7% of pregnancies. The maternal medical history determines the management during pregnancy, which can include anticoagulation with injections of heparin throughout the pregnancy and post-partum period.

The presence of one of these disorders may contribute to the risk of obstetric complications as well, including:

- IUGR
- preeclampsia
- stillbirth
- Frequent fetal surveillance is recommended in most cases, as well as timed delivery in the last week before the estimated date of delivery.

Alternatively, disorders of maternal hemostasis (such as von Willebrand disease) increase the risk of blood loss at delivery, and as hereditary disorders also increase the risk for abnormal bleeding in the newborn.

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	Consult with a physician regarding my risk factors.		
	Decline consultation with a physician regarding my risk factors.		
Client		Date	
CHEIL		Date	

Inherited Thrombophilia in Pregnancy. Practice Bulletin 138, November 2013. American College of Obstetricians and Gynecologists.

# 7. BODY MASS INDEX (BMI) EQUAL TO OR GREATER THAN 30

#### Preamble:

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## Disclosure of risks related to: Body Mass Index (BMI) equal to or greater than 30

Obesity is defined as having a BMI of 30 or higher. The number of obese women in the United States has increased greatly during the past 25 years. Obesity has also become a major health concern for pregnant women. More than one half of pregnant women are overweight or obese.

# Risks of Obesity Include:

- Birth defects Babies born to obese mothers have an increased risk of having birth defects, such as heart defects and neural tube defects.
- Macrosomia In this condition, the baby is larger than normal. This can increase the risk of the baby being injured during birth. For example, the baby's shoulder can become entrapped after the head is delivered. Macrosomia also increases the risk of cesarean birth.
- Preterm Birth Problems associated with a mother's obesity may mean that the baby will need to be delivered early. Preterm infants have an increased risk of health problems, including breathing problems, eating problems, and developmental and learning difficulties later in life.
- Stillbirth The risk of stillbirth increases the higher the mother's BMI.
- High Blood Pressure
- Preeclampsia Preeclampsia is a serious illness for both the woman and her baby. Although gestational hypertension is the most common sign of preeclampsia, this condition affects all organs of the body. The kidneys and liver may fail. In rare cases, stroke can occur. The fetus is at risk of growth problems and problems with the placenta. It may require early delivery, even if the baby is not fully grown. In severe cases, the woman, baby, or both may die.

Gestational Diabetes – High blood glucose (sugar) levels during pregnancy increase the risk of having a very large baby and
a cesarean delivery. Women who have had gestational diabetes have a higher risk of having diabetes in the future, as do
their children.

- Challenges in Prenatal Care Obesity can make it more difficult for the midwife to assess fetal position and fetal growth.
- Challenges in Labor Management Obesity can create challenges in moving the woman quickly in the event of an emergency during the birth, and can make auscultation of fetal heart tones more difficult.

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<u> </u>	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.			
Client		Date		
Midwife	<u> </u>	Date		

Bhattacharya, Sohinee, et al. "Effect of Body Mass Index on pregnancy outcomes in nulliparous women delivering singleton babies." BMC public Health 7.1 (2007): 168.

# 8. CARDIAC DISEASE

#### Preamble:

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## Disclosure of risks related to: Cardiac Disease

Most women tolerate the cardiovascular changes of pregnancy without difficulty. Pregnancy in a patient with significant cardiac disease is associated with significant risk. Despite occurring in only 0.2-4% of pregnancies, cardiac disease is associated with up to 30% of maternal deaths. A pregnant patient with cardiac disease will benefit from the coordinated care of a multidisciplinary team including perinatologists, cardiologists and anesthesiologists. In particular, adults with repaired congenital heart disease may pose complex management scenarios. They may require specialized cardiac monitoring during labor and birth, and some cardiac conditions are associated with a high enough risk of labor complications that cesarean is recommended.

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

	Consult with a physician regarding my risk factors. Decline consultation with a physician regarding my risk factors.		
Client		Date	
Midwife		Date	

Nanda S, Nelson-Piercy C, Mackillop L. Cardiac disease in pregnancy. Clin Med 2012;12:553-560.

## 9. CHRONIC OBSTRUCTIVE PULMONARY DISEASE OR OTHER PULMONARY DISORDERS

#### Preamble:

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Chronic Obstructive Pulmonary Disease (COPD) or other pulmonary disorders affect approximately 4% to 6% of adults of all ages and is one of the most common medical conditions complicating pregnancy.

# **RISKS**

- Preterm birth
- Decreased birth weight
- Increased neonatal and maternal death

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.	
Client_		Date
Midwife	<u> </u>	
 Lei	ghton, B, Fish, J, <i>Glob. libr. women's med., (ISSN: 1756-2228)</i> 2008; DOI 10.3843,	GLOWM.10170

# 10. ECTOPIC PREGNANCY (1)

#### Preamble:

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Today, about 1 in 50 pregnancies is ectopic. An ectopic pregnancy occurs when a fertilized egg grows outside of the uterus most commonly in the tube. As the pregnancy grows, it can rupture (burst). If this occurs, it can cause major internal bleeding. This can be life threatening and needs to be treated. If there is evidence of ectopic pregnancy, medical and surgical interventions are available, and a referral should be made to an appropriate health provider. If there is a positive pregnancy test with follow-up ultrasound showing no intrauterine pregnancy, then referral should be made to an appropriate healthcare provider.

# **RISKS**

- Fallopian tube damaged, leading to an increased likelihood of having another ectopic pregnancy in the future.
- Ruptured ectopic pregnancy (when the fallopian tube splits) and severe internal bleeding, which can lead to shock.
- Death

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	Consult with a physician regarding my risk factors.		
	Decline consultation with a physician regarding my risk factors	5.	
Client_		Date	
Midwife	2	Date	

Sivalingam VN, Duncan WC, Kirk E, et al, Diagnosis and management of ectopic pregnancy, Journal of Family Planning and Reproductive Health Care 2011;37:231-240.

# 11. ESSENTIAL CHRONIC HYPERTENSION (1)

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Elevated blood pressure, systolic >140 or diastolic >90 or both, that predates conception or is diagnosed before 20 weeks of gestation.

# **MATERNAL RISKS**

- Preterm delivery
- Placental abruption
- Preeclampsia
- Eclampsia
- Seizures
- Maternal congestive heart failure
- Acute renal failure
- Death

# **FETAL RISKS**

- Fetal growth restriction
- Fetal death

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<u> </u>	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.		
Client		Date	
Midwife		Date	

Bramham, Kate, et al. "Chronic hypertension and pregnancy outcomes: systematic review and meta-analysis." Bmj 348 (2014).

