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Appendix B.1: Protocols: Prenatal History and Physical Assessment: Nursing

Protocol Title:	Prenatal History and Physical Assessment: Nursing
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors
Date Updated:	01/2019
Date of Next Review:	01/2020

PURPOSE: A thorough nursing intake assessment of the client's physical and emotional health will provide essential information to enable the nurse to develop a care plan that supports the most appropriate interventions to promote a healthy pregnancy and optimal birth outcomes.

PROCESS: A basic nursing head to toe assessment should be done at the initial prenatal visit. It may not be possible to complete the full assessment in one visit, and not all of these issues may be pertinent to every client. However, as an important component of the nursing process, consider assessing the following systems delineated in Table 1, and attempt to assess them in a timely manner. Some areas might require waiting until rapport is established to assess (e.g., IPV and Substance Use). Some of these areas may be assessed through therapeutic conversation, rather than hands-on assessment, per nurse's discretion. Any areas that require further assessment and follow up should be noted and explored in further visits as soon as possible. Physical and mental health not within normal limits should have continued follow up at subsequent visits as needed. The body systems to consider for a head to toe assessment are listed in Table 1. Blood pressure and weights should be monitored at each pre-natal visit (see also Perinatal Blood Pressure Assessment Protocol).

Clients with chronic health issues (e.g., asthma, renal disease, cardiac disease, orthopedic issues) may need some additional case management services; however, clinical care responsibilities lie with the medical care provider. Signs and symptoms of concern or client concerns should be referred to the appropriate medical care provider, and the referral should be documented (see Table 1 guidelines for when to refer). Please see Protocol: Pregnancy Warning Signs for list of specific signs to report to physician immediately.

Prenatal Assessment Considerations		Considerations for referral to physician
General Health Status	Vital Signs (blood pressure and weight per protocol; and temperature, heart rate, and respirations as needed if abnormality suspected); Cognitive state: mood, orientation; Pain; Medications. Medical hx (e.g., Gestational or Diabetes Type II, anemia, hypo/hyperthyroidism, seizures) Immunizations, allergies)	*BP: SBP >130 mm Hg or DBP > 80 mm Hg Weight: increase or decrease not consistent with diet Temp: <96 or >101°F Pain not controlled with meds Progression of chronic disease Change in orientation or level of consciousness
Reproductive	EDD; Gravida, term, preterm, SAB, TAB, Living; Pregnancy planned or not planned; Prenatal care; Birth plan; Childbirth class plan; Reproductive plan; Contraceptive plan; Vaginal or pelvic pain; Vaginal or pelvic infections/Sexually Transmitted Infections/risk for infection	Pain Bloody discharge Discharge concerning for infection

Integumentary	Skin color, temperature, integrity; capillary refill; mucous membrane status	Skin pale, diaphoretic, cold; cap refill >3 seconds; contusions not explained, or not healing properly
HEENT	Vision; hearing; dental care; pain	Vision changes Persistent headache
Breasts	Breast surgery hx; breastfeeding plan	Signs of infection
Respiratory	Respiratory rate, effort, pattern; hx of disease, such as Asthma	RR <12 /min or >24/ min Shallow breaths, feeling short of breath, significant changes in respiratory effort (nostril flaring, retractions)
Cardiovascular	Heart Rate, blood pressure, pulses, rhythm, hx heart disease	*BP: SBP >130 mm Hg or DBP > 80 mm Hg HR: <50, >100 at rest, with consideration of what is normal for client Detection of new murmur or abnormal rhythm. (See also Perinatal Blood Pressure Assessment Protocol)
Gastrointestinal	Abdominal appearance/tenderness; bowel tones and movement; nausea/vomiting; indigestion	Abdomen tender/painful Bowel movement type/amount abnormal for patient Persistent nausea/vomiting
Diet and Exercise	Appetite; dietary intake; special dietary needs; food safety risks; folic acid use; weight; height; BMI; activity level	Loss of appetite affecting weight, not enough weight gain (See also Prenatal Weight Assessment Protocol)
Urinary	Voiding characteristics (amount, color, odor, pain). History of UTIs.	Pain with urination Increased frequency not associated with intake Oliguria or anuria (should void 0.5 to 1 ml/kg/hr) Blood or clots in urine
Peripheral Vascular	Edema; Varicosities; Leg pain	2+ edema not resolving, or in conjunction with other signs (BP, headache, blurred vision, HR changes, SOB). Persistent leg pain
Musculoskeletal	Extremity strength; extremity movement; Activity level; Limitations to activity; Pain	Unexpected weakness (<4/5 strength) in one or more limbs Unexpected change in mobility Persistent pain
Neurologic	Extremity sensation, seizure history; fatigue/sleep	Numbness or tingling in extremities Seizures Extreme fatigue, especially in

		conjunction with anemia
Mental Health	History of treatment for mental illness; History of depression/anxiety; Suicide ideation/attempts; History of abuse; Stress level; Self-esteem; Support system; Current affect	Within first 5 visits, conduct depression screening, suicide screening, intimate partner violence screening (see also Perinatal IPV Screening Protocol , and Perinatal Mood Disorders Screening Protocol), make referral as appropriate
Behavioral	Tobacco use/exposure; Substance use/exposure; Risky behaviors	As early as possible after establishing rapport, but within four weeks of enrollment, and at 36 weeks gestational age use a validated tool to screen all clients for use of alcohol, illicit drugs, prescription drugs, and tobacco and make referral as appropriate (see also Perinatal Substance Use Screening Protocol)

References:

1. Bates' Nursing Guide to Physical Exam and History Taking (2011).
2. NICE Clinical Guidelines, No. 62. National Collaborating Centre for Women's and Children's Health (UK). 2008 Mar. Accessed <https://www.ncbi.nlm.nih.gov/books/NBK51890/>

Appendix B.2: Protocols: Prenatal Weight Assessment: Nursing

Protocol Title:	Prenatal Weight Assessment: Nursing
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE: Supporting healthy weight gain during pregnancy promotes healthy birth outcomes. Women with either a rapid or slow weight gain during later pregnancy are at increased risk for preterm births. Women with high pre-pregnancy BMI have increased risk for gestational diabetes, hypertension, and preeclampsia, among other risks. Using the World Health Organization BMI calculations, the Institute of Medicine recommends *total* pregnancy weight gain based upon pre-pregnancy weight or weight at the first prenatal care appointment.

PROCESS (Singleton Pregnancy):

- Assure that scales are calibrated at least annually
- Document client self-report of pre-pregnancy weight
- Measure height, without shoes, during initial assessment. If the home visitor has no means to measure height, use client self-report or obtain information from pregnancy care provider.
- If a scale is available, weigh client and document weight at every prenatal visit. If reliable scales are not available, work with pregnancy care provider to ensure weight is measured. Weight gain should be slow:
 - 1 to 4 pounds total in first 3 months
 - 2 to 4 pounds each month from 4 months to delivery
- Using pre-pregnancy weight, compute BMI. There are several websites that will quickly provide the calculation:
<http://www.nhlbi.nih.gov/guidelines/obesity/BMI/bmicalc.htm>
- Plot weight gain using the following grids, by pre-pregnancy BMI:
<https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/WIC/Documents/611-612-613-weight-gain-grids.pdf>
- If Community Health Workers take weight and height measurements, local health authorities should have policies in place to provide procedures for reporting abnormal measurements to the Nurse Home Visitor.
- Alert prenatal care provider if client is losing weight or gaining weight excessively.

