

## West Virginia Perinatal Partnership

### Minimum Criteria for Level III Perinatal Facilities, Programs and services

#### Definition and Functions of Level III Perinatal Facilities:

1. In addition to providing Level I and II services, Level III institutions provide comprehensive sub-specialty services for the large majority of high-risk obstetric and newborn patients, including the full range of prematurity and most neonatal surgical conditions involving the following. **Recent research has found that infant mortality is significantly higher among very low birthweight neonates (< 1500 grams) who are cared for in low volume, Level III neonatal units (i.e.: units that care for less than 100 infants <1500 grams)<sup>1</sup>. Therefore the Perinatal Partnership recommends that Level III units in West Virginia are those that care for more than 100 very low birth weight babies per year.**

<b>Obstetric Staffing</b>	<b>Level III</b>	<b>My Facility</b>
<b>I. Obstetrical-Fetal Staffing Components</b>	<b>&lt;32 0/7 wks and &lt;1500 grams</b>	
<b>a. Physician Staff</b>		
1. Physician responsible for unit administration	Board Certified in Maternal Fetal Medicine-Required	
<b>b. Other physician on staff</b>		
1. General Surgeon	Required	
2. Neurosurgeon	Recommended	
3. Neurologist	Recommended	
4. Orthopedic surgeon	Recommended	
5. Urologist	Recommended	
6. Otolaryngologist	Recommended	
7. Cardiologist	Recommended	
8. Geneticist	Recommended	
9. Internist	Required	
10. Anesthesiologist with interest/expertise in obstetric anesthesia	Required	
11. Pathologist	Required	
12. Radiologist	Required	
<b>c. Nursing Staff</b>		
1. Nurse responsible for unit administration (supervisor). One nurse may have responsibility for both obstetrical and neonatal services in some.	RN, BSN with specialty training in obstetric nursing and Advanced degree	

<sup>1</sup> Phibbs CS, Baker LC, Caughey AB, Danielsen B, Schmitt SK, Phibbs RH. **Level and volume of neonatal intensive care and mortality in very-low-birth-weight infants.** New Engl Journal Med. 2007 May 24; 356(21):2165-75.

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<b>Obstetric Staffing</b>	<b>Level III</b>	<b>My Facility</b>
	Highly Recommended	
2. Regional perinatal outreach educator/coordinator – obstetric focus	Highly Recommended	
3. Nurse/Patient Ratio for Labor and delivery capable of FHR monitoring all shifts:		
1) Uncomplicated Patients	<b>Refer to Appendix I</b> <b>Refer to Appendix I</b>	<b>Complete Appendix I Worksheet</b>
2) High risk Patients		
3) Postpartum patients (Uncomplicated with central nursery)		
4) Uncomplicated with couplet care		
5) High risk (antepartum & postpartum care)		
d. Social Work – Provision of services	Required	
e. Nutrition – Provision of services	Required (RD)	

<b>Obstetric Capabilities and Services</b>	<b>Level III</b>	<b>My Facility</b>
<b>I. Obstetric- Fetal Service Components</b>	<b>&lt;28 0/7 wks and &lt;1000 grams</b>	
1. Perinatal care for uncomplicated obstetric and fetal patients		
2. Manage high-risk pregnancies All gestations	Required	
3. Risk assessment of all patients admitted to the obstetric service with an established triage system for identifying high-risk patients who should be transferred to a facility that provides a higher level prior to delivery	Required	
4. No <u>elective</u> deliveries prior to 39 weeks without evidence of fetal lung maturity	Required	
5. Emergency Capability	Required	
a. Provide proper detection and supportive care of unanticipated maternal-fetal problems that occur during labor and delivery	Required	
b. Personnel qualified to manage obstetric and newborn emergencies	Required	
c. Certified NRP personnel with neonatal intubation skills in every delivery	Required	
d. Begin emergency cesarean sections within 30 minutes after the decision to do the operation has been made	Required	
e. Provide transfusions of blood and fresh frozen plasma on a 24-hour basis	Required	
f. Pharmacy services available	Required	
6. Anesthesia services available,	Required	