Revised: 5/21

Guidance document: 85-10

# 12. GENITAL HERPES OR PARTNER WITH GENITAL HERPES

#### Preamble:

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#### Disclosure of Risks Related to: Genital Herpes

Because of its serious and potentially lethal risks to the fetus and neonate, pregnant women and their partners should be tested for *HSV - Herpes Simplex Virus* (HSV1 & HSV2).

In women with a previous diagnosis of genital herpes, cesarean delivery to prevent neonatal HSV infection is not indicated if there are NO genital lesions at the time of labor. In an effort to reduce cesarean deliveries performed for the indication of genital herpes, the use of oral acyclovir or valacyclovir near the end of pregnancy to suppress genital HSV recurrences has become increasingly common in obstetric practice. Several studies with small sample sizes suggest that suppressive acyclovir therapy during the last weeks of pregnancy decreases the occurrence of clinically apparent genital HSV disease at the time of delivery, with an associated decrease in cesarean delivery rates for the indication of genital HSV. However, because viral shedding still occurs (albeit with reduced frequency), the potential for neonatal infection is not avoided completely, and cases of neonatal HSV disease in newborn infants of women who were receiving antiviral suppression recently have been reported.<sup>20</sup>

Genital HSV, especially in primary infections, may be dangerous to the neonate if infected during delivery, as it can cause a severe neonatal disease.<sup>21</sup>

The frequency of neonatal infection ranged from 31% to 44% for primary first-episode, and 1 to 3% in recurrent.

Kimberlin, David W., et al. "Guidance on management of asymptomatic neonates born to women with active genital herpes lesions." Pediatrics 131.2 (2013): e635-e646.

Meytal Avgil, Asher Ornoy, Herpes simplex virus and Epstein-Barr virus infections in pregnancy: consequences of neonatal or intrauterine infection, Reproductive Toxicology, Volume 21, Issue 4, May 2006, Pages 436-445, ISSN 0890-6238, http://dx.doi.org/10.1016/j.reprotox.2004.11.014.

#### Risks of HSV infection to the fetus include:

- intrauterine fetal demise (the death of the fetus while in the uterus)
- skin scars (cutaneous manifestations),
- ophthalmologic findings (chorioretinitis, microphtalmia),
- neurological involvement (causing brain damage)

The clinical presentation of infants with neonatal HSV infection, that is almost invariably symptomatic and frequently lethal, is a direct reflection of the site and extent of viral replication.<sup>22</sup>

# Risks of HSV infection to the neonate (newborn) include:

- death
- · neurologic (brain) damage (intracranial calcifications, microcephaly, seizures, encephalomacia),
- growth restriction,
- psychomotor development impairment
- skin vesicles or scarring,
- eye lesions resulting in vision loss and/or blindness (chorioretinitis, microphthalmia, cataracts),
- hearing loss and/or deafness

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Date \_\_\_\_\_

Anzivino, Elena, et al. "Herpes simplex virus infection in pregnancy and in neonate: status of art of epidemiology, diagnosis, therapy and prevention." Virol J 6.1 (2009): 1-11.

Brown ZA, Wald A, Morrow RA, Selke S, Zeh J, Corey L. Effect of serological status and cesarean delivery on transmission rates of herpes simplex virus from mother to infant. JAMA. 2003;289(2):203.

# 13. HISTORY OF HEMOGLOBINOPATHIES

#### Preamble:

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## Disclosure of risks related to: History of hemoglobinopathies

Hemoglobinopathies include sickle cell disease and its variants as well as alpha and beta thalassemia. The involvement of a multidisciplinary team including perinatologists, hematologists and anesthesiologists can allow for development of a plan to screen for and manage complications.

# Maternal risks include:

- cerebral vein or deep vein thrombosis
- anemia and vaso-occlusive crisis
- pneumonia
- pyelonephritis
- transfusion
- pregnancy induced hypertension
- postpartum infection, sepsis, and systemic inflammatory response syndrome
- cesarean delivery

#### Fetal risks include:

- preterm birth and its consequences including low birth weight
- intrauterine growth restriction
- abruption placentae
- stillbirth

genetic risk assessment is also recommended for individuals identified as carriers for hemoglobinopathy, as they may be at risk to have affected offspring.
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 Consult with a physician regarding my risk factors.
 Decline consultation with a physician regarding my risk factors.

Revised: 5/21

Date \_\_\_\_\_

Date \_\_\_\_\_

Guidance document: 85-10

Client\_\_\_\_\_

Midwife\_\_\_\_\_

Villers, Margaret S., et al. "Morbidity associated with sickle cell disease in pregnancy." American journal of obstetrics and gynecology 199.2 (2008): 125-e1.

Naik, Rakhi P., and Sophie Lanzkron. "Baby on board: what you need to know about pregnancy in the hemoglobinopathies." ASH Education Program Book 2012.1 (2012): 208-214.

John C. Morrison and Marc R. Parrish. "Sickle Cell Disease and Other Hemoglobinopathies" Protocols for High-Risk Pregnancies (2010): 158-159. American College of Obstetricians and Gynecologists, Practice Bulletin 78, "Hemoglobinopathy in Pregnancy," January 2007

### 14. HIV POSITIVE STATUS OR AIDS

#### Preamble:

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## Disclosure of risks related to: HIV positive status with AIDS

HIV transmission from mother to child during pregnancy, labor and delivery, or breastfeeding is known as perinatal transmission and is the most common route of HIV infection in children. When HIV is diagnosed before or during pregnancy, perinatal transmission can be reduced to less than 1% if appropriate medical treatment is given, the virus becomes undetectable, and breastfeeding is avoided.<sup>23</sup>

Recommended medical treatment includes antiretroviral medication taken throughout pregnancy and during labor, regular monitoring of the maternal viral load, cesarean delivery for viral load > 1000 copies/mL, and initiation of antiretroviral medication for the newborn shortly after birth.

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

<ul><li>Consult with a physician regarding my risk factor</li><li>Decline consultation with a physician regarding re</li></ul>	
Client	Date
Midwife_	Date
http://www.cdc.gov/hiv/risk/gender/pregnantwomen/index.html	

# 15. INAPPROPRIATE FETAL SIZE FOR GESTATION - MACROSOMIA (LARGE FOR GESTATIONAL AGE)

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### Disclosure of Risks Related to: Inappropriate Fetal Size for Gestation – Macrosomia (Large for Gestational Age)

Macrosomia (meaning *big body*), is arbitrarily defined as a birth weight of more than 4,000 g (8 lb, 13 oz). Also known as *large for gestational age*, fetal macrosomia complicates more than 10 percent of all pregnancies in the United States.<sup>24</sup>

#### Risks to the mother related to macrosomia include:

- increased risk of uterine rupture after previous cesarean section or other uterine surgery;
- increased likelihood of induction at or before 40 weeks;
- increased likelihood of an operative delivery: forceps, vacuum, or cesarean section;
- trauma to vagina and/or perineum; including perineal and/or vulvar lacerations, 3<sup>rd</sup> or 4<sup>th</sup> degree episiotomy, short or long-term urinary or fecal incontinence;
- increased blood loss and/or postpartum hemorrhage,
- damage to the coccyx (tailbone)

