



# MAINE

## Perinatal and Neonatal Level of Care (LOC) 2022 Guidelines

Effective February 1, 2022

Adapted with permission from the Washington State Department of Health (DOH) Perinatal and Neonatal Level of Care 2018 Guidelines

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## Introduction

In 2020, Maine Department of Health and Human Services (DHHS) asked all of the hospitals in Maine to complete an assessment from the Federal CDC on maternal and neonatal Levels of Care (LOC) using the LOCATe tool as the state works towards strengthening the perinatal system of care and reducing infant and maternal morbidity and mortality rates. In 2021, DHHS and the Maternal and Child Health Team at the Maine CDC met with each hospital to review their LOCATe tool results and determine the appropriate maternal and newborn LOC. In order to help hospitals assess their facility’s capabilities and LOC, Maine DHHS developed this guidance document which is adapted from the Washington State Department of Health’s Washington State Perinatal and Neonatal Level of Care 2018 Guidelines. This document follows national guidance, including the American Academy of Pediatrics Levels of Neonatal Care and Guidelines for Perinatal Care recommendations to use uniform, nationally applicable definitions, and consistent standards of service<sup>1,2</sup> to improve neonatal outcomes. The guidance is also consistent with American College of Obstetricians and Gynecologists and Society for Maternal-Fetal Medicine’s Obstetric Care Consensus: Levels of Maternal Care that was updated in August 2019.<sup>3</sup> The Guidelines don’t require individual hospitals to provide the entire scope of service within a LOC; variation may be needed to meet the Guideline objectives and the unique goals of a hospital or region. This document will be reviewed every 3 years.

**It is expected that these guidelines will help:**

- improve the outcome of pregnancy,
- increase access to appropriate care for pregnant people and newborns, and
- optimize allocation of resources.

This is not a regulatory document. Maine DHHS uses this document as a reference for hospitals applying for Level I, Level II, Level III, or Level IV designations.

# Definitions of Availability and Reasons for Consultations

## Definitions of Availability

Physically present at all times: the specified person should be on-site in the location where perinatal care is provided, 24 hours a day, 7 days a week.<sup>3</sup>

Readily available at all times: the specified person should be available 24 hours a day, 7 days a week, for consultation and assistance, and able to be physically present on-site within a time frame that incorporates maternal and fetal or neonatal risks and benefits with the provision of care.<sup>3</sup>

**When to obtain at least a one-time consult by OB/GYN or Maternal Fetal Medicine and/or Neonatology** by phone, telehealth, or in person based on provider judgement

**Special circumstances:** 1) Lower limit of viability is changing and current standard is to offer resuscitation starting at 22 weeks gestation; this should be a shared decision making discussion that includes neonatology and Maternal Fetal Medicine; when patient presents at a Level 1 or Level 2 facility, reasonable attempts should be made by local OB/GYN and pediatrician to consult with nearest tertiary care facility and include them in discussion and shared decision making with the family.

**Phone numbers for consultations/transfers for Level 3 and 4 hospitals in Maine:**

**MMC MFM and Neonatology (One Call) is 207-662-6632**

**NL-EMMC OB via Northern Light Health Integrated Transfer Center at 973-9000 and NLH EMMC Neonatology is 207-275-1082 (EMMC NICU)**

Family Medicine or Midwife Consultation to OB or MFM	Consultations to MFM <sup>2(p. 597-600)</sup>
<p><b>Maternal Medical Conditions</b></p> <ul style="list-style-type: none"> <li>Asthma -unstable/symptomatic on medication</li> <li>Substance use disorder and Alcohol Use Disorder</li> <li>Epilepsy</li> <li>Psychiatric illness requiring medication management</li> <li>Hypertension without renal or cardiac disease</li> <li>Significant pulmonary, cardiac, or renal disease</li> <li>Maternal age greater than 39 at delivery</li> </ul>	<p><b>Medical History</b></p> <ul style="list-style-type: none"> <li>Maternal Cardiac Disease</li> <li>Type 1 and Type 2 Diabetes</li> <li>History of stroke or other severe chronic illness (e.g. SLE, Hypertension requiring multiple medications, severe renal disease, or creatinine greater than 1.2, HIV, congenital disorder)</li> <li>Other rheumatologic disorders (e.g. Sjogren’s Syndrome, scleroderma)</li> <li>History of or current cancer</li> <li>Hemoglobinopathy</li> <li>BMI &gt;50 (anesthesia consult recommended)</li> </ul>
<p><b>OB History</b></p> <ul style="list-style-type: none"> <li>VBAC</li> <li>Vertical/classical incision</li> <li>Prior IUGR</li> <li>Prior IUFD</li> <li>Uterine malformation</li> </ul> <p><b>OB Conditions</b></p> <ul style="list-style-type: none"> <li>Pre-eclampsia</li> <li>Diabetes requiring insulin</li> <li>Polyhydramnios</li> <li>Active herpes</li> <li>Uncontrolled hyperemesis</li> </ul>	<p><b>OB History</b></p> <ul style="list-style-type: none"> <li>Recurrent pregnancy loss (greater than 3 losses)</li> <li>IUFD</li> </ul> <p><b>OB Conditions</b></p> <ul style="list-style-type: none"> <li>Isoimmunization</li> <li>Fetal anomaly</li> <li>IUGR before 37 weeks estimated gestational age</li> <li>PPROM before 37 weeks estimated gestational age</li> <li>Trauma</li> <li>Bleeding at greater than 22 weeks or less than 36 weeks estimated gestational age</li> <li>Multiples (any number)</li> </ul>

## Maternal Levels of Care: Definitions, Capabilities, and Provider Types

Location	Hospital Without Delivery Service	Planned Home Birth or Accredited Birth Center (37–42 wk. gestation; low-risk pregnancies)
<p><b>Capabilities</b></p>	<p>Basic newborn support including thermoregulation and resuscitation as needed following AHA Guidelines for Neonatal Resuscitation<sup>4</sup> and stabilization pending transfer to appropriate level of care facility based on maternal and/or neonatal services required.</p> <p>STABLE course or NRP Essentials is expected for emergency department staff.</p> <p>Formal training, such as <a href="#">Emergencies in Clinical Obstetrics (ECO®)</a> course or <a href="#">Basic Life Support in Obstetrics (BLSO®)</a>, <a href="#">Advanced Life Support in Obstetrics (ALSO®)</a>, <a href="#">Practical Obstetric Multi-Professional Training (PROMPT®)</a>, or Dartmouth’s version of Emergent Delivery and Neonatal Resuscitation SIM Session, is highly encouraged for emergency department providers without inpatient obstetrics on site</p> <p>Periodic drills and simulations can assist in maintaining readiness for unanticipated obstetric events.</p> <p>Ensure that hospital has basic equipment for an emergency delivery and has at least one car seat or car bed available for transporting a newborn.</p>	<p>Care for low risk pregnant people with uncomplicated singleton term vertex pregnancies who are expected to have an uncomplicated birth. Initiates transfer to a facility that can provide higher level care as appropriate.</p> <p>Maternal: Routine monitoring, IV hydration, GBS prophylaxis, and management of hemorrhage responsive to treatment, including pharmacological treatment. Initiate BLS pending arrival of EMS. Providers should review the Maine CDC <a href="#">communication toolkit</a> around home births and <a href="#">power point presentation</a>.</p> <p>Newborn: Manage newborn resuscitation per AAP/AHA Guidelines for Neonatal Resuscitation, including thermoregulation, initial steps of resuscitation and mask ventilation, including laryngeal mask with appropriate training, and supplemental oxygen if required pending arrival of Emergency Medical Services. ARNPs and medical providers, if present, may provide endotracheal intubation, emergency vascular access and administration of medication and volume expanders if indicated per AAP/AHA Guidelines.<sup>5</sup> Emergencies in Clinical Obstetrics course or Birth Emergencies Skills Training is highly encouraged for providers offering planned home or birth center births.</p> <p>NRP is expected for all providers offering planned home or birth center births.</p> <p>Refer to <a href="http://birthcenters.org">birthcenters.org</a> for American Association of Birth Centers’ Standards for Birth Centers.</p>
<p><b>Provider Types</b></p>	<p>Emergency Room Physicians, Family Medicine Physicians</p>	<p>Certified Midwives, Certified Nurse Midwives, Certified Professional Midwives</p>