Table 1. Pregnancy Weight Gain for Singleton Pregnancy		
Pre-pregnancy Weight	Total Weight Gain	Weekly Weight Gain for 2 nd and 3 rd Trimesters
Underweight (BMI < 18.5)	28-40 pounds	1 pound (range 1.0 to 1.3)
Normal weight (BMI 18.5 to 24.9)	25-35 pounds	1 pound (Range 0.8 to 1.0)
Overweight (BMI 25.0 to 29.9)	15-25 pounds	0.6 pounds (Range 0.5 to 0.7)
Obese (BMI ≥ 30.0)	11-20 pounds	0.5 pounds (0.4 to 0.6)

PROCESS (Twin Pregnancy):

- If scales are available, assure that scales are calibrated at least annually.
- Document client report of pre-pregnancy weight.
- Measure height, without shoes, during initial assessment. If the home visitor has no means to measure height, use client self-report or obtain information from pregnancy care provider.
- If a scale is available, weigh client and document weight at every visit. If scales are unavailable, obtain weight from primary care provider.
- Using pre-pregnancy weight, compute BMI. There are a number of websites that will quickly provide the calculation:
<http://www.nhlbi.nih.gov/guidelines/obesity/BMI/bmicalc.htm>
- Alert prenatal care provider if client is losing weight or gaining weight excessively.
- Support clients in maintaining a healthy weight between pregnancies. Weight should be assessed via scale, self-report, or primary care office up to 12 weeks post-partum.

Table 2. Pregnancy Weight Gain for Twin Pregnancy		
Pre-pregnancy Weight	Total Weight Gain - Twins	Weekly Weight Gain for 2 nd and 3 rd Trimesters - Twins
Underweight women (BMI < 18.5)	Individualized – Speak to PN Care Provider	Individualized – Speak to PN Care Provider
Normal weight women (BMI 18.5 to 24.9)	37-54 pounds	1.1 to 1.7 pounds
Overweight women (BMI 25.0 to 29.9)	31-50 pounds	1.0 to 1.6 pounds
Obese women (BMI ≥ 30.0)	25-42 pounds	0.8 to 1.4 pounds

REFERENCES:

1. Institute of Medicine and National Research Council. 2009. *Weight Gain During Pregnancy: Reexamining the Guidelines*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/12584>
2. <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-weight-gain.htm>, accessed 12/19/2017.
3. Weight gain during pregnancy. Committee Opinion No. 548. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013;121:210–2. (reaffirmed 2018).

Appendix B.3: Protocols: Perinatal Blood Pressure Assessment: Nursing

Protocol Title:	Perinatal Blood Pressure Assessment: Nursing
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE: Taking an initial blood pressure reading will establish a baseline for future evaluation; successive blood pressure readings will assist in evaluating alterations that may be detrimental to the client and/or the pregnancy.

PROCESS:

- Blood Pressure should be measured and recorded at each visit prenatally and up to 6 weeks postpartum. In hypertensive clients, BP should be monitored at least 6 weeks postpartum and further until hypertension is resolved.
- Measure blood pressure after client has been sitting quietly for five minutes with arm resting at heart level. Back should be straight and legs should be uncrossed with feet flat on the floor. Attempt to take a blood pressure reading at least 30 minutes after the client has exercised, consumed caffeine, or used tobacco. Client should not be talking at the time of the reading.
- Assess size of cuff required. A cuff that is too large will give a falsely low reading, and a cuff that is too small will give a falsely high reading. The length of the cuff bladder should be at least 80% of the arm's circumference.
- Ideally, a reading should be taken on both arms and the higher reading should be recorded.
- If Community Health Workers take blood pressures, local health authorities should have policies in place to provide procedures for reporting abnormal blood pressures to the Nurse Home Visitor.
- Hypertension in pregnancy is greater than or equal to 130 mmHg systolic or 80 mmHg diastolic in a woman 20 weeks or greater with a previously normal blood pressure*.
- **Prenatal or postnatal blood pressure readings greater than 130 mmHg systolic or 80 mmHg diastolic should be immediately reported to the prenatal care provider.**
- **Prenatal or postnatal acute onset of blood pressure readings of 160 mmHg systolic or 110 mmHg diastolic (sustained 15 minutes or more) constitutes a medical emergency and should be addressed immediately.**
- **Take a blood pressure and alert prenatal care provider if client reports any of these symptoms (may indicate preeclampsia**):** Persistent severe headaches, changes in vision, right upper quadrant abdominal pain, or sudden weight gain of more than 2 pounds in a week.

*Note: the BP recommendation for adults was updated by the American College of Cardiology and the American Health Association in 2017. Many on-line resources still reference the BP of 140/90.

**** Note: Preeclampsia** is defined as gestational hypertension combined with proteinuria after 20 weeks gestation. A 24-hour urine specimen is necessary to reliably measure urine protein excretion for a diagnosis of proteinuria; a conventional urine dipstick test is not adequate.

References:

1. Institute for Clinical Systems Improvement (07/2012), National Institutes of Health.
2. The American College of Obstetricians and Gynecologists. Hypertension in Pregnancy (2013). <https://www.acog.org/Clinical-Guidance-and-Publications/Task-Force-and-Work-Group-Reports/Hypertension-in-Pregnancy>.
3. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA. Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults. *Journal of the American College of Cardiology*. Vol 71, no. 19, 2018.
4. Emergent therapy for acute-onset, severe hypertension during pregnancy and the postpartum period. Committee Opinion No. 692. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2017;129:e90–5.
5. Interpregnancy care. Obstetric Care Consensus No. 8. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2019;133:e51-72. <https://www.acog.org/Clinical-Guidance-and-Publications/Obstetric-Care-Consensus-Series/Interpregnancy-Care>

Appendix B.4: Protocols: Perinatal Breastfeeding Promotion and Support

Protocol Title:	Perinatal Breastfeeding Promotion and Support
Target Audience:	Public Health Maternal-Child Health Home Visitors including: Nurse-Family Partnership and Babies First! Nurses
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE: Breastfeeding is the biological norm for infant nutrition and the ideal method for feeding infants. Breast milk not only meets the specific nutritional needs of human babies, it also provides enzymes, growth factors, antibodies and hormones not found in formula. It is easy for babies to digest, supports healthy growth and development, and provides health benefits for mothers, too. The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for the first six months, and then continued breastfeeding for one year and beyond, even as solid foods are introduced.

PROCESS:

- During the pregnancy intake process, use open-ended questions to assess the woman's breast health history (breast surgery may impact her success with breastfeeding), breastfeeding history, desires around breastfeeding and plan for feeding her infant, and impact of previous experience and preconceptions about breastfeeding.
- Encourage breastfeeding throughout the pregnancy visits, as client permits and barring contraindications (referenced below).
- Provide education to support successful breastfeeding, based on assessment. Personalized education based on the woman's needs is most effective. The woman's partner and/or other family members may benefit from education: the woman's mother may be of particular importance in influencing breastfeeding practices. The La Leche League and Oregon WIC websites offer good educational materials on a variety of topics:
 - <http://www.lli.org/nb.html>
 - <http://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/BABIES/BREASTFEEDING/Pages/support.aspx>
- Postpartum, continue to monitor and support breastfeeding (see contraindications below), ensuring mother has access to lactation consultation, as needed. Highlight that breastfeeding takes practice, and that solutions are available for problems or concerns that arise.

GUIDANCE RELATED TO CONTRAINDICATIONS:

- Opioids: The AAP supports breastfeeding by narcotic-dependent mothers while enrolled in a supervised methadone maintenance program and who are negative for HIV and illicit drugs, especially PCP, cocaine and cannabis. Prescribed opioid use for limited duration are not contraindicated.
- Marijuana: Although marijuana is legal in Oregon, the use of marijuana while breastfeeding is discouraged. Tetrahydrocannabinol (THC) can pass from the mother's

breast milk to the infant and may harm the infant. Potential also exists for impairment in the mother's ability to care for the infant.