# Risks to the baby related to macrosomia at the time of birth include:

- shoulder dystocia (the baby gets stuck at the shoulders after the delivery of the head), which may result in trauma to the baby including:
  - broken clavicle (collar) bone(s);
  - brachial plexus injury, temporary or permanent nerve damage (sensory and motor) to either one or both shoulders, arms, and hands;
  - cerebral palsy;
  - hypoxia, resulting in permanent brain damage;
  - death.
- injuries related to operative delivery (forceps, vacuum, or cesarean section) including:
  - bruising and/or injury to the scalp, head and/or face;

MARK A. ZAMORSKI, M.D., M.H.S.A., and WENDY S. BIGGS, M.D., University of Michigan Medical School, Ann Arbor, Michigan. Am Fam Physician. 2001 Jan 15;63(2):302-307.

- temporary weakness in the facial muscles (facial palsy);
- external eye and/or ear trauma;
- broken clavicle (collar) bone(s);
- brachial plexus injury (see description above);
- cerebral palsy;
- skull fracture;
- bleeding within the skull;
- seizures;
- lacerations (during cesarean section) to the baby's presenting part
- immature lungs and breathing problems, if the due date has been miscalculated and the infant is delivered before 39 weeks of gestation;
- need for special care in the neonatal intensive care unit (NICU);

## Risks to the newborn related to macrosomia and later childhood risks:

- higher than normal blood sugar level (impaired glucose tolerance);
- childhood obesity (research suggests that the risk of childhood obesity increases as birth weight increases);
- metabolic syndrome (a group of conditions: increased blood pressure, a high blood sugar level, excess body fat, abnormal cholesterol levels; that occur together, increasing the risk of heart disease, stroke and diabetes later in life.

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

<ul><li>Consult with a physician regarding my risk factors.</li><li>Decline consultation with a physician regarding my risk factors.</li></ul>	ctors.
Client	Date
Midwife	Date

# 16. INAPPROPRIATE FETAL SIZE FOR GESTATION - IUGR (SMALL FOR GESTATIONAL AGE)

#### Preamble:

The Midwives Model of Care® recognizes the client/patient as the primary decision maker in all aspects of her care and respects herautonomy. This is supported within a model of well-informed, shared decision-making in order to achieve optimal clinical outcomes. Disclosure of risks is an integral part of the informed consent process, as outlined by NARM (the *North American Registry of Midwives*).

"If a midwife supports a client's choices that are outside of her Plan of Care, she must be prepared to give evidence of informed consent. The midwife must also be able to document the process that led to the decision and show that the client was fully informed of the potential risks and benefits of proceeding with the new care plan. It is the responsibility of the midwife to provide evidence-based information, clinical expertise, and when appropriate, consultation or referral to other providers to aid the client in the decision making process." – NARM

Licensed midwives are trained experts in the management of low-risk pregnancy and birth outside of the hospital. Certain conditions may present increased risk to mother and/or baby. The risks listed below apply to birth in any setting, and are not all-inclusive. The condition/risk factor listed may require medications and treatments outside of the scope of practice of Virginia Licensed Midwives and, thus may necessitate consultation with a physician, additional testing, and careful consideration for the appropriateness of birth in an out-of-hospital setting. Some conditions in pregnancy should be optimally managed and supported by a multidisciplinary team that may include midwives, obstetricians, perinatologists, family physicians, psychologists, social workers, and spiritual advisors.

## Disclosure of Risks Related to: Inappropriate Fetal Size for Gestation - IUGR (Small for Gestational Age)

IUGR (Intrauterine Growth Restriction) is a serious problem, regardless of why the baby is small. About 20% of stillborn babies are IUGR, and perinatal mortality for growth-restricted infants may be 6 to 10 times higher than for those of normal size. Most IUGR stillbirths occur after the 36<sup>th</sup> week of pregnancy and before labor begins.<sup>25</sup>

# Risks to the baby related to IUGR, known as Small for Gestation Age:

- low birth weight (LBW);
- difficulty handling the stresses of vaginal delivery;
- decreased oxygen levels (hypoxia);
- hypoglycemia (low blood sugar);
- low resistance to infection;
- low APGAR scores (a test given immediately after birth to evaluate the newborn's physical condition and determine need for special medical care);
- meconium aspiration (inhalation of stools passed while in the uterus), which can lead to breathing problems, lung surfactant dysfunction, chemical pneumonitis, and persistent pulmonary hypertension;
- trouble maintaining body temperature (hypothermia);
- abnormally high red blood cell count;
- admission to NICU;
- long-term growth problems;
- intrauterine fetal demise (fetal death prior to labor);

Frye, Anne, <u>Holistic Midwifery, Volume I</u>, Labrys Press, Portland, OR, 2006, p. 990

• stillbirth (fetal death during labor or birth).

#### Risks to the mother related to IUGR:

- increased stress related to fetal monitoring and surveillance (serial ultrasounds and non-stress testing);
- premature labor;
- premature birth (delivery of the fetus before 37 weeks gestation);
- induction and early delivery, before 40 weeks;
- cesarean section.

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.		
Client		Date	
Midwife	e	Date	

# 17. INCOMPLETE SPONTANEOUS ABORTION OR INCOMPLETE MISCARRIAGE (10)

#### Preamble:

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Spontaneous abortion also known as early pregnancy loss refers to a miscarriage that happens before 20 weeks of gestation and is seen in 13% to 20% of all diagnosed pregnancies. Incomplete spontaneous abortion occurs when some tissue is retained in the uterus. Medication or a procedure may be needed to remove the tissue.

## STILLBIRTH OR INTRAUTERINE FETAL DEMISE (IUFD)

Fetal death that happens after 20 weeks of gestational age is called stillbirth and has a rate of 3.2 per 1000 births. Medical intervention is needed for delivery.

# MATERNAL FETAL RISKS OF EARLY OR LATE FETAL LOSS

- Infection
- Hemorrhage
- Maternal coagulopathy
- Gestational trophoblastic disease
- Rh isoimmunization

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

Consult with a physician regarding my risk factors.

Guidance document: 85-10	Revised: 5/21	
☐ Decline consultation with a physician regarding my risk factors.		
Client	Date	
Midwife	Date	

Metz, Torri D., et al. "Obstetric care consensus# 10: management of stillbirth:(replaces practice bulletin number 102, March 2009)." American journal of obstetrics and gynecology 222.3 (2020): B2-B20.