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7. Radiology services (technician)	Required	
8. Clinical laboratory services on a 24-hour basis	Required	
9. Continuous electronic fetal heart-rate monitoring capability	Required	
10. Perinatal outreach program obstetric focus	Required	
11. Other medical services		
a. General Surgery	Required	
b. Thoracic Surgery	Recommended	
c. Neurosurgery	Recommended	
d. Orthopedic Surgery	Recommended	
e. Urology	Recommended	
f. Otolaryngology	Recommended	
g. Cardiology	Recommended	
h. Genetics	Recommended	
i. Internal Medicine	Recommended	
j. Pathology	Required	
k. Infection control	Required	
l. Radiology	Required	
12. Other services available for Obstetric Patients		
a. Respiratory Therapy	Required	
b. Laboratory Services	Refer to Appendix 2	Complete Appendix 2 Worksheet
c. Lactation support services	Required	
d. Diagnostic and evaluative techniques	Required	
i. Antenatal fetal testing (NST, OCT, Biophysical Profile)	Required	
ii. Antenatal fetal lung maturity evaluations	Required	
iii. X-Ray	Required	
iv. Diagnostic Ultrasound	Required	

<b>Obstetric Written Protocols/Policies/Procedures/Quality Improvement</b>	<b>Level III</b>	<b>My Facility</b>
<b>I. Obstetrical Components</b>		
1. Criteria for risk assessment	Required	
2. Criteria for consult/transport/referral	Required	

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3. Family-centered culturally sensitive care	Required	
4. Breastfeeding policy includes all of the following a. Initiate breastfeeding within the first hour afterbirth. b. Avoid giving infants fluids or solids other than breast milk unless medically necessary. c. Promote 24-hour rooming-in, encouraging the family to recognize and respond to infant's cues. d. Do not use a pacifier or artificial nipple with infants during the hospital stay. e. Give mothers a telephone number to call for help with breastfeeding	Required	
4. Early discharge arrangement	Required	
5. Criteria of practice of allied health professionals (e.g., nurse midwife, nurse practitioner, nurse anesthetist)		
6. Criteria for practice credentials and consults for attending physicians	Required	
7. Quality Assurance/Clinical Outcomes Review Program	Required	
8. No <u>elective</u> deliveries prior to 39 weeks without laboratory evidence of fetal lung maturity	Required	
<b>Data Collection Quality improvement Obstetrical and Neonatal</b>		
1. Perform data collection and retrieval	Required	
2. Multi-disciplinary continuous quality improvement programs for improving maternal and neonatal health outcomes.	Required	
3. internal perinatal case reviews which include all maternal, fetal, and neonatal deaths, as well as all maternal and neonatal transports	Required	
4. multi-disciplinary forums, periodically review the performance of the perinatal program, including trends, all deaths, all transfers, all very low birth weight infants, problem identification Required and solution, issues identified from the quality management process, and systems issue	Required	

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<b>Obstetric Equipment</b>	<b>Level III</b>	<b>My Facility</b>
<b>1. Obstetrical-Fetal Equipment Components</b>		
<b>Labor (Labor and delivery rooms may be combined as birthing rooms)</b>		
Areas used for women in labor are equipped with the following components:		
1. Adequate space for support persons, personnel, and equipment	Required	
2. Adequate ventilation and temperature control	Required	
3. A labor or birthing bed	Required	
4. A storage area for the patient's clothing and personal belongings	Required	
5. Adjustable lighting that is pleasant for the patient and adequate for examinations	Required	
6. An emergency signal and an intercommunication system	Required	
7. A sphygmomanometer and stethoscope	Required	
8. Mechanical infusion equipment	Required	
9. Fetal monitoring equipment	Required	
10. Oxygen and suction outlets	Required	
11. Access to at least one shower for use of labor patients	Required	
12. Storage facilities for supplies and equipment	Required	
13. Patients who have significant medical or obstetric complications are cared for in a room especially equipped with cardiopulmonary resuscitation equipment and other monitoring equipment necessary for observation and special care. It is preferable that this room be located in the labor and delivery area and meet the physical requirements of any other intensive care room in the hospital. When patients with significant medical or obstetric complications are cared for in the labor and delivery area, the unit has the same capabilities as an intensive care unit. (Guidelines for Perinatal Care, Sixth Edition, 2007.).	Highly Recommended	
<b>Delivery Rooms</b>		
1. Delivery/operating table or birthing bed that allows variation in position for delivery	Required	
2. Instrument table and solution basin stand	Required	
3. Instruments and equipment for vaginal delivery, repair of laceration, cesarean delivery, and the management of obstetric emergencies	Required	
4. Solutions and equipment for the intravenous administration of fluids	Required	
5. Equipment for administration of all types of anesthesia, including equipment for emergency resuscitation of the mother	Required	
6. Individual oxygen, air, and suction outlets for mother and neonate	Required	