# Maternal Levels of Care: Definitions, Capabilities, and Provider Types

## Level I

Care of low-to moderate-risk pregnancies with the ability to detect, stabilize, and initiate management of unanticipated maternal–fetal or neonatal problems that occur during the antepartum, intrapartum, or postpartum period until patient can be transferred to a facility at which specialty maternal care is available

### Capabilities<sup>3</sup>

- ✓ Ability to begin emergency cesarean delivery within a time interval that best incorporates maternal and fetal risks and benefits with the provision of emergency care.
- ✓ Support services, including access to limited obstetric ultrasonography with interpretation, and support services including laboratory testing, and blood bank supplies readily available at all times.
- ✓ Capacity to implement patient safety bundles for common causes of preventable maternal morbidity, such as management of maternal venous thromboembolism, obstetric hemorrhage, and maternal severe hypertension in pregnancy.
- ✓ Ability at all times to initiate massive transfusion protocol, with process to obtain more blood and component therapy as needed.
- ✓ Stabilization and the ability to facilitate transport to a higher-level hospital when necessary. This includes: risk identification and determination of conditions necessitating consultation (which may be achieved via telemedicine), referral, and transfer and a mechanism and procedure for transfer and transport to a higher-level hospital available at all times, and a reliable, accurate, and a comprehensive communication.... (continued on next page)

## Level II

Level I facility plus care of appropriate moderate to high risk antepartum, intrapartum, or postpartum complications.

### Level I Facility Capabilities plus:

- ✓ Computed tomography scan, non-obstetric magnetic resonance imaging, and echocardiography equipment and staff with interpretation readily available daily (at all times not required).
- ✓ Standard obstetric ultrasonographic imaging with interpretation readily available at all times.

### Level I Facility Healthcare Providers plus:<sup>3</sup>

- ✓ Continuous availability of adequate numbers of RNs with competence in Level II care criteria and ability to stabilize and transfer high-risk women and newborns who exceed Level II care criteria.
- ✓ Nursing leadership and staff have formal training and experience in the provision of perinatal nursing care and should coordinate with respective neonatal care services.
- ✓ OB/GYN readily available at all times or based on available resources and facility determination of most appropriate staffing, it may be acceptable for a family physician with obstetric training or equivalent training and skills in obstetrics and with surgical skills and privileges to perform cesarean delivery.
- ✓ Physician Obstetric leadership is a board-certified OB/GYN with experience in obstetric care or based on available resources and facility determination of most appropriate staffing, it may be acceptable for a family physician with obstetric training or equivalent training and skills in obstetrics and with surgical skills and privileges to perform cesarean delivery.

## Level III

Level II facility plus care of more complex maternal medical conditions, obstetric complications, and fetal conditions

### Level II Facility Capabilities plus:

- ✓ In-house availability of all blood components.
- ✓ Advanced imaging and interpretation services readily available at all times. This includes specialized obstetric ultrasound and fetal assessment, including Doppler studies with interpretation, CT Scan, MRI, Maternal ECHO, non-obstetric ultrasound imaging.
- ✓ Basic interventional radiology (capable of performing uterine artery embolization) readily available at all times.
- ✓ Onsite medical and surgical ICUs that accept pregnant and postpartum people and have critical care providers physically present at all times. An MFM is readily available at all times to communicate by phone or telemedicine or consult on obstetric patients in the ICU.
- ✓ Appropriate equipment and personnel physically present at all time onsite to ventilate and monitor women in labor and delivery until they can be safely transferred to the ICU.
- ✓ Documented process to facilitate and accept maternal transfers/transports.
- ✓ Provide outreach education and patient transfer feedback to Level I and II designated facilities to address maternal care quality issues.
- ✓ Provide perinatal system leadership if acting as a regional center which would include offering a yearly transport and education... (continued on next page)

## Level IV

Level III facility plus on-site medical and surgical care of the most complex maternal conditions and critically ill pregnant women and fetuses throughout antepartum, intrapartum, and postpartum care

### Level III Facility Capabilities plus:<sup>3</sup>

- ✓ On-site medical and surgical care of complex maternal conditions with the availability of ICU beds. This should include fetal monitoring in the ICU, respiratory failure assessment and management with or without ventilator support, procedure for emergency cesarean delivery, coordination of nursing care, and consultative or co-management roles to facilitate collaboration.
  - ✓ On-site ICU care co-managed with MFM.
  - ✓ Perinatal system leadership: facilitate QI, data review, outreach education.
- ### Level III health care providers plus:
- ✓ MFM care team with expertise to manage highly complex, critically ill, or unstable maternal patients MFM readily available at all times including for co-management of ICU obstetric patients.
  - ✓ Nursing Service Line leadership with advanced degree and national certification in management or maternal and child health.
  - ✓ Continuous availability of adequate numbers of RNs who have experience in the care of women with complex medical illnesses and obstetric complications with close collaboration between critical care nurses and obstetric nurses.