American College of Obstetricians and Gynecologists' Committee on Practice Bulletins—Gynecology. "ACOG Practice Bulletin No. 200: Early Pregnancy Loss." Obstetrics and gynecology vol. 132,5 (2018): e197-e207. doi:10.1097/AOG.000000000002899

### 18. ISOIMMUNIZATION TO BLOOD FACTORS

### Preamble:

The Midwives Model of Care® recognizes the client/patient as the primary decision maker in all aspects of her care and respects herautonomy. This is supported within a model of well-informed, shared decision-making in order to achieve optimal clinical outcomes. Disclosure of risks is an integral part of the informed consent process, as outlined by NARM (the *North American Registry of Midwives*).

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#### Disclosure of risks related to: Isoimmunization to blood factors

Pregnant women with a negative Rh blood type (O-, A-, B-, AB-) or with other atypical antibodies have significant fetal and neonatal risk factors. Clinical manifestations of RhD haemolytic disease (HDN) range from asymptomatic mild anemia to hydrops fetalis or stillbirth associated with severe anemia and jaundice.<sup>26</sup>

Use of anti-D immune globulin for prevention of D has decreased the risk of isoimmunization. Routine treatment includes prophylactic dosage at 28 weeks of gestation, after delivery of a D-positive newborn and at any significant bleeding. Testing for Rh typing should be performed with every pregnancy because revisions in lab procedures may present as a change in the Rh blood type.

### Risks to the baby related to maternal isoimmunization include:

- destruction of fetal red blood cells (hemolysis);
  - mild to moderate hemolysis manifests as increased indirect bilirubin (red cell pigment).
  - severe hemolysis leads to red blood cell production by the spleen and liver.
- severe anemia;
- hepatic circulatory obstruction (portal hypertension);
- placental edema, interfering with placental perfusion;
- ascites (accumulation of fluid in the abdominal cavity);
- hepatomegaly (swelling of the liver);
- increased placental thickness;
- polyhydramnios (increased amniotic fluid);
- hydrops (fetal heart failure);
- anasarca (extreme generalized edema);

•	effusions (abnormal accumulation of fluid); intrauterine fetal demise (fetal death); stillbirth.		
	quired by the regulations for practice as a Virginia Licensed rovided me with options for consultation and referral to a pl		
	- Constant a projection regarding my non-received	ctors.	
Client_		Date	
Midwif	ife	Date	
 Urbaniak	ak, S. J., and M. A. Greiss. "RhD haemolytic disease of the fetus and the new	born." Blood reviews 14.1 (2000): 44-61.	
	r SG, Li W, Langeberg A, Landy HJ. New laboratory procedures and Rh bloo		stet Gynecol. 2012;119(2 Pt 2):426.

Revised: 5/21

Guidance document: 85-10

## 19. MULTIPLE GESTATION

#### Preamble:

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Disclosure of risks related to: Multiple gestation

#### Maternal risks:

- Anemia
- Hemorrhage
- Preeclampsia
- Gestational diabetes
- Cesarean delivery

# Fetal risks:

- Twin-to-twin transfusion syndrome (TTTS) in monochorionic twins
- Vanishing twin/death of one fetus
- Congenital anomalies
- Hydramnios
- Preterm birth
- Malpresentation
- Small for gestational age
- Umbilical cord prolapse
- Neonatal intensive care unit admission

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

Consult with a physician regarding my risk factors.
Decline consultation with a physician regarding my risk factors.

Client
Date

Midwife
Date

Rao, Anita, Shanthi Sairam, and Hassan Shehata. "Obstetric complications of twin pregnancies." Best Practice & Research Clinical Obstetrics & Gynaecology 18.4 (2004): 557-576.

Revised: 5/21

Spellacy, W. N. "Antepartum complications in twin pregnancies." Clinics in perinatology 15.1 (1988): 79-86.

Guidance document: 85-10

# 20. PERSISTENT SEVERE ABNORMAL QUANTITY OF AMNIOTIC FLUID (OLIGOHYDRAMNIOS AND POLYHYDRAMNIOS)

#### Preamble:

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## Disclosure of risks related to: Persistent severe abnormal quantity of amniotic fluid

Oligohydramnios (decreased amniotic fluid) may be caused by fetal anomalies (bladder outlet obstruction, renal agenesis), premature rupture of the membranes, or placental insufficiency occurring de novo or as a consequence of maternal conditions such as hypertension.

## Maternal risks:

- antepartum hospitalization
- induction of labor
- cesarean delivery

### Fetal risks:

- pulmonary hypoplasia (underdevelopment of the lungs)
- limb contractures
- abnormal fetal heart rate patterns
- acidosis
- neonatal intensive care unit admission
- need for surgical intervention if anomalies present
- stillbirth or neonatal death

Polyhydramnios (increased amniotic fluid) is most commonly idiopathic (no identifiable cause) but may be seen in maternal diabetes (especially uncontrolled or with large for gestational age fetus) and with fetal anomalies (diaphragmatic hernia, intestinal obstruction).

#### Maternal risks:

- cesarean delivery
- post-partum hemorrhage

#### Fetal risks:

- malpresentation
- neonatal intensive care unit admission
- need for surgical intervention if anomalies present
- neonatal hypoglycemia
- stillbirth and neonatal death

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.	
Client		Date
Midwife	<u></u>	Date

Shanks, Anthony, et al. "Assessing the optimal definition of oligohydramnios associated with adverse neonatal outcomes." Journal of Ultrasound in Medicine 30.3 (2011): 303-307.

Magann EF, Sandlin AT, Ounpraseuth ST. Amniotic fluid and the clinical relevance of the sonographically estimated amniotic fluid volume: oligohydramnios. J Ultrasound Med 2011;30:1573-85.

Moore, Thomas R. "Abnormal Amniotic Fluid Volume." Protocols for High-Risk Pregnancies (2010): 399.

# 21. PLATELET COUNT LESS THAN 120,000

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## Disclosure of risks related to: Platelet count less than 120,000

Platelet disorders in pregnancy include those that are time-limited to pregnancy (gestational thrombocytopenia, HELLP syndrome) and those that may pre-date or be newly diagnosed during the pregnancy (idiopathic thrombocytopenic purpura (ITP), thrombotic thrombocytopenic purpura (TTP)). With the exception of gestational thrombocytopenia, all of these platelet disorders place the mother at increased risk for blood loss and need for transfusion.

Gestational thrombocytopenia: occurs in 7-8% of pregnancies and accounts for 70-80% of cases of thrombocytopenia in pregnancy, typically diagnosed in the third trimester, rarely associated with platelet counts below 70,000, not associated with increased risks of bleeding in the mother or fetus, platelet counts return to normal after delivery.