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<b>Obstetric Equipment</b>	<b>Level III</b>	<b>My Facility</b>
7. An emergency call system	Required	
8. Mirrors for patients to observe the birth	Recommended	
9. Wall clock with a second hand	Required	
10. Equipment for fetal heart rate monitoring	Required	
11. Scrub sinks	Required	
12. Obstetric ultrasound equipment available to the labor and delivery rooms	Highly Recommended	

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<b>Neonatal Staffing</b>	<b>Level III</b>	<b>My Facility</b>
<b>II. Neonatal Staffing Components</b>	<b>&lt;32 0/7 wks and &lt;1500 grams</b>	
<b>a. Physician Staff Well Newborn Nursery</b>	See Level I and II	
1. Associate staff –Neonatal Nurse Practitioners and PAs	Optimal	
<b>b. NICU Nursery</b>	<b>Board Certified Neonatologist Required</b>	
<b>c. Other physicians on staff with Pediatric expertise [board eligible/certified]:</b>		
1. Surgeon	Required	
2. Ophthalmologist	Required	
3. Cardiologist	Required	
4. Cardio-Thoracic Surgeon	Highly Recommended	
5. Anesthesiologist	Required	
6. Pathologist	Required	
7. Radiologist	Required	
8. Orthopedic Surgeon	Highly Recommended	
9. Plastic Surgeon	Highly Recommended	
10. Urologist	Highly Recommended	
11. Otolaryngologist	Highly Recommended	
12. Nephrologist	Highly Recommended	
13. Endocrinologist	Highly Recommended	
14. Pulmonologist	Highly Recommended	
15. Gastroenterologist	Highly Recommended	
16. Hematologist	Highly Recommended	
17. Infectious Disease Specialist	Highly Recommended	
<b>d. Nursing Staff</b>		
<b>Well Newborn Nursery</b>		
1. Nurse responsible for unit administration (supervisor). One nurse may have responsibility for both nursery and obstetrics.	RN with demonstrated competence in Obstetrics and Newborn Care	
2. Staff Nurses	Demonstrated and documented competency in the care of well and sick newborns.	

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<b>Neonatal Staffing</b>	<b>Level III</b>	<b>My Facility</b>
	Require	
3. Staff per shift	<b>Refer to Appendix I</b>	<b>Refer to Appendix I Worksheet</b>
<b>NICU Nursery</b>		
1. Nurse for unit administration. One nurse may have responsibility for both.	RN with advanced degree and specialized education/experience in neonatal care Highly Recommended	
2. Regional perinatal outreach educator/coordinator – neonatal focus	Highly Recommended	
3. Staffing		
1) Critical Infants (every shift)	<b>Refer to Appendix I</b>	<b>Refer to Appendix I Worksheet</b>
2) Intermediate care infants (every shift)		
3) Convalescent infants (every shift)		
4) Transitional care infants (every shift)		
e. Respiratory therapists assigned only to NICU	Required	
f. Pharmacists with neonatal specialty assigned only NICU	Required	
g. Social Work – Provision of services	Required	
h. Nutrition – Provision of services	Required (RD)	

<b>Neonatal Capabilities and Services</b>	<b>Level III</b>	<b>My Facility</b>
<b>II. Neonatal Services Components</b>	<b>&lt;32 0/7 wks and &lt;1000 grams</b>	
1. Neonatal care for uncomplicated and uncomplicated newborns	Required	
2. Transitional Newborn Care	Required	
3. Parent education program	Required	
4. Emergency Capability	Required	
a. Neonatal resuscitation capability per NRP guidelines	Required	
b. Personnel qualified to manage newborn emergencies	Required	