# Maternal Levels of Care: Definitions, Capabilities, and Provider Types

Level I Ctd.	Level II Ctd.	Level III Ctd.	Level IV Ctd.
<p>system between participating hospitals, hospital personnel, and transport teams.</p> <ul style="list-style-type: none"> <li>✓ Ability, in collaboration with higher-level facility partners, to initiate and sustain education and quality improvement programs to maximize patient safety.</li> <li>✓ The interprofessional team of each unit should have regular multidisciplinary conferences at which patient care problems are presented and discussed. Ongoing review of policies and procedures, as well as regular emergency drills and simulations, can assist in maintaining readiness for unanticipated emergency events.<sup>2(p.59)</sup></li> </ul> <p><b>Types of Healthcare Providers<sup>3</sup></b></p> <ul style="list-style-type: none"> <li>✓ Every birth attended by at least one qualified birthing professional (midwife, family physician, or OB/GYN) and two appropriately trained and qualified RNs with level-appropriate competencies. One nurse responsible for the mother and one nurse whose sole responsibility is the baby.</li> <li>✓ Physician with privileges to perform emergency cesarean delivery readily available at all times.</li> <li>✓ Nursing leadership has level-appropriate formal training and experience in maternal care.<sup>3(p. e44)</sup></li> <li>✓ Anesthesia services to provide labor analgesia and surgical anesthesia readily available at all times.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Anesthesia services readily available at all times to provide labor analgesia and surgical anesthesia.</li> <li>✓ Active telemedicine program with at least monthly on-site consultation with MFM for patients with high risk conditions defined by the Guidelines for Perinatal Care. MFM readily available at all times for consultation onsite, by phone, or by telemedicine, as needed.</li> <li>✓ Medical and surgical consultants readily available at all times for obstetric patients.</li> <li>✓ For hospitals prepared to care for newborns &gt;32 0/7 weeks gestation and estimated birthweight &gt;1500 grams, OB capabilities include management consistent with ACOG guidelines of selected high-risk pregnancy conditions such as preterm labor or other complications of pregnancy judged unlikely to deliver before 32 weeks gestation and managed with consultation with MFM prior to 34 weeks.</li> </ul>	<p>conference to referral sites, support for QI projects, and review of perinatal data.</p> <p><b>Level II Healthcare Providers plus:</b></p> <ul style="list-style-type: none"> <li>✓ Nursing leaders and adequate number of RNs who have special training and experience in the management of women with complex and critical maternal illnesses and obstetric complications.</li> <li>✓ Board certified OB/GYN physically present onsite at all times.</li> <li>✓ MFM with inpatient privileges readily available at all times, either onsite, by phone, or by telemedicine. Timing of need to be onsite is directed by urgency of clinical situation. MFM must be available to be onsite to provide direct care within 24 hours when requested.</li> <li>✓ Director of MFM service is a board-certified MFM.</li> <li>✓ Director of obstetric service is a board-certified Ob-Gyn or MFM.</li> <li>✓ Board-certified anesthesiologist physically present at all times.</li> <li>✓ Director of obstetric anesthesia services is a Board-certified anesthesiologist with obstetric fellowship training or experience in obstetric anesthesia.</li> <li>✓ Full complement of subspecialists, such as subspecialists in critical care, general surgery, infectious disease, hematology, cardiology, nephrology, neurology, gastroenterology, internal medicine, behavioral health, and neonatology, readily available for inpatient consultation at times.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Board certified anesthesiologist with OB fellowship training or experience in obstetric anesthesia to serve as director of obstetric anesthesia (not present at all times).</li> <li>✓ Board-certified anesthesiologist with obstetric anesthesia fellowship training or experience in obstetric anesthesia physically present at all times.</li> <li>✓ At least one of the following adult subspecialists readily available at all times for consultation and treatment as needed onsite: neurosurgery, cardiac surgery, or transplant. If the facility does not have all three subspecialties available, there should be a process in place to transfer women to a facility that can provide the needed service.</li> </ul>

# Neonatal Levels of Care: Definitions, Capabilities, and Provider Types<sup>1</sup>

Level of Care	Capabilities	Provider Types
<p><b>Level I</b> <b>Well Newborn Nursery</b></p>	<ul style="list-style-type: none"> <li>✓ Provide neonatal resuscitation at every delivery</li> <li>✓ Evaluate and provide postnatal care to stable term newborn infants</li> <li>✓ Stabilize and provide care for infants born greater than 35 wk. gestation who remain physiologically stable; may accept back transfers of physiologically stable infants</li> <li>✓ Stabilize newborn infants who are ill and those born at &lt;35 wk. gestation until transfer to a higher level of care</li> <li>✓ Provide continuous positive airway pressure for &lt; 4 hours with an in-house/onsite provider and respiratory therapist who are continuously available, as transition from delivery room for cases with mild respiratory distress in term infants, and consider discussion with referral center if infant requires CPAP past 2 hours</li> </ul>	<ul style="list-style-type: none"> <li>✓ Pediatricians</li> <li>✓ Family physicians</li> <li>✓ Advanced Practice Providers as appropriate</li> <li>✓ Other advanced practice registered nurses</li> </ul>
<p><b>Level II</b> <b>Special Care Nursery</b></p>	<p><b>Level I Capabilities plus:</b></p> <ul style="list-style-type: none"> <li>✓ Provide care for infants born ≥32 wk. gestation and weighing ≥1500 g with physiologic immaturity or who are moderately ill with problems that are expected to resolve rapidly and are not anticipated to need subspecialty services on an urgent basis. If the hospital nursery has no contractual oversight from neonatology, timely consultation should be obtained for infants born &lt;34 weeks and/or less than 1800g.</li> <li>✓ Provide care for physiologically unstable infants convalescing after intensive care (available to care for back transfers from Level III and Level IV hospitals)</li> <li>✓ Provide continuous positive airway pressure (&lt;24hrs) with an in-house provider and respiratory therapist who are continuously available<sup>2(p.30)</sup> Consider discussion with referral center if infant on CPAP&gt;16 hours.</li> <li>✓ Stabilize infants born before 32 weeks until transfer to a neonatal intensive care facility</li> </ul>	<p><b>Level I Providers plus:</b></p> <ul style="list-style-type: none"> <li>✓ Pediatric hospitalists</li> <li>✓ Neonatologist</li> <li>✓ Advanced Practice Providers as appropriate</li> </ul>
<p><b>Level III</b> <b>NICU</b></p>	<p><b>Level II Capabilities plus:<sup>6</sup></b></p> <ul style="list-style-type: none"> <li>✓ Provide sustained life support</li> <li>✓ Provide comprehensive care for infants born &lt;32 wks. gestation and weighing &lt;1500 g and infants born at all gestational ages and birth weights with critical illness.</li> <li>✓ Provide prompt and readily available access to a full range of pediatric medical subspecialists, pediatric surgical specialists, pediatric anesthesiologists, and pediatric ophthalmologists</li> <li>✓ Provide a full range of respiratory support that may include conventional and/or high- frequency ventilation and inhaled nitric oxide</li> <li>✓ Perform advanced imaging, with interpretation on an urgent basis, including computed tomography, MRI, and echocardiography</li> </ul>	<p><b>Level II Providers plus:</b></p> <ul style="list-style-type: none"> <li>✓ Pediatric medical subspecialists</li> <li>✓ Pediatric anesthesiologists</li> <li>✓ Pediatric surgeons</li> <li>✓ Pediatric ophthalmologists with appropriate qualifications</li> </ul>
<p><b>Level IV</b> <b>Regional NICU</b></p>	<p><b>Level III Capabilities plus:</b></p> <ul style="list-style-type: none"> <li>✓ Located within an institution with the capability to provide surgical repair of complex congenital or acquired conditions</li> <li>✓ Maintain a full range of pediatric medical subspecialists, pediatric surgical subspecialists, and pediatric anesthesiologists at the site</li> <li>✓ Facilitate transport and provide outreach education</li> </ul>	<p><b>Level III Providers plus</b></p> <ul style="list-style-type: none"> <li>✓ Pediatric surgical subspecialists</li> </ul>

# Neonatal Levels of Care: Additional Information on Services and Capabilities

## Level I

### Services and Capabilities of all Level I:

- ✓ Newborn resuscitation per AAP/AHA Guidelines including advanced airway management and vascular access for medications and volume
- ✓ Stabilize sick newborns pending arrival of transport team
- ✓ Breastfeeding support per AAP and WHO guidelines<sup>7</sup>
- ✓ Controlled thermal environment
- ✓ Neonatal cardiorespiratory monitor for use during resuscitation, stabilization, assessment, or observation prior to transport
- ✓ Neonatal pulse oximeter
- ✓ Oxygen blender
- ✓ Ability for blood glucose screening
- ✓ Gavage feeding
- ✓ Device and appropriate-size cuffs for assessing blood pressure
- ✓ Hood oxygen/nasal cannula
- ✓ Peripheral IV insertion for fluids, glucose, and antibiotics prior to transport
- ✓ Treatment of hyperbilirubinemia with irradiation measurement and treatment equipment<sup>8</sup>
- ✓ Device to measure blood gas in <0.4 mL blood

### Perform all required newborn screenings

## Level II

### Services and Capabilities of Level I plus:

Services are limited for newborns whose problems are expected to resolve rapidly and without need for CPAP >24 hours, assisted ventilation, or arterial/central venous catheter:

- ✓ Space designated for care of sick/convalescing neonates
- ✓ Cardiorespiratory monitor for continuous observation
- ✓ Peripheral IV insertion, maintenance and monitoring for fluids, glucose, antibiotics
- ✓ Neonatal blood gas monitoring
- ✓ Average daily census of at least one to three Level II patients
- ✓ Relationship with regional neonatal center for routine and urgent consultation and medical direction advice by phone or videoconference, and regular transport and education conferences
- ✓ High flow nasal cannula
- ✓ Nasal CPAP

## Level III

### Services and Capabilities of Level II plus:

- ✓ Umbilical or peripheral arterial catheter insertion, maintenance, and monitoring
- ✓ Peripheral or central administration and monitoring of total parenteral nutrition and/or medication and fluids
- ✓ Conventional mechanical ventilation
- ✓ Cranial ultrasound
- ✓ Pediatric echocardiography with written protocols for pediatric cardiology interpretation and consultation<sup>9</sup>
- ✓ High-risk NICU follow-up program
- ✓ Quality improvement program with comparisons to national benchmarks for Level III NICUs, e.g., VON
- ✓ Complete range of genetic diagnostic services and genetic counselor available, referral arrangement for geneticist and diagnostics per written protocol
- ✓ Arrangement for perinatal pathology services
- ✓ Average daily census of at least 10 Level II/Level III patients
- ✓ Provide outreach education and patient transfer feedback to Level I and II designated facilities to address neonatal care quality improvement.
- ✓ If services include high-frequency ventilation or inhaled nitric oxide, add NICU respiratory care practitioners continuously available in the NICU during use.
- ✓ If services include major surgical procedure add:<sup>10</sup>
  - 24/7 pediatric surgeons
  - 24/7 pediatric anesthesiologists
  - 24/7 pediatric diagnostic and interventional radiology
  - NICU nurses trained to care for post-op infants

## Level IV

### Services and Capabilities of Level III plus:

- ✓ Full spectrum (all possible) of medical and surgical pediatric subspecialists available 24/7
- ✓ Multi-disciplinary teams for management of complex patients, including those with meningomyelocele, hydrocephalus, urogenital anomalies, orthopedic problems, chronic lung disease, congenital diaphragmatic hernia, congenital heart disease, etc.
- ✓ Therapeutic hypothermia program for hypoxic-ischemic encephalopathy, including aEEG, cEEG, pediatric neurologist, and pediatric neuroradiologist
- ✓ Ability to perform surgical repair of complex congenital or acquired conditions
- ✓ Neuro-developmental follow-up program
- ✓ Quality improvement program with comparisons to national benchmarks for Level IV NICUs (Children's Hospital Neonatal Consortium (CHNC) and/or Vermont Oxford Network (VON))
- ✓ Training and educational relationship with referring hospitals
- ✓ Facilitate transport and provide outreach education
- ✓ Have a process for transport program evaluation which could include written feedback after a transport, verbal feedback after a case review or transport conference<sup>2(p. 129)</sup>

# Newborn and Maternity Medical Director

## Level I

**Obstetrics:** Board-certified in OB/GYN or family medicine

**Nursery:** Board-certified in pediatrics or family medicine

If the medical director is a family medicine physician, he or she may direct both services.

## Level II

**Obstetrics:** Board-certified in OB/GYN

**Nursery:** Board-certified in pediatrics

**If caring for 32–34 week infants:**

**Obstetrics:** Board-certified in OB/GYN  
This includes a relationship with MFM that involves ongoing medical management of patients.

**Nursery:** Board-certified in neonatology or board certified pediatrician or pediatric hospitalist who has oversight from a neonatologist<sup>2(p.30-31)</sup> This includes a contractual relationship with a neonatologist or with neonatology that involves ongoing medical management of patients.

## Level III

**Obstetric Service (if provided):** Board-certified in MFM or OB/Gyn

**MFM Service:** Board-certified in MFM

**Nursery:** Board-certified in neonatology

## Level IV

# Transport and Quality Improvement

## Level 1

## Level II

## Level III

## Level IV

All hospitals demonstrate capabilities to stabilize and initiate transport of patients in the event of unanticipated maternal-fetal-newborn problems that require care outside the scope of the designated level of care. Access to return transport services may be a necessary capability for Level III and Level IV intensive care nurseries. All birth hospitals are expected to participate in Quality Improvement activities.

**Decision to Transfer:** “Of note, the decision to transfer a patient is not only based on guidelines but also dependent on the health care provider’s judgement of the severity of illness, balancing the need for a higher level of care with the risks associated with moving the mother/baby dyad out of her community.”<sup>3(p. e48)</sup> “Some conditions present across a range of severity and, depending on the severity, geography, and available resources, it may be appropriate to care for some patients at a level different from what is listed.”<sup>3(p. e49)</sup> Health care teams should include the patient and family in the discussion and decision making based on that and the patient’s condition.

### Transport patients:

- ✓ Who are anticipated to deliver a neonate of earlier gestational age than appropriate for the facility’s designated level of care, but should not transport if the fetus or mother is medically unstable or delivery is imminent
- ✓ Whose illness or complexity requires services with a higher level of care than provided at the admitting facility. For neonatal transport, refer to AAP reference titled, “Guidelines for Air and Ground Transport of Neonatal and Pediatric Patients”<sup>11</sup>

### A hospital that transports patients to a higher level of care facility should:

- ✓ Demonstrate on-going relationships with referral hospital(s) for education, immediate consultation, urgent transport facilitation, and quality assurance
- ✓ Establish a written policy and procedure for maternal and neonatal transport that includes an established triage system for identifying patients at risk who should be transferred to a facility that provides the appropriate level of care
- ✓ Establish guidelines that ensure a provider’s continuing responsibility for and care of the patient until transport team personnel or receiving hospital personnel assume full responsibility for the patient
- ✓ Ensure that pending laboratory or radiology or other studies are communicated and results shared in a timely manner when those are available.
- ✓ Participate in at least an annual review for Level 1 hospitals and biannual review for Level II hospitals of its perinatal data and transport cases with Level III or IV hospital. Schedule more frequent case and transport reviews depending on volume of deliveries and transfers and as requested based on severity of individual case.

### A Level III or IV hospital that accepts maternal or neonatal transports in order to provide a higher level of care than is offered at the referral hospital, should:

- ✓ Participate in perinatal and/or neonatal case reviews with the referring hospital at least annually for Level I hospitals and biannually for Level II hospitals. Provide feedback on case reviews as requested by the referring hospital.
- ✓ Maintain a 24 hrs./day, 7 days/week system for reliable, comprehensive communication between hospitals for immediate consultation, initiation, and approval of maternal and newborn transports
- ✓ Provide referring physicians with ongoing communication and recommendations for ongoing patient care at discharge
- ✓ Have written processes in place with Level I and II hospitals for return/back transport to make acute care beds accessible and for discharge planning closer to patient’s community.