- Tobacco: It is always best for a mother to NOT smoke. However, if she cannot quit smoking, breastfeeding will decrease her baby's risk for respiratory problems, allergies, and Sudden Infant Death Syndrome. Mothers who smoke are encouraged to breastfeed, **and** to keep secondhand smoke away from the baby – not smoking near her baby, in the house or car, to change her shirt after smoking, etc. Mothers who smoke may also have lower milk production.
- Hepatitis B and C: Mothers with Hepatitis B or C can breastfeed. If a mother has an open sore on her breast, or a cracked and bleeding nipple, she can breastfeed from the side that is not affected, and express and discard any milk she collects from the affected side until the sore heals. Ensure the lesion is covered carefully so the baby has no risk of contact.
- HIV-AIDS: The AAP recommends no breast milk if the mother is HIV-positive.
- Active, untreated Tuberculosis: May give expressed milk; may resume breastfeeding when mother is treated for 2 weeks and is documented she is no longer infectious.
- Active herpes simplex lesions on breast: May give expressed milk.
- Varicella 5 days before through 2 days after birth: mothers should be separated from infants but may give expressed milk.
- Infant metabolic disorder, such as galactosemia: No breast milk.
- Mothers positive for human T-cell lymphotropic virus type I or II or untreated Brucellosis may not breastfeed or give expressed milk.

REFERENCES:

1. Breastfeeding and the Use of Human Milk. SECTION ON BREASTFEEDING. Pediatrics Mar 2012, 129 (3) e827-e841.
2. Centers for Disease Control and Prevention. *Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies*. Atlanta: U.S. Department of Health and Human Services; 2013.

Appendix B.5: Protocols: Perinatal Environment and Environmental Exposures Evaluation

Protocol Title:	Perinatal Environment and Environmental Exposures Evaluation
Target Audience:	Public Health Maternal-Child Health Home Visitors
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE: An evaluation of home environment and potential environmental exposures will augment the History and Physical assessment of the client. Community Healthy Workers who are performing this evaluation should have a process in place to communicate their findings with the Nurse Home Visitor. This additional shared knowledge will inform the development of a nursing care plan that supports the most appropriate interventions to promote a healthy pregnancy, optimal birth outcomes, and child development.

PROCESS: It may not be possible to complete the full environmental evaluation in one visit, and not all of these issues may be pertinent to every client. Consider evaluating the following issues in a timely manner. It will be necessary to continue to reevaluate many of these issues throughout the management of the case.

Housing Considerations	
Shelter Status	Home owner; Apartment; Mobile home; Living with extended family; Neighborhood safety; Homeless; Number of bedrooms/persons; Bathroom access; Safe stairs/Trip hazards; Safe egress/Locking entrance; Fire hazards;
Heating/Cooling	Ventilation; Type of heat; Wood or pellet stove/Fireplace safety; Funds to pay for heat source; Broken windows/doors
Cleanliness	Clutter; Trash accumulating; Mold/Mildew
Water	City services; Well water; Hauling and storing water; lead exposure
Sewage/Garbage	City curbside services; Self-transport to landfill
Food Storage	Refrigerator; Cupboards; Pests
Food Preparation	Counter space; Stove/Oven; Sink
Safety Considerations	
Smoke and Carbon monoxide Alarms	Carbon monoxide alarms and Smoke alarms are required (landlords required to provide); Installed/Working order; Batteries replaced
Smoking	Family members smoke; Allowed inside/Confined to outside
Lead Exposure	Paint; Pipes; Eating/Serving dishes; Hobbies; Occupational exposure (mine, smelter, lead-glazed ceramic potter, auto repair, paint, batteries, plastics), soil (pica), canned food, toys made outside United States
Toxin Exposure	Asbestos; Mercury (including in fish: https://www.fda.gov/Food/ResourcesForYou/Consumers/ucm393070.htm); Occupational chemicals; Household cleaners; Radon; Rodent poisons;
Pets	Variety; Number; Responsibility for care of animals (e.g., pregnant women should not empty cat litter boxes d/t risk Toxoplasmosis); pet products (flea and tick shampoo with pesticides); wild or pet rodents (stay away from droppings d/t lymphocytic choriomeningitis virus)

Food	Unpasteurized foods; Raw meat, fish, eggs; Contaminated fish; Refrigerated patés and smoked fish; Non-food cravings, improper washing
Guns	Possession; Locked/Unloaded
Phone	Possession/Access

References:

1. <https://www.marchofdimes.org/pregnancy/lead-poisoning.aspx> accessed 4/25/2018
2. Based upon guidelines from OAR 410-130-0595

Appendix B.6: Protocols: Perinatal Gestational Diabetes Mellitus Assessment: Nursing

Protocol Title:	Perinatal Gestational Diabetes Mellitus Assessment: Nursing
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE:

Gestational diabetes mellitus (GDM) is a common disorder of pregnancy. Between 2% and 10% of pregnancies are impacted by GDM. Currently, there is discussion about lowering the threshold for diagnosis, especially in high-risk ethnic populations with a higher prevalence of GDM. The American Diabetes Association encourages providers to test women with risk factors for type 2 diabetes at the first prenatal appointment; a diagnosis of diabetes at this time is considered overt diabetes, not GDM. Untreated or poorly controlled GDM can lead to many complications including preeclampsia and/or preterm delivery. Complications for the baby may include macrosomia (very large at birth), neonatal hypoglycemia, and risks for future development of obesity and diabetes. Fifty percent of women with GDM will develop type 2 diabetes later in life.

PROCESS:

- During the pregnancy intake process, assess for diagnosis of GDM and any diagnosis of GDM with previous pregnancies, as applicable.
 - Clients should be tested for GDM at 24-28 weeks of gestation in women not previously known to have diabetes. Some clients may receive testing earlier in pregnancy depending on assessment and risk factors.
 - Diagnostic criteria for GDM are based on a “One-step” 75 g oral glucose tolerance test (OGTT) OR a “Two-step” Glucose Challenge test (or glucose screening test).
 - Women with risk factors for Type 2 Diabetes (see Table 1) should be screened for diabetes at their first prenatal visit.
- Provide education about diagnostic testing to clients, as applicable. Connect clients to resource for GDM testing if needed.
- Provide education about the risks associated with GDM.
- Advise client of risk factors for development of GDM:
 - ✓ African American, American Indian/Alaska Native, Asian American, Hispanic, or Pacific Islander
 - ✓ Overweight (BMI ≥ 25 kg/m² or ≥ 23 kg/m² in Asian Americans)

- ✓ Older than 25 years
- ✓ Parent or sibling with diabetes
- ✓ Previous pre-diabetes diagnosis
- ✓ History of GDM in a previous pregnancy
- ✓ History of delivery of a baby who weighed 9 pounds or more
- Encourage client with a diagnosis of GDM to adhere to primary care provider's plan, which may include a healthy diet, physical activity, routine monitoring and testing (including urine ketone levels and daily blood glucose checks), referrals to specialists (e.g., dietician, diabetes educator), and possibly medication.
- Advise client with a GDM diagnosis that she will need to be tested 6-12 weeks postpartum to ensure her blood glucose levels have returned to normal, and screened at least every 3 years for life.
- Provide education on prevention or delay of type 2 diabetes later in life, including importance of breastfeeding.

Table 1. Risk factors for Type 2 Diabetes

Overweight (BMI ≥ 25 kg/m²) **and** have additional risk factors*:

- physical inactivity
- first-degree relative with diabetes
- high-risk race/ethnicity (e.g., African American, Latino, Native American, Asian American, Pacific Islander)
- women who delivered a baby weighing >9 lb or were diagnosed with GDM
- hypertension ($\geq 140/90$ mmHg or on therapy for hypertension)
- HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)
- women with polycystic ovary syndrome
- A1C $\geq 5.7\%$, IGT, or IFG on previous testing
- other clinical conditions associated with insulin resistance (e.g., severe obesity, acanthosis nigricans)
- history of CVD

*American Diabetes Association. Classification and diagnosis of diabetes. Sec. 2. In *Standards of Medical Care in Diabetes—2015*. Diabetes Care 2015;38(Suppl. 1):S8–S16

References:

1. American Diabetes Association. Classification and diagnosis of diabetes. Sec. 2. In *Standards of Medical Care in Diabetes—2015*. Diabetes Care 2015;38(Suppl. 1):S8–S16
2. <https://www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes/gestational/after-your-baby-is-born>, accessed on 12/18/2017
3. <https://www.cdc.gov/diabetes/basics/gestational.html>, accessed on 12/19/2017

Appendix B.7: Protocols: Social Determinants of Health Screening

Protocol Title:	Social Determinants of Health Screening
Target Audience:	Public Health Maternal-Child Health Home Visitors
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE:

Scientific research has made it clear that access to good health care is not sufficient to produce a healthy society. The social determinants of health (e.g., income, education, transportation, housing, food, community safety) have a profound impact on child and adult health and mental health. The research on adverse childhood experiences (ACEs) and early brain development has demonstrated that psychosocial stressors are “toxic” to the developing brain and metabolic systems of the young child, resulting in poor mental health, cognitive disability, and chronic disease. Home visitors are uniquely positioned to address these challenges. By directly focusing on these needs, home visitors can buffer the impact of stressors on the brain through promoting responsive, nurturing relationships.