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<b>Neonatal Capabilities and Services</b>	<b>Level III</b>	<b>My Facility</b>
c. Certified NRP personnel <u>capable of initiating resuscitation</u> in every delivery who can be immediately available to the baby as his or her only responsibility.	Required	
d. A person with skills required to perform complete resuscitation, including endotracheal intubation and administration of medications is immediately available for all deliveries.		
e. Ability to stabilize all neonates including unexpectedly small or sick neonates	Required	
f. Arrangement for transport	Required	
g. Provide transfusions of blood and fresh frozen plasma on a 24-hour basis	Required	
h. Radiology services (technician)	Required	
i. Clinical laboratory services (technician) on a 24-hour basis	Required	
5. Advanced Neonatal Services		
a. Unit volume: Cares for more than 100 very low birth weight (<1500 grams) neonates per year.	Required	
b. Respiratory Therapy Services committed only to NICU	Required	
c. Conventional Ventilation Support	Required	
d. Continuous Positive airway pressure	Required	
e. High Frequency ventilation	Required	
f. Inhaled Nitric Oxide	Required	
g. During c. and d. In-house qualified practitioner (i.e.: neonatal nurse practitioner) with capability of diagnosing and treating a full range of complications of mechanical ventilation.	Required	
h. Extracorporeal membrane oxygenation	Recommended	
i. Cardiothoracic surgery with cardiopulmonary bypass	Required	
j. Developmental assessment follow-up/early intervention	Required	
k. Infection Control	Required	
6. Evaluate the condition of healthy neonates and their continuing care until discharge	Required	
7. Perinatal outreach program with neonatal focus	Highly Recommended	
8. Other medical/neonatal services	Required	
a. Pathology	Required	
b. Radiology	Required	
c. Anesthesia	Required	
d. Pediatric Surgery	Highly Recommended	
e. Pediatric Cardio-thoracic surgery	Highly Recommended	
f. Plastic surgery	Highly Recommended	

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<b>Neonatal Capabilities and Services</b>	<b>Level III</b>	<b>My Facility</b>
g. Pediatric Cardiology	Required	
h. Pediatric Neurology	Highly Recommended	
i. Pediatric Ophthalmology	Required	

<b>Neonatal Written Protocols/Policies/Procedures/Quality Improvement</b>	<b>Level III</b>	<b>My Facility</b>
<b>II. Neonatal Components</b>	Required	
1. Criteria for risk assessment	Required	
2. Criteria for consult/transport/referral	Required	
3. Family-centered culturally sensitive care	Required	
4. Breastfeeding: Low-risk newborns remain with their mothers until the first breastfeeding is completed. Necessary infant care is completed at mothers' bedsides. Infants delivered by cesarean section are brought to their mothers within an hour of birth or within 30 minutes of completion of surgery if mother is awake.	Required	
5. Initial evaluation of newborn by physician	Required	
6. Stabilization (transitional care) of newborn	Required	
7. Ongoing care of newborn	Required	
8. Discharge Planning	Required	
9. Criteria for practice of allied health professionals (e.g., nurse practitioners)	Required	
10. Criteria for practice credentials and consults for attending physicians	Required	
11. Infant Abduction Policy	Required	
<b>Data Collection Quality improvement Obstetrical and Neonatal</b>		
5. Perform data collection and retrieval	Required	
6. Multi-disciplinary continuous quality improvement programs for improving maternal and neonatal health outcomes.	Required	
7. internal perinatal case reviews which include all maternal, fetal, and neonatal deaths, as well as all maternal and neonatal transports	Required	
8. multi-disciplinary forums, periodically review the performance of the perinatal program, including trends, all deaths, all transfers, all very low birth weight infants, problem identification Required and solution, issues identified from the quality management process, and systems issue	Required	

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<b>Neonatal Equipment</b>	<b>Level III</b>	<b>My Facility</b>
<b>Neonatal Functional Units</b>		
<b>Resuscitation/Stabilization</b>		
A resuscitation and stabilization bed should be available in the immediate area of delivery for those neonates who require it. Contingent upon their condition, neonates are moved from this area to the nursery for admission and stabilization and/or transfer to a Level III Perinatal Center.	Required	
The resuscitation area contains the following items:		
1. Overhead source of radiant heat that can be regulated based on the infant's temperature - radiant warmers with accommodations for X-ray capabilities are recommended	Required	
2. Thin resuscitation/examination mattress that allows access on three sides	Required	
3. Wall clock (Apgar timer is beneficial)	Required	
4. Equipment and medications as recommended by the Neonatal Resuscitation Program. This includes a laryngoscope with infant-sized blades, endotracheal tubes, and resuscitation bags with masks for full-term and preterm neonates	Required	
5. Humidified oxygen, compressed air and suction sources that are separate from those for the mother	Required	
6. Equipment for examination, immediate care, and identification of the neonate	Required	
7. Umbilical vessel catheter and insertion tray	Required	
8. Cardiac monitor	Required	
9. Pulse oximeter,	Required	
10. Phototherapy unit	Required	
11. Doppler blood pressure for neonates	Required	
12. Blood glucose monitor	Required	
13. Gavage feeding equipment	Required	