It is important to differentiate gestational thrombocytopenia from more serious platelet disorders:

- ITP: chronic disorder associated with:
  - fluctuating platelet counts that may be lower than 50,000
  - need for steroid or immune globulin treatment and platelet transfusion to avoid excess blood loss at delivery, particularly surgical delivery.
- TTP: acute or chronic disorder generally associated with:
  - o severe thrombocytopenia of 20,000 or less
  - o hepatic impairment
  - o renal impairment
  - CNS impairment
  - o increased risk of death for both mother and fetus.

- HELLP syndrome: an acute condition occurring in up to 2% of pregnancies, usually seen in the setting of preeclampsia, and characterized by:
  - thrombocytopenia
  - o elevated liver enzymes
  - o hemolytic anemia
  - o potential for severe maternal illness including:
    - liver failure
    - hepatic subcapsular hematoma
    - excess maternal blood loss
    - seizure
    - maternal death
    - preterm birth
    - intrauterine growth restriction
    - fetal death

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<ul><li>Consult with a physician regarding my risk factors.</li><li>Decline consultation with a physician regarding my risk factors</li></ul>	
Client	Date
Midwife	Date

Gernsheimer T, James AH, Stasi R. How I treat thrombocytopenia in pregnancy. Blood 2013;121:38-47.

Thrombocytopenia during pregnancy. Importance, diagnosis and management. Boehlen F. Hamostaseologie. 2006 Jan;26(1):72-4

## 22. POSITION PRESENTATION OTHER THAN CEPHALIC AT TERM OR WHILE IN LABOR

#### Preamble:

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### **Presentation Risks**

Non-cephalic presentations occur in less than 4% of all pregnancies. This would include breech, transverse lie, and compound presentations. Non-cephalic presentations are associated with congenital abnormalities of the baby, multiple pregnancies, placenta previa, and uterine abnormalities. These associations may increase risk to the mother/baby in addition to the actual risks associated with non-cephalic delivery.

C-section has become the standard mode of delivery for babies in non-cephalic positions. Physicians and midwives may not have adequate training in the vaginal delivery of non-cephalic presentations further increasing the risk of injury or death to both mother and baby. A transverse presentation is considered incompatible with vaginal delivery. Posterior, Brow, and Face presentations are associated with complicated delivery and increased maternal and/or fetal complications and may require C-section if the fetal malpresentation does not resolve.

Disclosure of risks related to: Position presentation other than vertex at term or while in labor:

### **Risks to Babies:**

- Low APGAR scores
- Ruptured organs (kidney, liver)
- Neck Trauma
- Genital edema
- Prematurity
- Cord Prolapse
- Respiratory distress
- Stillbirth

- Head entrapment
- Edema to face and skull
- Tracheal damage
- Increased NICU admission rates
- Shoulder/arm trauma
- Hip and leg trauma
- Intracranial hemorrhage
- Death

## **Maternal Risks:**

- C-section
- Prolonged/Dysfunctional labor
- Placenta abruption
- Increased risk of deep lacerations

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

	nsult with a physician regarding my risk factors. cline consultation with a physician regarding my risk factors.		
Client		Date	
Midwife		Date	

de Leeuw, J. (2002). Mortality and early morbidity for abdominal and vaginal deliveries in breech presentation. Journal of Obstetrics and Gynaecology, 22 (2), 127-139.

Tidy, C. R. (2010). patient.co.uk/doctor/malpresentations. Retrieved from patient.co.uk.

# 23. PRE-ECLAMPSIA/ECLAMPSIA

### Preamble:

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### Disclosure of risks related to Pre-eclampsia:

Pre-eclampsia is a leading cause of death in pregnant women and occurs in 5% of all pregnancies. The management of pre-eclampsia may require medication and monitoring unavailable in an out of hospital setting.

#### **Maternal Risks:**

- Hypertension leading to brain injury
- Liver Failure
- Kidney Failure
- HELLP Syndrome
  - HELLP syndrome: an acute condition occurring in up to 2% of pregnancies, usually seen in the setting of preeclampsia, andcharacterized by:
  - o thrombocytopenia
  - elevated liver enzymes
  - o hemolytic anemia
  - potential for severe maternal illness including: liver failure, hepatic supscapular hematoma, excess maternal blood loss, seizure, maternal death, preterm birth, intrauterine growth restriction, fetal death.
- Clotting problems (DIC)
- Pulmonary edema
- Seizure (Eclampsia)
- Stroke
- Placental Abruption
- C-section
- Death

### **Fetal Risks:**

- Small for gestational age (IUGR)
- Premature Birth
- Stillbirth

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

<ul><li>Consult with a physician regarding my risk factors.</li><li>Decline consultation with a physician regarding my risk factors.</li></ul>	
Client	Date
Midwife	Date

American College of Obstetricians and Gynecologists. (2011). Frequently Aksed Questions: Pregnancy: High Blood Pressure During Pregnancy. ACOG. Cunningham, C. L. (2010). Williams Obstetrics (23rd Edition ed.). New York, NY: McGraw-Hill.

Frye, A. (1998). Holistic Midwifery (Vol. 1). Portland, OR: Labry's Press.

Gernsheimer T, James AH, Stasi R. How I treat thrombocytopenia in pregnancy. Blood 2013;121:38-47.

Thrombocytopenia during pregnancy. Importance, diagnosis and management. Boehlen F. Hamostaseologie. 2006 Jan;26(1):72-4

# 24. Pregnancy lasting longer than 42 completed weeks with an abnormal stress test

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Pregnancy is considered to be postdates at 42 weeks of gestation. There is limited research available to outline the risks of a pregnancy continuing beyond 42 weeks *with* an abnormal stress test. Current medical standard of practice is that beginning at 41 weeks, a non-stress test (NST) be combined with other indicators of fetal well-being, i.e., amniotic fluid index (AFI) or biophysical profile (BPP). There is no benefit in continuing a pregnancy at or post term after fetal surveillance is found to be non-reassuring. The recommendation is delivery. (Price, 2014)

### **Maternal Risks:**

- Oligohydramnios
- Medical induction
- C-section
- Prolonged labor
- Complicated delivery such as: Shoulder dystocia

#### **Fetal Risk**

- Large size leading to risks associated with macrosomia
- uteroplacental insufficiency
- Asphyxia
- Infection
- Neonatal acidemia

- Low Apgar
- Birth Injury
- Stillbirth
- Postmaturity/Dysmaturity syndrome
- Fetal distress
- Meconium Aspirtation
- Death

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<ul><li>Consult with a physician regarding my risk factors.</li><li>Decline consultation with a physician regarding my risk factors.</li></ul>	
Client	Date
Midwife	Date

Hilder, C. T. (1998). Prolonged Pregnancy: evaluating gestation-specific risks of fetal and infact mortality. BJOG.

O'Neill, E. T. (2012). Antepartum evaluation of the fetus and fetal well-being. Clinical Obstetrics and Gynecology, 55 (3), 722.

Preboth, M. (2000). Practice Guidelines ACOG Guidelines on Antepartum Fetal Sruveilannce . Am Fam Physician .