PROCESS:

Assess for the availability of resources to meet daily needs (e.g. safe housing, transportation, food security), social network/support system and ability to access and/or utilize needed services. The [TCM Assessment](#) should be used for all clients for whom Targeted Case Management services will be provided and billed. Additional (optional) screening instruments include:

- The [Oregon Family Well Being Assessment](#) was developed by the Oregon Perinatal Collaborative as a response to the need to integrate behavioral health, social determinants of health and awareness of Adverse Childhood Events (ACEs) into maternity care.
- The American Academy of Family Physicians offers a social determinants of health screening tool, available in short- and long-form in English and Spanish. The [short-form\(bit.ly\)](#) includes 11 questions. It can be self-administered or administered by clinical or nonclinical staff.
- The Centers for Medicare & Medicaid Services Accountable Health Communities’ 10-question [Health-Related Social Needs Screening Tool\(innovation.cms.gov\)](#) (AHC-HRSN) is meant to be self administered.
- [The Hunger Vital Sign](#) offers 2 standardized questions to screen for food insecurity.

In collaboration with the client, the home visitor and client should develop goals and activities/interventions to address the social determinants of health.

RESOURCES:

American Academy of Pediatrics: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Screening/Pages/Social-Determinants-of-Health.aspx>

Oregon Primary Care Association: <https://www.orpca.org/initiatives/social-determinants-of-health/251-sdoh-tools-resources>

Appendix B.8: Protocols: Perinatal Reproductive Life Planning

Protocol Title:	Perinatal Reproductive Life Planning
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors including: Nurse-Family Partnership and Babies First! Nurses
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE:

Reproductive life plans are intended to promote planned, healthy pregnancies, positive birth outcomes, and overall health and well-being for women, men, and infants. The Centers for Disease Control and Prevention recommends that all women, men, and couples be encouraged to have a reproductive life plan. (1)

PROCESS:

Reproductive life planning can be initiated at any time (e.g., prenatal, postpartum or interconception) and should be offered to everyone, irrespective of assumptions or biases about individual circumstances. Furthermore, reproductive life plans should be considered fluid, and updated regularly per changing goals, needs, and life circumstances (or updated at least annually). Addressing reproductive life planning during the perinatal periods offers an opportunity to provide education, support, and resources to help the women and families they serve achieve optimal pregnancy goals.

Discuss client's reproductive life plan about becoming pregnant by asking questions like:

- a) Do you want to have (more) children?
- b) How many (more) children would you like to have and when?

If yes, discuss patients' readiness for pregnancy, overall health and opportunities for improving health, and potential risk factors for adverse pregnancy outcomes. If the client desires pregnancy testing, then provide or refer for pregnancy testing and preconception counseling. All options counseling should be made available to all pregnant clients.

If no, provide counseling about family planning, and provide or refer for birth control. Provide evidence-informed counseling about the full range of contraceptive methods for postpartum use.

If unsure, using a client-centered approach, continue to explore clients' readiness for pregnancy, goals, needs and life circumstances.

REFERENCE:

- (1) Centers for Disease Control and Prevention (CDC) Planning for Pregnancy
<https://www.cdc.gov/preconception/planning.html>

RESOURCES

Before, Between and Beyond Pregnancy, Resource Guide for Clinicians

<https://beforeandbeyond.org/toolkit/reproductive-life-plan-assessment/>

Centers for Disease Control and Prevention Contraceptive Method Guidance

<https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/training.htm>

MMWR Update: Providing Quality Family Planning Services — Recommendations from CDC and the U.S. Office of Population Affairs, 2015

<https://www.cdc.gov/mmwr/volumes/65/wr/mm6509a3.htm>

March of Dimes

[One Key Question](#)

Appendix B.9: Protocols: Perinatal Mood Disorder Screening

Protocol Title:	Perinatal Mood Disorder Screening
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors including: Nurse-Family Partnership and Babies First! Nurses
Date Updated:	1/2019
Date of Next Review:	10/2019

PURPOSE:

Perinatal mood disorders, which include major and minor depressive episodes and anxiety that occur during pregnancy or in the first 12 months after delivery, are one of the most common medical complications during pregnancy and the postpartum period, affecting one in seven women (1). It is important to identify pregnant and postpartum women with mood disorders because untreated perinatal mood disorders can have devastating effects on mothers, infants and families.

PROCESS:

Use a validated tool to screen all clients for perinatal mood disorders. Examples of validated tools are below.

- [Patient Health Questionnaire-9 \(PHQ-9\)](#) 9-item screener for DSM-IV depression criteria and other leading major depressive symptoms.
- [Edinburgh Postnatal Depression Scale \(EPDS\)](#) 10- item non-standardized self-report measure assessing maternal postnatal/postpartum depression.

Both the EPDS and the PHQ-9 are validated for use in the perinatal population, and there is no fee. The benefits are that they are self-administered, translated into many languages, and easy to complete. The EPDS addresses the anxiety component of perinatal mood disorders as well as depressive symptoms and suicidal thoughts. The PHQ-9 does not have the anxiety component but includes suicidal ideation.

Depression or anxiety is recognized as one of the presenting symptoms of perinatal mood disorders and should be a part of a mood disorder assessment.

If Community Health Workers screen for IPV, local health authorities should have policies in place to provide procedures for reporting positive screens to the Nurse Home Visitor.

The screens should be administered at intervals according to the guidelines of the home visiting program and any time concerns arise. Communicate screening results to prenatal care provider and document. Determine need for further assessment. If the screening results suggest a perinatal mood disorder share concerns with the client and develop a plan of care to:

- Continue to establish a supportive relationship
- Recognize and reassure. She is not alone, it is not her fault, and with help she will get better. Help her reach out.
- Educate the client.
- Educate on possible treatment options;
- Plan interventions based on need.

REFERENCES:

- (1) American College of Obstetricians and Gynecologists Committee Opinion
<https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression?IsMobileSet=false>

RESOURCES:

Oregon Maternal Mental Health Webpage

<https://www.oregon.gov/oha/PH/HEALTHYPEOPLEFAMILIES/WOMEN/MATERNALMENTALHEALTH/pages/index.aspx>

Postpartum Support International <http://www.postpartum.net/>

Appendix B.10: Protocols: Perinatal Intimate Partner Violence Screening

Protocol Title:	Perinatal Intimate Partner Violence Screening
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors including: Nurse-Family Partnership and Babies First! Nurses
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE: Intimate Partner Violence (IPV) impacts women and men across all age groups, educational levels, races, ethnicities, socioeconomic backgrounds, and cultures; the number of individuals affected can only be estimated because many instances of IPV are never reported. The Centers for Disease Control and Prevention (CDC) suggests that nearly 3 in 10 women and 1 in 10 men in the U.S. have experienced rape, physical violence, and/or stalking by a partner; these numbers do not reflect people subjected to psychological abuse. Pregnancy and the postpartum period is a particularly dangerous time for women impacted by IPV. Home visiting nurses are in unique positions to assess, educate, and support safety.