### Quality Improvement for all Levels of Care

- ✓ Participate in perinatal quality improvement efforts
- ✓ Have a safe sleep program in place and maintain at least Bronze Certification for Cribs for Kids.
- ✓ The interprofessional health care team should have regular multidisciplinary conferences at which patient care problems are presented and discussed at least quarterly. Ongoing review of policies and procedures, as well as regular emergency drills and simulations, can assist in maintaining readiness for unanticipated emergency events.<sup>2(p.59)</sup>

# Healthcare Providers

## Level I

- ✓ Physician or credentialed obstetrical provider in-house, immediately available in late stage labor or when fetal or maternal complications are imminent or apparent
- ✓ Every delivery is attended by at least one person whose sole responsibility is the baby, whose Neonatal Resuscitation Program (NRP) provider status is current, and who is capable of initiating newborn resuscitation<sup>12</sup>
- ✓ Another person is in-house and immediately available whose NRP provider status is current and who is capable of performing or assisting with chest compressions, intubation, and administering medications<sup>3</sup>
- ✓ Anesthesiologist or nurse anesthetist available to initiate cesarean section within 30 minutes of decision to do so
- ✓ If providing HFNC or CPAP for less than 4 hours or awaiting transfer: Continuous in-house availability of personnel experienced in airway management and the diagnosis and treatment of pneumothorax when a patient is being treated with high flow nasal cannula or nasal CPAP
- ✓ Consultation arrangement with genetic counselor per written guideline

## Level II

### Level I Coverage plus:

- ✓ Every **high-risk** delivery is attended by at least two people<sup>12</sup> one of whom is a pediatrician, family medicine physician, or advanced practice provider capable of a complete resuscitation, including chest compressions, advanced airway management and administering medications
- If providing HFNC or CPAP:**
- ✓ Continuous in-house availability of personnel experienced in airway management and the diagnosis and treatment of pneumothorax when a patient is being treated with high flow nasal cannula or nasal CPAP
  - ✓ Radiologist on-staff with daily availability who can interpret neonatal studies such as chest and abdominal radiographs, and cranial ultrasounds
  - ✓ Ophthalmologist with pediatric experience available to do eye exams for neonates who are at high risk for retinopathy of prematurity (ROP) if accepting back transport of such infants; written protocol for referral or treatment
  - ✓ Arrangement for neurodevelopmental follow-up or referral per written guideline

## Level III

### Level II Coverage plus:

- ✓ **Obstetrics:** Immediate availability of an obstetrician with demonstrated competence in the management of complicated labor and delivery patients
- ✓ **MFM:** Available by phone or telemedicine
- ✓ **Newborn:** Immediate availability of neonatologist or Neonatal Advanced Practice Provider (APP) with demonstrated competence in the management of severely ill neonates, including those requiring mechanical ventilation
- ✓ Obstetrical anesthesiologist or nurse anesthetist immediately available

### If services include major surgical procedure, add:

- ✓ Pediatric surgeon available within 30 minutes of request 24/7
- ✓ Pediatric anesthesiologist, with at least 10 infant cases per year, available within 60 minutes of request 24/7

## Level IV

### Same as Level III Staff plus:

- ✓ On site neonatology at all times
- ✓ Full spectrum of medical and surgical pediatric subspecialists available 24/7
- ✓ Board certified anesthesiologist with OB fellowship training or experience with pregnant patients physically present at all times
- ✓ Adult subspecialists available to be on site

# Healthcare Providers

## Nurse: Patient Ratio

Staffing parameters<sup>13</sup> should be clearly delineated in guidance that reflects staff mix and skill levels; patient census, intensity, and acuity; and plans for delegation of selected, clearly defined tasks to competent assistive personnel.

It is an expectation that allocation of personnel provides for safe care of all patients in a setting where census and acuity are dynamic.<sup>14</sup>

### Maternity<sup>2(p.49-52)</sup>

#### Antepartum

- ✓ 1 to 2–3 pregnant people during non-stress testing, after initial assessment and stable, pregnant people receiving pharmacologic treatment for cervical ripening
- ✓ 1 to 1 pregnant person presenting for initial obstetric triage within 10-20 min, pregnancy complications and unstable, Pregnant Person receiving Magnesium Sulfate for first hour

#### Intrapartum

- ✓ 1 to 1 pregnant person with medical complications, VBAC, receiving medications such as oxytocin, Magnesium, initiation of regional anesthesia, active pushing phase of labor, fetal monitoring via auscultation
- ✓ 1 to 2 Pregnant people in labor without complications
- ✓ 2 to 1 Birth; one nurse responsible for the mother and one nurse whose sole responsibility is the baby

#### Postpartum and Newborn Care

##### Immediate Postpartum

- ✓ 1 to 1 Continuous bedside nursing attendance to a Pregnant person in the immediate postoperative recovery period (for at least 2 hours)
- ✓ 1 to 3 Mother–baby couplets after the first 2-hour recovery period (with consideration for assignments with mixed acuity rather than all recent post cesarean cases)
- ✓ 1 to 2 Pregnant people on the immediate postoperative day who are recovering from cesarean birth as part of the nurse-to-patient ratio of one nurse to three mother–baby couplets

##### 2 hours or more Postpartum/Ongoing Postpartum Care

- ✓ 1 to 5–6 Pregnant people postpartum without complications or patients who are stable with pre-existing conditions and no complications
- ✓ 1 to 3 Pregnant people postpartum with complications who are stable
- ✓ 1 to 5–6 Healthy newborns in the nursery requiring only routine care whose mothers cannot or do not desire to keep their baby in the postpartum room
- ✓ 1 At least one nurse physically present at all times in each occupied basic care nursery when babies are physically present in the nursery and during circumcision

### Newborns

- ✓ 1:6 to 8 neonates requiring only routine care\*
- ✓ 1:4 recently born neonates and those requiring close observation
- ✓ 1:3 to 4 neonates requiring continuing care
- ✓ 1:2 to 3 neonates requiring intermediate care
- ✓ 1:1 to 2 neonates requiring intensive care
- ✓ 1:1 for unstable neonates requiring multisystem support
- ✓ 1:1 or greater for unstable neonates requiring complex critical care
- ✓ At least one nurse available at all times with skills to care for newborns who may develop complications or need resuscitation

\* Reflects traditional newborn nursery care. A nurse should be available at all times, but only one may be necessary, as most healthy neonates will not be physically present in the nursery. Direct care of neonates in the nursery may be provided by ancillary personnel under the nurse's direct supervision. Additional staff is needed to respond to acute and emergency situations. The use of assistive personnel is not considered in the nurse: patient ratios noted here.

# Nursing Management

Level I	Level II	Level III	Level IV
<p>Nurse manager of perinatal and nursery services:*</p> <ul style="list-style-type: none"> <li>✓ Maintains RN licensure</li> <li>✓ Bachelor's degree desirable</li> <li>✓ Directs perinatal and/or nursery services</li> <li>✓ Guides perinatal and/or nursery policies and procedures</li> <li>✓ Collaborates with medical staff</li> <li>✓ Consults with higher level of care units as necessary</li> </ul>			
	<ul style="list-style-type: none"> <li>✓ Advanced degree or equivalent experience is desirable</li> </ul>		<ul style="list-style-type: none"> <li>✓ Progressive experience in leadership related to the care of the maternal/child dyad</li> </ul>

\*One RN may manage both services, but additional managers may be necessary based on number of births, average daily census, or number of full-time equivalents (FTEs).