Price, A. (2014, January). MSN CNM. Assistant Clinical Professor VCUMC. (B. Sheets, Interviewer)

Singh, T. (2008). The prediction of intra-partum fetal compromise in prolonged pregnancy. Journal of Obstetrics and Gynecology, 28 (8), 779-782.

# 25. VBAC (VAGINAL BIRTH AFTER CESARIAN) PREVIOUS UTERINE INCISION OR MYOMECTOMY (8)

### Preamble:

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"If a midwife supports a client's choices that are outside of her Plan of Care, she must be prepared to give evidence of informed consent. The midwife must also be able to document the process that led to the decision and show that the client was fully informed of the potential risks and benefits of proceeding with the new care plan. It is the responsibility of the midwife to provide evidence-based information, clinical expertise, and when appropriate, consultation or referral to other providers to aid the client in the decision making process." – NARM

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Because the uterine scar for most caesarian sections is low on the uterus, women who undergo TOLAC (trial of labor after cesarean), are able to give birth vaginally 60–80% of the time. But if problems arise during TOLAC, the baby may need to be born by emergency cesarean delivery. Because uterine rupture can be sudden and unexpected labor outside of a hospital can delay delivery and increase the risk of injury and death for both mother and baby in an emergency. Some surgery for fibroids can result in a similar risk for uterine rupture. An unknown type of prior uterine scar is a contraindication for TOLAC outside of the hospital setting so review of prior surgical records is essential part of the evaluation.

# **RISKS**

### Maternal risks

- Maternal hemorrhage
- Infection
- Thromboembolism
- Placenta accreta
- Death
- Emergency hysterectomy

# **Fetal risks**

- Hypoxic Ischemic Encephalopathy
- Stillbirth

- Perinatal death
- Neonatal death
- Respiratory morbidity
- Transient tachypnea
- Hyperbillirubinemia

The probability that a woman attempting TOLAC will achieve VBAC depends on her individual combination of factors.

Selected Clinical Factors Associated with Trial of Labor after Previous Cesarean Delivery Success

# Increased Probability of Success

- Prior vaginal birth
- Spontaneous labor

# **Decreased Probability of Success**

- Recurrent indication for initial cesarean delivery (labor dystocia)
- Increased maternal age
- Maternal obesity
- Preeclampsia
- Short interpregnancy interval
- Increased neonatal birth weight

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.	
Client		Date
Midwife	<u> </u>	Date

Asakura H, Myers SA. More than one previous cesarean delivery: a 5-year experience with 435 patients. Obstet Gynecol 1995;85:924–9. Cahill AG, Tuuli M, Odibo AO, Stamilio DM, Macones GA. Vaginal birth after caesarean for women with three or more prior caesareans: assessing safety and success. BJOG 2010;117:422–7.

Caughey AB, Shipp TD, Repke JT, Zelop CM, Cohen A, Lieberman E. Rate of uterine rupture during a trial of labor in women with one or two prior cesarean deliveries. Am J Obstet Gynecol 1999;181:872–6.

Chauhan SP, Magann EF, Carroll CS, Barrilleaux PS, Scardo JA, Martin JN Jr. Mode of delivery for the morbidly obese with prior cesarean delivery: vaginal versus repeat cesarean section. Am J Obstet Gynecol 2001;185:349–54.

Development Maternal-Fetal Medicine Units Network. Obstet Gynecol 2006;108:12-20.

Flamm BL, Newman LA, Thomas SJ, Fallon D, Yoshida MM. Vaginal birth after cesarean delivery: results of a 5-year multicenter collaborative study. Obstet Gynecol 1990;76:750–4.

Gregory KD, Korst LM, Fridman M, Shihady I, Broussard P, Fink A, et al. Vaginal birth after cesarean: clinical risk factors associated with adverse outcome. Am J Obstet Gynecol 2008:198:452.e1–10: discussion 452.e10–2.

Landon MB, Spong CY, Thom E, Hauth JC, Bloom SL, Varner MW, et al. Risk of uterine rupture with a trial of labor in women with multiple and single prior cesarean delivery. National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network. Am J Obstet Gynecol 2005;193:1016–23.

Lavin JP, Stephens RJ, Miodovnik M, Barden TP. Vaginal delivery in patients with a prior cesarean section. Obstet Gynecol 1982;59:135–48. Macones GA, Cahill A, Pare E, Stamilio DM, Ratcliffe S, Stevens E, et al. Obstetric outcomes in women with two prior cesarean deliveries: is vaginal birth after cesarean delivery a viable option? Am J Obstet Gynecol 2005;192:1223–8.

McMahon MJ, Luther ER, Bowes WA Jr, Olshan AF. Comparison of a trial of labor with an elective second cesarean section. N Engl J Med 1996;335:684-95.

Miller DA, Diaz FG, Paul RH. Vaginal birth after cesarean: a 10-year experience. Obstet Gynecol 1994;84:255-8.

Signore, Caroline, and Catherine Y. Spong. "Vaginal birth after cesarean: new insights manuscripts from an NIH consensus development conference, March 8–10, 2010." Seminars in perinatology. Vol. 34. No. 5. NIH Public Access, 2010.

Tahseen S, Griffiths M. Vaginal birth after two caesarean sections (VBAC-2)-a systematic review with meta-analysis of success rate and adverse outcomes of VBAC-2 versus VBAC-1 and repeat (third) caesarean sections. BJOG 2010;117:5–19. (Meta-analysis).

## **26.** MENTAL HEALTH ISSUES

#### Preamble:

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Clients with clinically-diagnosed and self-reported mental health issues such as:

- Depression
- Panic/anxiety
- Obsessive-compulsive traits
- Schizophrenia

should be counseled about the stresses of pregnancy and the postpartum period. Clients who are taking psychiatric medication should be made aware that some potential for birth defects may exist and are advised to discuss the risks and benefits of continuing their drugs during pregnancy with their provider.

Risks associated with pregnancy and psychiatric disorders include:

- Poor maternal health
- Poor outcomes for babies including poor fetal growth and development
- Maternal psychiatric medication side effects
- Increased potential for some birth defects

Clients who are taking psychiatric medication are advised to discuss the risks and benefits of continuing their drugs during pregnancy with their mental health provider.

Vesga-Lopez O, B.C. (2008) Psychiatric Disorders in Pregnant and Postpartum Women in the United States, Archives of General Psychiatry, 65(7) 805-815

Revised: 5/21

Guidance document: 85-10

# 27. RUPTURE OF MEMBRANES 24 HOURS BEFORE THE ONSET OF LABOR (7)

#### Preamble:

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The risk of prolonged rupture of membranes is chorioamnionitis. The risk increases with the delay between rupture of membranes and delivery.