PROCESS:

- Local health authorities should have written guidelines in place that delineate safety procedures for home visitors during IPV assessments.
- Guidelines may include safety measures such as:
 - Arrange time to screen woman alone, *never* with partner, friends or family.
 - Use professional interpreter if needed, *never* a family member.
 - Never leave domestic violence information around without first finding out if it is safe to do so.
- Attempt to normalize the screening process to promote comfort with the discussion and encourage candid responses: use a framing statement such as, “We’ve started talking to all of our clients about safe and healthy relationships, because these have such a large impact on your health.”
- Note that non-structured discussions that focus on parenting, safety or healthy relationships are more likely to illicit disclosure of violence, so it is most helpful to establish a therapeutic relationship before using the IPV screening tool.
- After establishing rapport and creating a safe environment, use a validated tool to screen for IPV during the intake process, postpartum, and at any other time concerns arise. Examples of validated tools include:
 - Futures Without Violence Relationship Assessment Tool
<https://www.futureswithoutviolence.org/wp-content/uploads/E-Relationship-Assessment-Tool1.pdf> (This is the same form as on the Oregon MIECHV Data Collection website).
 - For NFP program, use the Clinical IPV Assessment form.

- If Community Health Workers screen for IPV, local health authorities should have policies in place to provide procedures for reporting positive screens to the Nurse Home Visitor.
- Ensure patients also know that what they say is confidential unless what they tell you falls within the mandatory reporting guidelines. Among others, this includes child abuse or neglect: if you suspect a child with whom you have had contact is being abused or neglected, or that a person has abused a child, you must report it.
 - For full mandatory reporting information, go to: http://www.oregon.gov/DHS/ABUSE/Pages/mandatory_report.aspx
- When IPV is identified, support the client in making a safety plan. See the Futures Without Violence Safety Plan and Instructions at http://www.futureswithoutviolence.org/userfiles/file/Maternal_Health/Safety%20plan%20English-Consensus%20Guidelines.pdf. The plan covers:
 - ✓ Safety during a violent incident
 - ✓ Safety when preparing to leave
 - ✓ Safety in client's own home
 - ✓ Safety with a protection order
- Provide client with community resources for IPV advocacy support and services; remember to evaluate safety risks for client before leaving print IPV materials in the home.

REFERENCES:

1. Healthy Moms, Happy Babies: Using the Relationship Assessment Tool and Universal Education. <https://www.futureswithoutviolence.org/healthy-moms-happy-babies-using-the-relationship-assessment-tool-and-universal-education/>
2. How to Screen for Intimate Partner Violence: Tools from ACOG. <http://www.obgyn.net/young-women/how-screen-intimate-partner-violence-tools-acog>
3. Module 3 (Young Mom's Version). Assessment and Safety Planning for Domestic Violence in Home Visitation. <https://www.futureswithoutviolence.org/youngmomsmodule/>.
4. Tools for improving maternal health and safety in a multicultural context. <https://www.futureswithoutviolence.org/tools-for-improving-maternal-health-safety-in-a-multicultural-context/>, accessed 12/27/2017.

Appendix B.11: Protocols: Perinatal Substance Use Screening

Protocol Title:	Perinatal Substance Use Screening
Target Audience:	Public Health Maternal-Child Health Home Visitors including: Nurse-Family Partnership and Babies First! Nurses
Date Updated:	1/2019
Date of Next Review:	1/2020

PURPOSE: Evidence directly links prenatal exposure to drugs, alcohol and tobacco with negative impacts on the developing fetus and/or the pregnancy outcome and child development. Mothers and caregivers are strongly discouraged from using these substances. In pregnancy, researchers frequently find an *association* between drug use and adverse pregnancy outcomes; however, they are challenged to find a *causal* relationship. For instance, marijuana is composed of many different chemicals and can be mixed with other drugs; women may use multiple substances and may also exhibit other risky behaviors; and, it is difficult to effectively measure and monitor substance use. Because we cannot be certain what outcomes are related to which substances and behaviors, we are not able to determine the dose relationship; therefore, women are discouraged from using *any* quantity of anything not prescribed by the prenatal care provider.

PROCESS:

Assessment, Diagnosis and Planning:

- As early as possible after establishing rapport, screen for substance use according to program (Babies First!, Nurse Family Partnership) guidelines.
- Use a validated tool to screen all clients for use of alcohol, drugs including prescription drugs, and tobacco. Examples of validated tools are below, but this is not an exhaustive list.
 - Alcohol: SBIRT, AUDIT, Abbreviated AUDIT-C, or a single question such as “How many times in the past year have you had 5 (for men) or 4 (for women) or more drinks in a day?”; others screening tools include the CAGE-AID, CAGE, T-ACE, and ASI.
 - Alcohol and Drugs: 4 P’s Plus; Screening to Brief Interventions (S2BI); CRAFT (age 26 or younger); Brief Screener for Alcohol, Tobacco and Drugs (BSTAD); and NIDA Quick Screen.
 - The MIECHV Substance use risk Profile-Pregnancy Scale form and the NFP Health Habits form should be used as appropriate per program guidelines.
- If Community Health Workers screen for substance use, local health authorities should have policies in place to provide procedures for reporting positive screens to the Nurse Home Visitor.
- Consider repeating the screen if your nursing assessment suggests this need, even if not according to program guidelines.
- Assess cognitive status, especially changes in mood that might be a sign of preexisting or coexisting conditions such as multi-substance use, depression, or mental health concerns. Just eliminating one substance may not solve the problem.
- Communicate screening results to pregnancy care provider and document. Determine need for further assessment by pregnancy care provider. Determine with provider need for

screening of STDs, hepatitis B and C, and tuberculosis, especially if there are signs of co-existing conditions.

- If the screening results suggest substance use, share concerns with the client and develop a plan of care to:
 - Continue to establish a supportive relationship.
 - Educate the client on effects of substance use during pregnancy: Ask the client to describe her understanding of the situation, link substance use to any signs or symptoms client has (there may be none), describe importance of stopping, explain what could happen with continued use.
 - Educate on possible treatment options such as medication assisted treatment and behavioral therapy like skill-building and problem-solving (medically supervised withdrawal is not recommended at this time due to association with high relapse rate).
 - Plan interventions based on need (see below).

Interventions:

- Depending upon the substance, the level of use, and the outcome of the communication with the prenatal or primary care provider, assist the client in accessing drug and/or alcohol rehabilitation supports. Treatment with methadone or buprenorphine may be recommended by physician.
- Engage all clients in a conversation giving education, feedback and advice on the potential harmful effects of substance use. Some clients may need more intensive motivational interviewing, or Brief Interventions conversation (see the MIECHV Substance use risk Profile – Pregnancy Scale tool or the NFP Visit-to-Visit Guidelines, as allowed by program area)
- For women using tobacco, implement the 5As framework for counseling (Ask, Advise, Assess, Assist, Arrange); provide education and refer as appropriate; continue to monitor and support the client in achieving cessation. The CDC website has education resources for this purpose: <https://www.cdc.gov/reproductivehealth/MaternalInfantHealth/TobaccoUsePregnancy/index.htm>
- Provide emotional support to clients who becomes abstinent during pregnancy, as they may struggle with strong feelings related to exposing the fetus to potentially harmful substances.
- Opiates, alcohol, and nicotine can be passed to infants through mother's breast milk. Advise pregnant women of these risks and discourage breastfeeding mothers from using substances. The American College of Obstetricians and Gynecologists and the American Academy of Pediatrics supports breastfeeding by women who are prescribed opioids while enrolled in substance use treatment.
- Oregon law does not consider substance use during pregnancy to be child abuse under child-welfare statutes, and there is not a requirement for health care professionals to report suspected prenatal drug use. Oregon's mandatory child abuse and neglect reporting law can be found here: https://www.oregonlegislature.gov/bills_laws/ors/ors419B.html

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Appendix B.12: Protocols: Postpartum History and Physical Assessment: Nursing

Protocol Title:	Postpartum History and Physical Assessment: Nursing
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors
Date Updated:	01/2019
Date of Next Review:	01/2020

PURPOSE: A thorough nursing assessment of the client's physical and emotional health after the birth of her child will provide essential information to enable the nurse to develop a care plan that supports the most appropriate interventions to promote health and the nurturing of a positive parent-infant relationship postpartum. The postpartum period is also a key time to monitor for pregnancy-associated problems and provide early interventions: the maternal mortality rate has been steadily increasing since 1999 and reached 21.5 deaths per 100,000 births in 2014. The top causes of pregnancy related deaths in the United States are due to heart conditions, infections, bleeding, blood clots and high blood pressure. The risk of pregnancy-related deaths in African-American women is three to four times higher than those of white women. Providing thorough nursing assessments in the post-partum period may be an essential part of reducing maternal morbidity and mortality.