# Pharmacy, Nutrition/Lactation, and OT/PT

Level I	Level II	Level III	Level IV
<p><b>Pharmacy Services</b></p> <ul style="list-style-type: none"> <li>✓ Registered pharmacist immediately available for telephone consultation, 24 hrs./day and 7 days/wk.</li> <li>✓ Provision for 24 hr./day and 7 days/wk. access to emergency drugs</li> </ul>			
	<ul style="list-style-type: none"> <li>✓ Registered pharmacist available 24 hrs./day and 7 days/wk.</li> </ul>		<p><b>Level II Services Plus:</b></p> <ul style="list-style-type: none"> <li>✓ Registered pharmacist with experience in neonatal/perinatal pharmacology available 24 hrs./day, and 7 days/wk., esp. when ordering</li> </ul>
<p><b>Nutrition/Lactation</b></p> <ul style="list-style-type: none"> <li>✓ Dietary and lactation services and consultation available<sup>13</sup></li> </ul>			
	<p><b>One healthcare professional who is knowledgeable in:</b></p> <ul style="list-style-type: none"> <li>✓ Management of special maternal and neonatal dietary needs</li> <li>✓ Lactation services and consultation available</li> <li>✓ Diabetic educator for inpatient and outpatient OB services</li> <li>✓ Staff Lactation consultant approx. 1.9 FTE per 1000 live births</li> </ul>		<p><b>Level II Services Plus:</b></p> <ul style="list-style-type: none"> <li>✓ At least one registered dietitian who has special training in neonatal/perinatal nutrition and can plan diets that meet the special needs of high-risk mothers and neonates, and oversee TPN orders</li> <li>✓ Lactation consultant support dedicated to NICU</li> </ul>
<p><b>OT/PT Services</b></p> <ul style="list-style-type: none"> <li>✓ Provide for inpatient consultation and outpatient follow-up services</li> </ul>			
			<ul style="list-style-type: none"> <li>✓ OT/PT/Speech therapist dedicated support in NICU with specialized training</li> </ul>

# Social Services/Case Management, Respiratory Therapy, Nurse Educator/Neonatal Advanced Practice Provider

## Level I

## Level II

## Level III

## Level IV

### Social Services/Case Management

- ✓ Mechanism available for high-risk assessment and provision of social services

#### **Level I Services plus:**

- ✓ Personnel with relevant experience whose responsibilities include perinatal patients, specific personnel for discharge planning and education, community follow-up, referral process, and home care arrangements

#### **If caring for 32–33-week infants:**

- ✓ At least one MSW with relevant experience

#### **Level II Services plus:**

- ✓ At least one FTE licensed MSW for every 20 NICU patients in delivery hospital<sup>14</sup> and for every 15 NICU patients in children's hospital<sup>14</sup> who has experience with socioeconomic and psychosocial problems of high-risk mothers and babies, available 24 hrs./day and 7 days/wk.

### Nurse Educator/Clinical Nurse Specialist/Clinical Nurse Leader

- ✓ Phone/Telehealth/email consultation/education provided by nurse educator/CNS located at regional Level III or IV NICU
- ✓ Staff education on maternal or newborn stabilization prior to transport, provided to all staff caring for newborns via Telehealth Computer technology or onsite

- ✓ A nurse educator with appropriate training in special care nursery or perinatal care to coordinate staff education and development
- ✓ If caring for full spectrum of Level II patients, an RN with an advanced degree with appropriate training in high risk neonatal care (clinical nurse specialist with graduate education is recommended) for staff development and to effect system-wide changes to improve programs of care

- ✓ An RN with an advanced degree/graduate education (Masters level or higher) with appropriate training in high risk neonatal care and/or Clinical Nurse Leader for staff development and to effect system-wide changes to improve programs of care
- ✓ An RN with an advanced degree/graduate education (Masters level or higher) with appropriate training in maternity care and/or Clinical Nurse Leader for staff development and to effect system-wide changes to improve programs of care

### Respiratory Therapy

- ✓ The role of a Respiratory Care Practitioner is prescribed by the medical director and clearly delineated per written protocol. If attending deliveries or providing neonatal respiratory care will have current NRP Provider status with a minimum of NRP essentials
- ✓ When CPAP in use for less than 4 hours or awaiting transport: in-house and immediately available RCP with documented competence and experience in the management of neonates with cardiopulmonary disease

#### **Same as Level I plus:**

- ✓ When CPAP in use: in-house and immediately available RCP with documented competence and experience in the management of neonates with cardiopulmonary disease and experience with CPAP
- ✓ If attending deliveries or providing neonatal respiratory care will have current NRP Advanced Provider status

#### **Level II plus:**

- ✓ One Respiratory Care Practitioner readily available for ventilated neonates with additional staff for procedures
- ✓ RCP skilled in neonatal airway management immediately available for every high-risk delivery

## X-Ray/Ultrasound

Level I	Level II	Level III	Level IV
<ul style="list-style-type: none"> <li>✓ Portable x-ray and ultrasound equipment available to Labor and Delivery and Nursery within 30 minutes</li> <li>✓ Performance and interpretation of neonatal x-rays and perinatal ultrasound available 24 hrs./day and 7 days/wk.</li> <li>✓ Antepartum surveillance techniques available</li> </ul>	<p><b>Level I Services plus:</b></p> <ul style="list-style-type: none"> <li>✓ Ultrasound equipment immediately accessible and available to the Labor and Delivery unit 24 hrs./day and 7 days/wk.</li> </ul>	<p><b>Level II Services plus:</b></p> <ul style="list-style-type: none"> <li>✓ Advanced level ultrasound available to Labor and Delivery and Nursery on-site</li> <li>✓ Interventional Radiology available</li> </ul> <p><b>If therapeutic hypothermia offered:</b></p> <ul style="list-style-type: none"> <li>✓ Neonatal MRI with special HIE sequences</li> </ul>	

## Laboratory and Blood Bank Services

Level I	Level II	Level III	Level IV
<p><b><u>Laboratory</u></b></p>			
<ul style="list-style-type: none"> <li>✓ Laboratory technician available 24 hrs./day, and 7 days/wk. present in the hospital or within 30 minutes</li> <li>✓ Capability to report laboratory results in a timely manner</li> </ul>	<p><b>Same as Level I plus:</b></p> <ul style="list-style-type: none"> <li>✓ Lab technician in-house 24 hrs./day and 7 days/wk.</li> <li>✓ Personnel skilled in phlebotomy and IV placement in the newborn immediately available 24 hrs./day and 7 days/wk.</li> <li>✓ Micro technique for hematocrit and blood gases within 15 minutes</li> </ul>	<ul style="list-style-type: none"> <li>✓ Comprehensive services available 24 hrs./day and 7 days/wk.</li> </ul>	
<p><b><u>Blood Bank</u></b></p>			
<ul style="list-style-type: none"> <li>✓ Blood bank technician on-call and available w/in 30 minutes for performance of routine blood banking procedures</li> <li>✓ Provision for emergent availability of blood and blood products</li> </ul>			