# MATERNAL COMPLICATIONS

- cesarean delivery
- endomyometritis
- wound infection
- pelvic abscess
- postpartum hemorrhage
- bacteremia, most commonly involving GBS

# Rarely

- septic shock
- disseminated intravascular coagulation
- adult respiratory distress syndrome

maternal death

### **FETAL COMPLICATIONS**

- fetal death
- neonatal sepsis

## **NEONATAL COMPLICATIONS**

- perinatal death
- asphyxia
- early onset neonatal sepsis
- septic shock
- pneumonia
- intraventricular hemorrhage
- cerebral palsy

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.		
Client		Date	
Midwife	<u>:</u>	Date	

Association of Ontario Midwives, Management of Prelabour Rupture of Membranes at Term, Clinical Practice Guideline 13, May 2014.

Gunn G, Mishell D, Morton D. Premature rupture of the fetal membranes. Am J Obs Gyne 1970 Feb;106(3):469.

Hannah ME, Ohlsson A, Wang EE, Matlow A, Foster GA, Willan AR, et al. Maternal colonization with group B Streptococcus and prelabor rupture of membranes at term: the role of induction of labor. TermPROM Study Group. Am.J.Obstet.Gynecol. 1997 Oct;177(4):780-785.

Seaward PG, Hannah ME, Myhr TL, Farine D, Ohlsson A, Wang EE, et al. International Multicentre Term Prelabor Rupture of Membranes Study: evaluation of predictors of clinical chorioamnionitis and postpartum fever in patients with prelabor rupture of membranes at term. American Journal of Obstetrics & Gynecology 1997 Nov;177(5):1024-1029

Tita, Alan T N, and William W Andrews. "Diagnosis and management of clinical chorioamnionitis." Clinics in perinatology vol. 37,2 (2010): 339-54. doi:10.1016/j.clp.2010.02.003

Umans-Eckenhausen, M. A., and Harrie N. Lafeber. "Prolonged rupture of membranes and transmission of the human immunodeficiency virus." *The New England journal of medicine* 335.20 (1996): 1533-1534.

## 28. SEIZURE DISORDER REQUIRING PRESCRIPTIVE MEDICATION

### Preamble:

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## Disclosure of risks related to: Seizure disorder requiring prescriptive medication

Most pregnancies are uneventful in women with epilepsy, and most babies are delivered healthy with no increased risk of obstetric complications in women. When controlled, there does not appear to be an increased risk for intrauterine growth restriction, preeclampsia, preterm birth or stillbirth compared to women without seizure disorder.

### Fetal risks:

- With uncontrolled seizures:
  - o Intrauterine growth restriction
  - Preterm birth
  - Stillbirth
- Some medications are associated with an increased risk of birth defects

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

Consult with a physician regarding my risk factors.		
Decline consultation with a physician regarding my risk factors	5.	
Client	Date	
Midwife	Date	

Best practice guidelines for the management of women with epilepsy. Crawford, P., Epilepsia. 2005:46 Suppl 9:117-24.

McPherson JA, harper LM, Odibo AO, et al. Maternal seizure disorder and risk of adverse pregnancy outcomes. Am J Obstet Gynecol 2013;208:378.e1-5.

Management of epilepsy during pregnancy. Battino D., Tomson T. Drugs, 2007:67(18):2727-46.

## 29. SEVERE LIVER DISEASE -- ACTIVE OR CHRONIC

#### Preamble:

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### Disclosure of risks related to: Severe liver disease -- active or chronic

Liver disease occurs in approximately 3% of pregnancies. It may be chronic or occurring coincident with pregnancy, such as viral hepatitis or drug-induced hepatotoxicity, or pregnancy specific such as HELLP syndrome, intrahepatic cholestasis of pregnancy or acute fatty liver of pregnancy.

# Severe liver disease:

- is usually acute in onset
- can be life-threatening to the mother
- associated with a high risk ofstillbirth
- If hypertension has preceded the onset of HELLP syndrome, fetal growth restriction may also be present.

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	Consult with a physician regarding my risk factors.  Decline consultation with a physician regarding my risk factors.	
Client_		Date
Midwife	2	Date
l iver Dise	ase in Pregnancy Cleveland Clinic Disease Management Project, Jamilé Wakim-Flem	ing August 10 2010

Liver Disease in Pregnancy, Cleveland Clinic Disease Management Project, Jamilé Wakim-Fleming, August 10, 2010 Joshi D, James A, Quaglia A et al. Liver Disease in Pregnancy. Lancet 2010;375:594-605.

# 30. SEVERE RENAL DISEASE -- ACTIVE OR CHRONIC

### Preamble:

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#### Disclosure of risks related to: Severe Renal Disease — Active or Chronic

Renal disease is associated with increased risks of both maternal and fetal adverse outcomes. These risks, which rise with the severity of preexisting renal disease, include:

#### Maternal:

- Hypertension
- o abruptio placentae
- o deterioration of renal function including permanent end-stage renal failure;

## Fetal:

- Intrauterine growth restriction
- o abruptio placentae
- o stillbirth

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

☐ Consult with a physician regarding my risk factors.

☐ Decline consultation with a physician regarding my risk factors.	
Client	Date
Midwife	Date
	ciples and Practice. 6 <sup>th</sup> edition, 2009: Saunders Elsevier.

Revised: 5/21

Guidance document: 85-10

# 31. SIGNIFICANT 2<sup>ND</sup> OR 3<sup>RD</sup> TRIMESTER BLEEDING

#### Preamble:

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Significant 2<sup>nd</sup> or 3<sup>rd</sup> trimester bleeding is often associated with potentially serious conditions, including placenta previa, placenta abruption, and vasa previa.

Medical management and ultrasound is indicated to rule out and/or monitor potentially serious conditions associated with significant bleeding.

### **Maternal Risk Factors:**

- C-section
- Hemorrhage
- Anemia
- Hypovolemic Shock
- Death
- Coagulation Defects (DIC)
- Damage to Kidneys and Brain

### **Fetal Risk Factors:**

- Poor fetal growth (IUGR)
- Birth Defects

Nielson, E. M. (1991). The Outcome of Prengancies complicated by bleeding during the second trimester. Surgery, Gynecology, & Obstetrics.

Oylese, Y. (2010). Third Trimester Bleeding. Protocols for High Risk Pregnancies .

Revised: 5/21

Guidance document: 85-10

**Premature Birth** 

# 32. SIGNIFICANT GLUCOSE INTOLERANCE (PREEXISTING DIABETES, GESTATIONAL DIABETES, PCOS)

#### Preamble:

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## Disclosure of risks related to: Significant glucose intolerance

Pre-gestational diabetes mellitus (Type 1 or Type 2) affects approximately 1% of pregnancies, with an incidence rising with the incidence of type 2 diabetes in younger adults. Gestational diabetes is diagnosed in 5-7% of pregnancies.