PROCESS: A basic nursing head to toe assessment should be done at the first visit post-partum. Areas that require further assessment and follow up (such as mental health status), should be noted and explored in further visits as soon as possible. Some of these areas may be assessed through therapeutic conversation, rather than hands-on assessment, per nurse's discretion. Physical and mental health not within normal limits should have continued follow up at subsequent visits as needed. The body systems to consider for a head to toe assessment are listed in Table 1. Blood pressure should be monitored at each visit up to 6 weeks postpartum. In hypertensive clients, BP should be monitored at least 6 weeks postpartum and further until hypertension is resolved ([See Perinatal Blood Pressure Assessment Protocol](#)). Note that secondary postpartum hemorrhage can happen between 24 hours and 12 weeks after giving birth.

Clients with chronic health issues (e.g., asthma, renal disease, cardiac disease, orthopedic issues) may need some additional case management services; however, clinical care responsibilities lie with the medical care provider. Signs and symptoms of concern or client concerns should be referred to the appropriate medical care provider, and the referral should be documented (see Table 1 guidelines for when to refer).

Postpartum Assessment Considerations		Considerations for referral to physician
General Health Status	Vital Signs (blood pressure per protocol; and temperature, heart rate, and respirations as needed if abnormality suspected); Cognitive state: mood, orientation; Pain; Medications. Medical hx (e.g., Gestational or Diabetes Type II, anemia, hypo/hyperthyroidism)	*BP: SBP >130 mm Hg or DBP > 80 mm Hg Weight: increase or decrease not consistent with diet Temp: <96 or >101°F Pain not controlled with medication Progression of chronic disease Change in orientation or level of consciousness

Reproductive	Contraceptive plan; Vaginal or pelvic pain; Vaginal or pelvic infections/Sexually Transmitted Infections/risk for infection; vaginal discharge (lochia)	Dark red lochia more than 4 days after delivery; > 1 pad soaked per hour; lochia serosa (pink/brown) > 2 weeks after delivery (can indicate hemorrhaging); clots bigger than a golf ball; foul odor Pain not controlled with medication, or experiencing pain for > 2 weeks
Integumentary	Skin color, temperature, integrity; capillary refill; mucous membrane status	Skin pale, diaphoretic, cold; cap refill >3 seconds; contusions not explained, or not healing properly; if cesarean, scar red, inflamed, warm, or with pus
HEENT	Vision; hearing; dental care; pain	Vision changes Persistent headache
Breasts	Breastfeeding plan; breast tissue firm, venous pattern increased, areola color dark, nipple everted; no signs infection.	Inverted nipples, poor let down, pain with feeding may need referral to lactation specialist Redness, burning, itching, pus refer to physician
Respiratory	Respiratory rate, effort, pattern; hx of disease, such as asthma	RR <12 /min or >24/ min Shallow breaths, feeling short of breath, significant changes in respiratory effort (nostril flaring, retractions)
Cardiovascular	Heart Rate, blood pressure, pulses, rhythm, hx heart disease	*BP: SBP >130 mm Hg or DBP > 80 mm Hg HR: <50, >100 at rest, with consideration of what is normal for client Detection of new murmur or abnormal rhythm
Gastrointestinal	Abdominal appearance/tenderness; bowel tones and movement; nausea/vomiting; indigestion; status of uterus.	Abdomen unusually tender Bowel movement type/amount abnormal for patient Persistent nausea/vomiting Uterus hard umbilicus or not decreasing in size
Diet and Exercise	Appetite; special dietary needs/preferences; food safety risks; weight; activity level	Loss of appetite affecting weight Weight gain, especially in conjunction with changes in BP,

		edema, headache, or vision changes
Urinary	Voiding characteristics (amount, color, odor, pain). History of UTIs.	Pain with urination Increased frequency not associated with intake Oliguria or anuria (should void 0.5 to 1 ml/kg/hr) Blood or clots in urine (not associated with vaginal bleeding)
Peripheral Vascular	Edema; Varicosities; Leg pain	2+ edema not resolving, or in conjunction with other signs (BP, headache, blurred vision, HR changes, SOB) Persistent leg pain
Musculoskeletal	Extremity strength; extremity movement; Activity level; Limitations to activity; Pain	Unexpected weakness (<4/5 strength) in one or more limbs Unexpected change in mobility Persistent pain
Neurologic	Extremity sensation, seizure history; fatigue/sleep	Numbness or tingling in extremities Seizures Extreme fatigue, especially in conjunction with anemia
Mental Health	History of treatment for mental illness; History of depression/anxiety; Suicide ideation/attempts; History of abuse; Stress level; Self-esteem; Support system; Current affect	By 4 – 6 weeks post-partum and at 3-4 months, conduct depression screening, suicide screening, intimate partner violence screening, make referral as appropriate
Behavioral	Tobacco use/exposure; Substance use/exposure; Risky behaviors	As needed, conduct substance use screening and make referral (See Substance Abuse Protocol)
Developmental	Education level; reading level; special needs	

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Appendix B.13: Protocols: Newborn, Infant, Toddler History and Physical Assessment: Nursing

Protocol Title:	Newborn, Infant, Toddler History and Physical Assessment: Nursing
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors including: Nurse-Family Partnership and Babies First! Nurses
Date Updated:	01/2019
Date of Next Review:	01/2020

PURPOSE: Thorough assessments are an important component of the nursing process, and are an essential component of Babies First! program expectations. Assessments provide information on the child's physical, emotional, and developmental health, which enables the nurse to develop a care plan that supports the most appropriate interventions to promote healthy growth and development.

PROCESS: The newborn head to toe assessment should be completed at the first postpartum visit. It may not be possible to complete the full assessment in one visit, and not all of these issues may be pertinent to every client. However, as an important component of the nursing process, consider assessing the following systems. Systems to assess are listed in Table 1 (Newborn and Infant) and Table 2 (Toddler).

Blood pressure and temperature for infants and toddlers are not required; the local implementing agency may decide to take BP and temperatures on a case-by-case basis (e.g., if a client is on blood pressure medication, or for teaching parents how to take temperature). For that reason, considerations for referrals to the primary care physician are listed and include parameters for BP and temperature. Referrals should always be made based on nursing judgment, even if the criteria listed in the table are specifically met (or not met).

Growth (weight, length and head circumference) should be recorded and plotted on appropriate growth grid (see recommended growth grids here: <https://www.cdc.gov/growthcharts/index.htm>).

If providing blood pressure and temperature monitoring, pay special attention to Vital Sign (VS) abnormalities in infants < 1 month, as a single VS abnormality may be the only sign of serious illness.