## Appendix A: References and Resources

- 1** American Academy of Pediatrics (2012). Levels of Neonatal Care. *Pediatrics* 130(3): 587–97.  
Online at: [www.pediatrics.org/cgi/content/full/130/3/587](http://www.pediatrics.org/cgi/content/full/130/3/587)
- 2** American Academy of Pediatrics and American College of Obstetricians and Gynecologists (2017). Guidelines for Perinatal Care, 8<sup>th</sup> edition Riley LE and Stark AR. (eds.) Elk Grove Village, IL: American Academy of Pediatrics.
- 3** American College of Obstetricians and Gynecologists and Society for Maternal-Fetal Medicine. Obstetric Care Consensus: Levels of Maternal Care. August 2019. 134 (2): E41-E55. Online at: <https://www.acog.org/clinical/clinical-guidance/obstetric-care-consensus/articles/2019/08/levels-of-maternal-care>
- 4** Performance Improvement and Patient Safety (PIPS) Program. Online at: [www.facs.org/~media/files/quality%20programs/csv/pips%20requirements%20level%20i.ashx](http://www.facs.org/~media/files/quality%20programs/csv/pips%20requirements%20level%20i.ashx)
- 5** Optimal Resources for Children’s Surgical Care v.1. Online at: [www.facs.org/quality-programs/childrens-surgery/childrens-surgery-verification](http://www.facs.org/quality-programs/childrens-surgery/childrens-surgery-verification)
- 6** Healthy People 2020. Increase the proportion of very low birth weight (VLBW) infants born at Level III hospitals or subspecialty perinatal centers. United States Dept of Health and Human Services. Online at: [https://www.healthypeople.gov/node/4892/data\\_details](https://www.healthypeople.gov/node/4892/data_details)
- 7** American Academy of Pediatrics Section on Breastfeeding (2012). Breastfeeding and the Use of Human Milk. *Pediatrics* 129 (3): e827–e841.  
Online at: <http://pediatrics.aappublications.org/content/129/3/e827.full.pdf> or UNICEF: Ten Steps to Successful Breastfeeding. Online at: [www.unicef.org/newsline/tensteps.htm](http://www.unicef.org/newsline/tensteps.htm)
- 8** Aziz K, Lee HC, Escobedo MB, et al. Part 5: Neonatal Resuscitation 2020 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Pediatrics*. 2020; doi: 10.1542/peds.2020-038505E
- 9** Technical report AAP: Phototherapy to prevent severe neonatal hyperbilirubinemia in the newborn infant 35 or more weeks of gestation (2011). *Pediatrics* 128(5): e1046
- 10** Bricker, J.T., Fraser, C.D., Fyfe, D.A., Mahoney L.T., Colegrove, L. (2002). American Academy of Pediatrics Section on Cardiology and Cardiac Surgery Guidelines for Pediatric Cardiovascular Centers. *Pediatrics* 109 (3): 544–549
- 11** American Academy of Pediatrics (2016). “Guidelines for Air and Ground Transport of neonatal and Pediatric Patients” 4th edition.
- 12** American Academy of Pediatrics and American Heart Association (2021). Textbook of Neonatal Resuscitation, 8th edition. Weiner, G & Zaichkin, J, editors. Itasca, IL: American Academy of Pediatrics, 2021.
- 13** Association of Women’s Health, Obstetric and Neonatal nurses (2010). Guidelines for Professional Registered Nurse Staffing for Perinatal Units.
- 14** Society for Social Work Leadership in Health Care Standards for Social Work Care and Staffing in Children’s Hospitals.  
Online at: [www.aposw.org/docs/SSWPedsStandards.pdf](http://www.aposw.org/docs/SSWPedsStandards.pdf)
- 15** National Association of Perinatal Social Workers—Standards for Social Work Services in the NICU.  
Online at: [www.napsw.org/assets/docs/NICU-standards.pdf](http://www.napsw.org/assets/docs/NICU-standards.pdf)

## Appendix B: Subcommittee for Perinatal Level of Care (LOC) 2021 Guidelines Document

Adapted with permission from Bat-Sheva Stein, RN, MSN (LOC Subcommittee coordinator)

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## Notice of Maternity and/or Newborn Care Changes

**Purpose statement:** The purpose of this policy is to ensure the Department of Health and Human Services (DHHS), surrounding hospitals, local EMS, fire and law enforcement services and registered patients are notified when a Maine birthing hospital either temporarily or permanently changes the maternity and newborn services they offer.

**Policy background:** In 2020-21, DHHS underwent the process of assessing the maternity and newborn Levels of Care (LOC) with each hospital in the State of Maine. The hospitals offering labor and delivery services and newborn care provided information to DHHS, which outlined their resources and capacity to provide care, and a joint determination between DHHS and the hospitals was done to determine the appropriate LOC (1, 2, 3, or 4) for each service. The LOC are publicly posted on the Maine CDC website.

There are times when a hospital may need to suspend or close the labor and delivery department or change the LOC they are providing. The Department requests an opportunity to review capacity and resources with the licensee as the LOC is a joint determination. This information will be used by surrounding communities to identify the closest hospital that offers the appropriate LOC needed by pregnant people and/or newborn at any given time.

### **Temporary or Permanent Termination of Maternity and/or Newborn Care**

Hospitals should provide notice of temporary closure at least 30 days prior to the effective date, and 120 days prior to the effective date, for a permanent termination of service. In cases when such notice cannot be done, the hospital should provide notice soon as reasonably practical for a temporary termination of service, by sending a Change in Service Notification to the Maine Department of Health and Human Services Division of Licensing and Certification (DLC) State House Station #11 41 Anthony Avenue Augusta, ME 04333. DLC will share the notice of closure information received with the DHHS Child Health Officer and the Maine CDC Maternal and Child Health Program Director. The notice should include:

- Hospital Name;
- Contact Person with Name, Title, Email, and Phone Number;
- Date/Time of change;
- Statement noting whether the notice is for Temporary or Permanent Termination of Service and the Reason for Termination;
- A list and description of notifications sent to:
  - Surrounding hospitals within 50 miles and Level 2/3/4 Newborn Nurseries
  - All local EMS, fire, and law enforcement services
  - All registered patients that are affected by the change
- How the hospital provided public notification;
- Plan for emergency care; and

- The hospital’s plan for policy and procedure development and review around maternity emergencies for the hospital and local EMS agencies, including a plan for training Emergency Department and Family Practice staff on emergency obstetric care that incorporates teaching with didactic and simulation, if one exists. It is recommended that each hospital adopts one, however, if your hospital does not have one, please state that in the notification letter.

**Change in Level of Care for Maternity and Newborn Services (Level 1, 2, 3, or 4)**

Provide notice of at least 30 days and within 120 days notice for a proposed change in LOC to the Maine CDC Maternal and Child Health Program Director who will notify the DHHS Chief Child Health Officer. The notice should include:

- Hospital Name;
- Contact Person with Name, Title, Email, and Phone Number;
- Date/Time of proposed change; and
- An outline for the proposed change in LOC and reasons for change.

The Maine CDC Maternal and Child Health Program Director will schedule a virtual or on-site meeting with the hospital to review the proposed change in LOC. The meeting will include the Maine CDC Maternal and Child Health Program Director, a Neonatologist, a Maternal-Fetal Medicine provider, the Maine CDC Perinatal Nurse Outreach Educator, the DHHS Chief Child Health Officer, and representatives from the hospital who should include the Medical and Nursing Directors of the Newborn Nursery and Maternity Service, Respiratory Therapy, and the Quality Assurance Office. The Maine CDC may ask the hospital to complete the Federal CDC LOCATE tool to assess the proposed LOC, if this tool was not completed within the last two years.

After meeting with the hospital and the Maine CDC to discuss the LOC designation and agreement is reached on the level of care, the hospital should send notifications to:

- Surrounding hospitals within 50 miles and Level 2/3/4 Newborn Nurseries
- All local EMS, fire, and law enforcement services
- All registered patients that are affected by the change
- Public notification to include ensuring notice is posted on hospital website

Additionally, the Maine CDC will update the map of Birthing Hospitals with Levels of Care that is publicly posted on their website and this document with the new Levels of Care. The Maine CDC will notify the EMS-Children (EMS-C) coordinator at Maine EMS of the changes so they can share the updated information with EMS organizations. The Maine CDC Perinatal Nurse Outreach Educator will notify the Perinatal Nurse Leadership Group with this updated document.