Risk factors for GDM: occurs more commonly in women with a family history of diabetes, prior personal history of glucose intolerance including prior gestational diabetes, obesity, and maternal age over 25.

### Maternal risks:

- Hypertension
- Antepartum hospitalization
- Induction of labor
- Cesarean dellivery
- Uncontrolled diabetes may result in:
  - kidney damage
  - o retinopathy resulting in vision loss
  - o peripheral nerve damage.

# Fetal risks:

- Even when controlled, pre-gestational diabetes is associated with an increased risk of miscarriage and major congenital anomalies. This risk rises with poorer control around the time of conception.
- Throughout pregnancy, diabetes is associated with increased risks of:

- hypertensive disorders
- large for gestational age babies
- stillbirth
- abnormal progression of labor
- cesarean delivery
- shoulder dystocia with resultant brachial plexus injury
- Due to these risks, more frequent ultrasound examinations and antepartum testing of fetal well-being may be indicated in the newborn period:
  - hypoglycemia
  - o hyperbilirubinemia
  - o polycythemia

# Timing of delivery:

- Pre-gestational diabetes, and uncontrolled gestational diabetes: between 37 and 39 weeks, individualized
- Controlled gestational diabetes: between 39 and 41 weeks, individualized

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	onsult with a physician regarding my risk factors. ecline consultation with a physician regarding my risk factors.	
Client		Date
Midwife		Date

Pre-gestational Diabetes Mellitus. American College of Obstetricians and Gynecologists, Practice Bulletin 60, March 2005. Gestational Diabetes Mellitus. American College of Obstetricians and Gynecologists, Practice Bulletin 137, August 2013. Landon MB, Gabbe SG. Gestational Diabetes Mellitus. Obstet Gynecol 2011;118:1379-93.

## 33. UNCONTROLLED HYPERTHYROIDISM

#### Preamble:

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Hyperthyroidism occurs in 0.2% of pregnancies; Graves' disease accounts for 95% of these cases.

The signs and symptoms of hyperthyroidism include nervousness, tremors, tachycardia, frequent stools, excessive sweating, heat intolerance, weight loss, goiter, insomnia, palpitations, and hypertension.

# RISKS

- Premature delivery
- Severe preeclampsia
- Heart failure
- Maternal death
- Low birth weight
- Fetal death
- Abnormal thyroid function in the newborn

Thyroid storm is a medical emergency and occurs in 1% of pregnant patients with hyperthyroidism and can be triggered by infection, labor or delivery.

# RISKS

- Shock
- Stupor
- Coma

	censed Midwife, my midwife has discussed this information with me a to a physician for the risk factors that apply to me. I have decided to:
<ul><li>Consult with a physician regarding my risk factors.</li><li>Decline consultation with a physician regarding m</li></ul>	
Client	Date
Midwife	Date
http://www.acog.org/Resources And Publications/Practice Bulletins/Co	emmittee on Practice Bulletins

Revised: 5/21

Guidance document: 85-10

Casey, Brian M., and Kenneth J. Leveno. "Thyroid disease in pregnancy." Obstetrics & Gynecology 108.5 (2006): 1283-1292. American Thyroid Association (ATA): Guidelines of the American Thyroid Association for the Diagnosis and Management of Thyroid Disease During Pregnancy and Postpartum (2017). Topic 112934, Version 7.0

# 34. UTERINE ABLATION (ENDOMETRIAL ABLATION)

#### Preamble:

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# Disclosure of risks related to Uterine Ablation (Endometrial Ablation):

Endometrial Ablation is a procedure accompanied by sterilization or the strong recommendation for continuous contraception. Pregnancy after ablation is rare and therefore there is little research, and the maternal and fetal complications are poorly defined. The general recommendation is that pregnancy is contra-indicated once endometrial ablation has been performed.

#### **Maternal Risks:**

- Miscarriage
- Ectopic pregnancy
- Placenta accreta
- Manual/Surgical removal of placenta
- Hemorrhage
- Uterine rupture
- C-section
- Hysterectomy
- Death

### **Fetal Risks:**

- Prematurity
- Death
- Possible increase in anomalies
- Malpresentation

. , , , , , , , , , , , , , , , , , , ,	nia Licensed Midwife, my midwife has discussed this information with me and ferral to a physician for the risk factors that apply to me. I have decided to:
<ul><li>Consult with a physician regarding my risk fac</li><li>Decline consultation with a physician regardi</li></ul>	
Client	Date
Midwife	Date

Revised: 5/21

Guidance document: 85-10

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### 35. Uterine anomaly

#### Preamble:

The Midwives Model of Care® recognizes the client/patient as the primary decision maker in all aspects of her care and respects her autonomy. This is supported within a model of well-informed, shared decision-making in order to achieve optimal clinical outcomes. Disclosure of risks is an integral part of the informed consent process, as outlined by NARM (the *North American Registry of Midwives*).

"If a midwife supports a client's choices that are outside of her Plan of Care, she must be prepared to give evidence of informed consent. The midwife must also be able to document the process that led to the decision and show that the client was fully informed of the potential risks and benefits of proceeding with the new care plan. It is the responsibility of the midwife to provide evidence-based information, clinical expertise, and when appropriate, consultation or referral to other providers to aid the client in the decision making process." – NARM

Licensed midwives are trained experts in the management of low-risk pregnancy and birth outside of the hospital. Certain conditions may present increased risk to mother and/or baby. The risks listed below apply to birth in any setting, and are not all-inclusive. The condition/risk factor listed may require medications and treatments outside of the scope of practice of Virginia Licensed Midwives and, thus may necessitate consultation with a physician, additional testing, and careful consideration for the appropriateness of birth in an out-of-hospital setting. Some conditions in pregnancy should be optimally managed and supported by a multidisciplinary team that may include midwives, obstetricians, perinatologists, family physicians, psychologists, social workers, and spiritual advisors.

### Disclosure of risks related to: Uterine anomaly

Women with a uterine anomaly (uterine septum, unicornuate uterus, bicornuate uterus, uterine didelphys) are at risk for

- PTB (preterm birth)
- Fetal presentation other than cephalic
- Hemorrhage
- Retained placenta
- Maternal urinary tract malformation
- Miscarriage
- Restricted fetal growth
- Cesarean delivery
- Pregnancy-associated hypertension

As required by the regulations for practice as a Virginia Licensed Midwife, my midwife has discussed this information with me and has provided me with options for consultation and referral to a physician for the risk factors that apply to me. I have decided to:

<ul><li>Consult with a physician regarding my risk factors.</li><li>Decline consultation with a physician regarding my risk facto</li></ul>	rs.	
Client	Date	
Midwife	Date	

Laufer, M, DeCherney, A. Congenital Uterine Anomalies: Clinical Manifestations and Diagnosis, Dec 2019.