Table 1. Newborn and Infant Assessment Considerations (0-11 months)

Newborn and Infant Assessment Considerations		Considerations for referral to physician
General Health Status	Vital Signs (weight, recumbent length, head circumference (recommended monthly up to three years of age); and temperature, heart rate, blood pressure, and respirations as needed if abnormality suspected; Medical hx (e.g., type of birth, newborn blood tests, major or minor anomalies suggesting need for genetic evaluation)	<p>*<i>SBP</i>: <50 mmHg or >100 mmHg (<3 months); <75 or >115 mmHg (3-11 months)</p> <p><i>Heart Rate</i>: <80 or >190 (< 3 months); <80 or >160 (3-11 months)</p> <p><i>RR</i>: <20 or >60 (< 3 months); <20 or >50 (3-11 months)</p> <p><i>Temp</i>: <96 or >101°F</p> <p>Weight loss of >10% birth weight for normal weight or >15% for preterm infants, failure to gain any weight after 72 hours</p> <p>Larger than expected increase in head circumference</p>
Cognitive	Alertness Congenital anomalies	<p>Lethargy, unresponsive or minimal responsiveness to touch</p> <p>No tracking with eyes</p> <p>Minimal responsiveness to interactions</p>
Integumentary	Skin color, temperature, integrity; capillary refill; mucous membrane status	<p>Skin jaundice</p> <p>Lesions, bruising, rashes (not diaper rash)</p> <p>Mottled skin (especially in conjunction with fever or lethargy and not normal for infant)</p>
HEENT	Head size/shape, sutures, fontanels Vision, fixate and follow response Ears Nose Hearing screen done by 1 mo Oral care provided	<p>Enlarged or sunken fontanel, prematurely closed sutures (<2 mo for posterior; < 9 mo for anterior)</p> <p>Lack of tracking</p> <p>Ears with pits or tags</p> <p>Nose patency</p>
Respiratory	Respiratory rate, effort, pattern	<p>Tachypnea/ bradypnea</p> <p>Shallow breaths, significant changes in respiratory effort (nostril flaring, retractions)</p>
Cardiovascular	Heart Rate, blood pressure, pulses, rhythm, hx heart disease	<p>Hyper/hypotension</p> <p>Tachy/bradycardia</p> <p>Detection of new murmur or abnormal rhythm.</p>

Gastrointestinal	Abdominal appearance/tenderness; bowel tones and movement; nausea/vomiting; indigestion	Abdomen unusually tender Umbilical site not healing Bowel movement type/amount abnormal for patient Projectile vomiting
Diet	Appetite Breastfeeding or bottle feeding success Weight (Normal: immediate after birth loss = 10%; regained within 7 days; gain 1 oz per day first 3 mo; 4-5 oz/week from 3-6 months) Length (gains 1 inch/mo up to 6 mo)	Weight loss Lack of weight gain (for pre-term infants, see https://www.oregon.gov/oha/ph/healthypeoplefamilies/wic/documents/preterm.pdf for indications for referral and promoting caloric requirements) Signs of dehydration
Urinary	Voiding characteristics (amount, color, odor, pain)	Apparent pain with urination Oliguria or anuria (should void at least 6 soaked diapers days 5-28 or 1ml/kg/hr) Blood or clots in urine
Peripheral Vascular	Femoral pulses Temperature of extremities	Weak femoral pulse Cool extremities not related to room temperature or lack of clothing, esp with fever, mottling or lethargy.
Musculoskeletal	Spine formation Formation/movement of extremities	Torticollis Noted abnormalities of leg length or thigh-fold asymmetry at 4 mo
Neurologic	Reflexes: Suck, blink, gag, rooting, extrusion, Babinski, Moro, startle, plantar/palmar, stepping Tonic neck Symmetry of limbs/movement Muscle tone	Absence or change in reflex Asymmetry in movement Decreased muscle tone
Developmental	Social/Verbal/Gross/Fine motor development Sleep habits	See Newborn, Infant, Toddler Developmental Screening Protocol

*change in vital signs may be the first and only sign of an infection

Table 2. Toddler Assessment Considerations

Toddler Assessment Considerations		Considerations for referral to physician
General Health Status	Vital Signs (weight, recumbent length, head circumference (recommended up to three years of age); and axillary temperature, heart rate, blood pressure and respirations as needed if abnormality suspected); Medical hx (e.g., type of birth, newborn blood tests, major or minor anomalies suggesting need for genetic evaluation)	SBP: <75 mmHg or >125 Heart Rate: <80 or >125 RR: <20 or >40 Temp: <96 or >101°F Failure to gain weight
Cognitive	Alertness Congenital anomalies	Lethargy, unresponsive or minimal responsiveness to touch No tracking with eyes Minimal responsiveness to interactions
Integumentary	Skin color, temperature, integrity; capillary refill; mucous membrane status	Lesions, bruising, rashes (not diaper rash) Mottled skin (especially in conjunction with fever or lethargy and not normal for toddler)
HEENT	Head size/shape, sutures, fontanels Vision, fixate and follow response Ears Nose Oral care provided – fluoride given	Prematurely closed anterior fontanel (<9 mo) Lack of tracking Ears with pits or tags Nose patency decreased
Respiratory	Respiratory rate, effort, pattern	Tachypnea/ bradypnea Shallow breaths, significant changes in respiratory effort (nostril flaring, retractions)
Cardiovascular	Heart Rate, blood pressure, pulses, rhythm, hx heart disease	Hyper/hypotension Tachy/bradycardia New murmur or abnormal rhythm
Gastrointestinal	Abdominal appearance/tenderness; bowel tones and movement; nausea/vomiting; indigestion	Abdomen tender Bowel movement type/amount abnormal for patient Vomiting/Diarrhea leading to dehydration
Diet	Appetite Breastfeeding and solid foods	Weight loss Lack of weight gain

	Weight (Normal: 3-5 oz/week from 6-18 mo) Length	Signs of dehydration
Urinary	Voiding characteristics (amount, color, odor, pain)	Apparent pain with urination Oliguria or anuria (expect 1ml/kg/hr) Blood or clots in urine
Peripheral Vascular	Femoral pulses Temperature of extremities	Weak femoral pulse Cool extremities not related to room temperature or lack of clothing, esp with fever, mottling or lethargy
Musculoskeletal	Spine formation Formation/movement of extremities	Abnormal movements By 2.5, not able to run without falling
Neurologic	Reflexes: deep tendon Symmetry of limbs/movement Muscle tone	Absence, asymmetrical, or change in reflex Asymmetry in movement Decreased muscle tone
Developmental	Social/Verbal/Gross/Fine motor development Sleep habits Parent-Child Interaction; assess behaviors for positive attachment	See protocol Newborn, Infant, Toddler Developmental Screening See protocol Parent Child Interaction

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Appendix B.14: Protocols: Newborn, Infant, Toddler Developmental Screening

Protocol Title:	Newborn, Infant, Toddler Developmental Screening
Target Audience:	Public Health Maternal-Child Health Home Visitors
Date Updated:	01/2019
Date of Next Review:	01/2020

PURPOSE: Assessing child development from newborn through toddler stage helps identify developmental delays early. Early intervention is key to reducing the impact of delay on the child and their family. Parent-child interaction and attachment will be improved when parents understand the child's developmental status.

PROCESS: Administration of a valid screening tool: identifies children that are developing on schedule; identifies areas children would benefit from practice/support; and identifies children at risk for developmental delays. Results of screening will inform you that: most children are on-schedule and doing great; some children will benefit from practice in an area of development; and a few children will need referral for evaluation. Screening does not diagnose delays or disabilities.

Home Visitors in the Babies First! and Nurse Family Partnership programs are encouraged to use the Ages and Stages Questionnaires (ASQ)-3 and the Ages and Stages Questionnaires (ASQ): Social Emotional (SE)-2 for screening. The screens should be administered at intervals according to the guidelines of the home visiting program (Babies First!, NFP) and anytime concerns arise.

The ASQ-3 is a series of questionnaires for children ages 1 month to 5 ½ years. These are valid tools that are known to accurately identify children at risk for developmental delays. There are 21 age-based ASQ-3 questionnaires but not all ages need to be administered for each child. The 9-month questionnaire was designed for use in health care settings and is not recommended for use in home visiting.

The ASQ:SE-2 is composed of nine questionnaires that can be used with all children from 1 month to 72 months of age.

Step one: Introduce the screening tool to families, explain the purpose of the screening, who will have access to the screening information and how the results will be used.

Step two: Home visitors should carefully calculate a child's age at administration in months and days. See ASQ-3 and/or ASQ:SE-2 User's Guides for detailed guidance. There is an age calculator that the publisher of the ASQ provides at the following website.

www.agesandstages.com. Age adjustments must be made when a child is born more than 3 weeks premature, up to, but not including 24 months.