DocuSigned by:  
*Maryann Harakall*  
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**Maryann Harakall, MPPM**  
**MCH Program Director**

DocuSigned by:  
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**Jamie Cotnoir**  
**Associate Director, Division of Disease Prevention**

Policy Effective Date 2-1-2022

## Appendix E: Continuum of Care Workgroup Information on Home Births

**Continuum of Care Workgroup:** The Maine CDC convened a multi-disciplinary workgroup to focus on high-quality obstetric and newborn care to assure that home birth families are provided full spectrum care in appropriate settings. Building on best practices, the group worked to enhance the choice, access, experience and safety of pregnant women and newborns. The Continuum of Care Collaborative developed a communication tool for the transfer of care that has a potential impact for any transfer of care (home to hospital or community hospital to tertiary care center). Resources are available on the [Perinatal Health; Resources - Division of Disease Prevention - Maine CDC: DHHS Maine](#)

- [Transport Guidelines](#)
- [Transport Guidelines Appendices A&B](#)
- [Transport Guidelines Appendices C&D](#)
- [Transport Guidelines Appendices E](#)
- [Transport Guidelines Evaluation Tool](#)
- [Transport Guidelines Family Evaluation Tool](#)
- [Transport Guide Training](#)

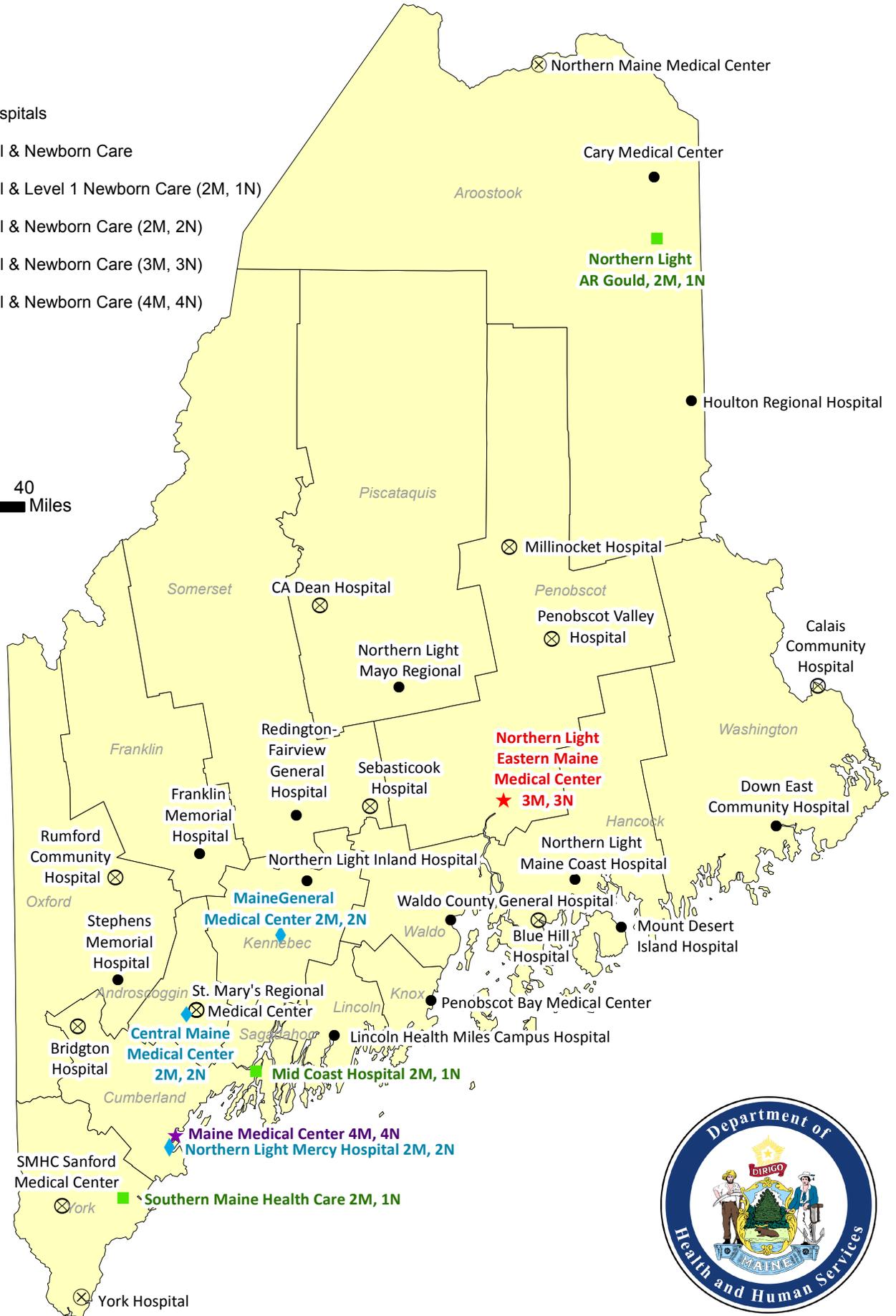
# Maine Hospitals by Level of Maternal & Newborn Care 2023

## Map Legend:

-  Maine Counties
-  Non-Birthing Hospitals
-  Level 1 Maternal & Newborn Care
-  Level 2 Maternal & Level 1 Newborn Care (2M, 1N)
-  Level 2 Maternal & Newborn Care (2M, 2N)
-  Level 3 Maternal & Newborn Care (3M, 3N)
-  Level 4 Maternal & Newborn Care (4M, 4N)



0 5 10 20 30 40  
Miles



Birthing Hospital Name	Map Icon	Newborn Level of Care	Maternal Level of Care	OB Phone Number	Hospital Phone Number
Cary Medical Center	●	1	1	207-498-1179	207-498-3111
Central Maine Medical Center	◆	2	2	207-795-2530	207-795-0111
Down East Community Hospital	●	1	1	207-255-0242	207-255-3356
Franklin Memorial Hospital	●	1	1	207-779-2295	207-778-6031
Houlton Regional Hospital	●	1	1	207-521-2130	207-532-2900
Lincoln Health - Miles Campus	●	1	1	207-563-4536	207-563-1234
Maine General Medical Center - Alford	◆	2	2	207-248-5230	207-626-1000
Maine Medical Center	★	4	4	207-662-2589	207-662-0111
Mid Coast Hospital	■	1	2	207-373-6500	207-373-6000
Mount Desert Island Hospital	●	1	1	207-288-5082 Ext. 1352	207-288-5081
Northern Light AR Gould Hospital	■	1	2	207-768-4330	207-768-4000
Northern Light Eastern Maine Medical Center	★	3	3	207-973-8730	207-973-7000
Northern Light Inland Hospital	●	1	1	207-861-3100	207-861-3000
Northern Light Maine Coast Hospital	●	1	1	207-664-5464	207-664-5311
Northern Light Mayo Hospital	●	1	1	207-564-4293	207-564-8401
Northern Light Mercy Hospital	◆	2	2	207-553-6300	207-879-3000
Penobscot Bay Medical Center	●	1	1	207-301-8343	207-301-8000
Redington-Fairview General Hospital	●	1	1	207-858-2405	207-474-5121
Southern Maine Health Care Medical Center - Biddeford	■	1	2	207-283-7350	207-283-7000
Stephens Memorial Hospital	●	1	1	207-744-6151	207-743-5933
Waldo County General Hospital	●	1	1	207-505-4140	207-338-2500

Phone numbers for consultations/transfers for Level 3 and Level 4 hospitals in Maine

- MMC MFM and Neonatology (One Call): 207-662-6632
- NL-EMMC OB via Northern Light Health Integrated Transfer Center: 973-9000 and NLH EMMC Neonatology: 207-275-1082 (EMMC NICU)

Non-Birthing Hospitals

- Bridgton Hospital
- Calais Community Hospital
- Millinocket Regional Hospital
- Northern Light Blue Hill Hospital
- Northern Light CA Dean Hospital
- Northern Light Seabasticook Valley Hospital
- Northern Maine Medical Center
- Penobscot Valley Hospital
- Rumford Community Hospital
- St. Joseph Healthcare
- St. Mary's Regional Medical Center
- York Hospital

24/7 Free Standing ED only (not a birthing facility)

- Maine General - Thayer
- Southern Maine Health Care Medical Care - Sanford