Step three: The questionnaire is completed. Accuracy is improved when a familiar caregiver reports on observable behaviors in a familiar, comfortable environment over time. The child should be given some time to play with materials and the caregiver should try out the majority of the items. Studies suggest that parents are highly reliable reporters on developmental screening tools. The questionnaires are designed to encourage parent/caregiver involvement in the

screening process. Home Visitors report that completing the ASQ-3/ASQ: SE-2 with parents offers an important opportunity to educate parents about whether their child's development and behavior is similar to that of same-age peers.

Step four: Score the questionnaire. Review responses. If there are any missing items, try to obtain answers. If an item is inappropriate, omit the item. Calculate area totals. If any items omitted, calculate new area total (See ASQ-3/ASQ:SE-2 User's Guide for detailed guidance). Review any parent comments.

Step five: Score interpretation and follow-up. Consider culture and family values when interpreting the results. Discuss results with family. If score is above the monitoring zone: Provide follow-up activities and rescreen according to program schedule. If the score is in the monitoring gray zone: Provide activities to practice skills in specific areas and rescreen in 2 months or sooner. Make community referrals as appropriate if the score is below cutoff in one of more areas.

In consultation with family, provide referral to Early Intervention and share results with the primary care provider. The summary sheet (score form) provides a complete summary of ASQ information. The summary sheet can be used to share information with other providers. When sharing results with the summary sheet only, the optional individual item response section should be completed.

If a parent expresses concern, respond and refer if necessary.

Follow-up activities may include:

- ASQ Play activities found in the Appendix of the ASQ-3 User's Guide. They are in a chart format, and each age interval contains activities across developmental areas.
- ASQ Learning Activities are a separate publication. The learning activities contain actions by developmental area.
- ASQ: SE-2 Learning Activities are found in Appendix E of the ASQ-SE2 User's Guide. The Learning Activities include age-by-age handouts and activities to support parents.

Information about how to refer a child to EI/ECSE can be found here:

<https://www.oregon.gov/ode/students-and-family/specialeducation/earlyintervention/pages/default.aspx>

Appendix B15: Protocols: Oral Health Screening for Infants and Children: Nursing

Protocol Title:	Oral Health Screening for Infants and Children: Nursing
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors including: Nurse-Family Partnership and Babies First! Nurses
Date Created:	1/2019
Date of Next Review:	1/2020

PURPOSE:

Having a healthy mouth plays a vital role in developing and maintaining the overall health and wellness of children, and good oral health starts with a child's baby teeth. Having healthy baby teeth allows a child to chew and eat properly; speak more clearly; guides adult teeth into place; helps to shape a child's face; and keeps future dental costs to a minimum. The purpose of a screening is to identify normal versus abnormal oral conditions and to make referrals for dental care.

PROCESS:

Starting at age 4-6 months, and every 6 months ongoing perform an oral health screening. Recommended screening tools include those endorsed by the Oregon Oral Health Coalition (e.g., [The First Tooth Caries Risk Assessment](#)), the American Dental Association, the American Academy of Pediatric Dentistry, or the American Academy of Pediatrics.

An oral health screening is comprised of two parts:

1. Reviewing oral health history/risk assessment
2. Performing a physical examination of the child's teeth and gums

The oral health history review should cover a child's and his/her caregiver's past and current oral health practices and experiences to help discover risk for oral problems. This review can include the following:

- Previous oral problems.
- Diet and nutrition.
- Fluoride intake:
 - Primary source of drinking water
 - Past fluoride treatment
 - Fluoride supplements (e.g. tablets or rinse)
- Dental visit history.
- Medications that affect the mouth.
- Baby bottle or sippy cup use.

An oral health screening involves a physical examination of a child's mouth, including the lips, tongue, teeth, gums and tissues. For a child less than 3 year of age: the home visitor and the caregiver should sit facing each other with their knees touching. Lay the child on the home visitor's lap with his/her head securely nestled against the screener's abdomen. With gloved hands, the screener should lift the child's lips, feel the soft tissues, check the physical condition of the teeth and gum and look throughout the mouth. For a child 3 year of age or older: the child can be checked while sitting close and across from the screener. A tongue depressor can be used to move the lips to view the teeth and gums.

INTERVENTIONS:

- Provide age and culturally appropriate anticipatory guidance.
- If local policies and procedures are in place, apply fluoride varnish.
- Refer children for regular dental care or immediate care if assessed to be at increased risk for oral disease. Every child should have a dental visit by age 1. OHP cover dental care from birth.

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Appendix B.16: Protocols: Parent Child Interaction Assessment

Protocol Title:	Parent Child Interaction Assessment
Target Audience:	Public Health Maternal-Child Health Nurse Home Visitors including: Maternity Case Management, Nurse-Family Partnership and Babies First! Nurses
Date Updated:	01/2019
Date of Next Review:	01/2020

PURPOSE:

A healthy relationship between a caregiver and their infant is essential for the infant's positive physical, cognitive, social and emotional development. Infants are born with innate biological behaviors that signal a caregiver to respond and aid. When a caregiver can respond sensitively over and over, the infant learns trust and forms an attachment to the caregiver. Attachment is an interaction and emotional experience between the child and caregiver. This first relationship experience forms the basis for infant's understanding of how relationships work, and secure attachment requires warm, nurturing and consistent caregiving. Promoting positive parent-child interaction is a key component of home visiting, as home visitors are in a unique position to assess and enhance parent-child interactions during the first year of life.

PROCESS:

Assessment:

- Nurse home visitors with training in a validated parent-child interaction (PCI) assessment tool (e.g., DANCE, Parent Child Relationship Assessment/NCAS, [KIPS](#)) should use that assessment tool. Use the tool-specific scores to identify when parents would benefit from interventions (see Interventions section below).
- It is recommended that programs who are planning to provide parent education and attachment promotion seek training and certification in a validated PCI tool like the ones noted above; however, when a validated parent-child assessment tool is not in use by an agency, the Bright Futures Age Specific Observations of Parent-Child Interactions may be used: <https://www.brightfutures.org/mentalhealth/pdf/professionals/in/observation.pdf>.
- It is not possible to determine a cutoff point for referral without using a validated tool; however, it is important to make sure that parent-child interactions are positive and opportunities for improvement are not missed; nurses should have a low threshold for instituting strength-based interventions. MCH State Nurse Consultants trained in validated tools are available for consultation as needed.
- Parent-child interaction assessments should be culturally sensitive and completed per program guidelines or more often as needed based on assessment.
- Each parent-child assessment should have accompanying documentation that includes assessment results, nursing diagnosis, expected outcomes, planning and interventions.

Interventions:

- 1) When a concern is identified by the nurse or parent, provide follow-up. Follow-up may include:
 - a) Interventions from evidenced based curriculums designed to strengthen attachment and overall parent-child interaction:
 - i) Circle of security (parent education handouts and videos available online: <https://www.circleofsecurityinternational.com/>)
 - ii) Partnering in Parenting Education (PIPE) curriculum (materials must be purchased)
 - iii) [Promoting First Relationships](#)

- iv) Zero-3 (parent education handouts available under specific topics)
<https://www.zerotothree.org/resources/series/parent-favorites#social-emotional-development>
- b) Referral to a mental health provider trained to address parent child interaction (see a list of sites that provide Parent-Child Psychotherapy and [Parent Child Interaction Therapy](#))
- c) Treatment of underlying conditions contributing to PCI interruption such as toxic stress, substance use disorder, or other mental health disorders.

Additional Training resources:

- 1) [Oregon Infant Mental Health Association](#)
- 2) Achieve OnDemand Trainings (contact the MCH Workforce Development team for access) include some courses that relate to this topic:
 - a) Foundations of Infant Mental Health Practice in Home Visiting
 - b) Exploring Values and Beliefs around Parenting
 - c) Home Visiting with Families During Pregnancy
 - d) Promoting Effective Parenting with Motivational Interviewing

REFERENCES:

Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017.