

MATERNITY CENTER COVID-19 LABOR, DELIVERY & POSTPARTUM MANAGEMENT

		Every Pregnant Woman & Support Person
Pre-Hospital	Anticipatory Guidance - Work	All pregnant women are anticipated to have a hospital admission for delivery. Encourage discontinuation of work/work from home and strict social isolation \geq 2 weeks prior to anticipated delivery (for majority of women this will start at ~37 weeks).
	Anticipatory Guidance - Hgb/Hct	Given concerns for blood availability, optimize maternal Hgb/Hct pre-delivery.
	Scheduled Procedure Pre-Screen	For scheduled procedures (IOL, CD, ECV), phone screen 48-72 hours and send to ambulatory tent for testing 48-72 hours prior. - Consider current health care system burden (may prompt acceleration or delay of procedures).
Hospital Arrival	<p>Screen and Mask</p> <ul style="list-style-type: none"> • Pregnant women • Support person (SP) 	<p>All pregnant women arriving for evaluation to the Maternity Center, regardless of chief complaint, will be given a mask and screened at multiple points which could include E4 Registration desk, and upon meeting receiving nurse.</p> <p>It is our goal for all women to have <u>one</u> support person (\geq 18 y/o) present for labor support. Support persons will be screened and provided a mask. Support persons must be healthy (i.e. screen negative) and can accompany all pregnant persons regardless of the pregnant persons' COVID status.</p> <p>If a support person is screen positive, they cannot come to maternity center excepting conditions outlined in the visitor policy.</p> <p>Consistent with Phase 2 state MDPH guidelines, in addition to the labor support person, pregnant and postpartum women can have 1 additional visitor at any given time. This person will be screened upon entry and needs to be health. A mask must be worn at all times.</p>



MATERNITY CENTER COVID-19 LABOR, DELIVERY & POSTPARTUM MANAGEMENT

	<ul style="list-style-type: none"> - Minimize need for GETA (if needed, most experienced anesthesiologist; other providers exit OR for intubation if able and extubation, no PACU) - Avoid Decadron as antiemetic - Avoid Toradol with mod-severe sx's 	
Oxygen	<p>Avoid aerosolized oxygen; Use as needed for maternal condition FHR Abnormality¹²³⁴</p> <ul style="list-style-type: none"> - normal maternal O2 sat, no oxygen - abnormal maternal O2 sat, oxygen via NC with maternal surgical mask 	
Oral Intake & Fluid Resuscitation	<p>Per UMass guidelines on feeding in labor</p> <p>If non-septic, consider total fluid input (IV & PO; consider run dry) If septic, fluid resuscitate as needed</p>	<p>Per UMass guidelines on feeding in labor</p> <p>Usual approach to fluid management</p>
FHR & Ctx Monitoring	<p>EFM and Toco as usual FSE & IUPC as needed (data limited and evolving)</p>	Usual care
First Stage Labor (usual approach)	<ul style="list-style-type: none"> - Intrapartum abx ppx if GBS+ or risk factors - Upright position recommended as able; walk in delivery room - Peanut ball and birthing balls cannot be recommended and may be a transmission risk - Early amniotomy and oxytocin intervention for ppx and tx of dysfunctional or slow labor recommended - (CD for arrest not performed unless ≥4h with adequate ctx or 6h with inadequate ctxs with ROM, and ≥ 6 cm) 	
Second Stage Labor (Pushing & VD)	<ul style="list-style-type: none"> - Consider aerosolized procedure; wear per PPE/Mask chart - No delayed pushing - Use perineal massage and warm packs to decrease OASIS 	

¹ Raghuraman et al. Effect of Oxygen vs Room Air on Intrauterine Fetal Resuscitation: A Randomized Noninferiority Clinical Trial. JAMA Pediatrics 172 (9), 818, 2018 Sept.

² Boelig RC, Mauck T, Oliver EA, DiVascio D, Saccone G, Bellussi F, Berghella V. Expert Review – Labor and Delivery Guidance for COVID-19

³ Hamel, Anderson, Rouse. Oxygen for intrauterine resuscitation: of unproved benefit and potentially harmful. Am J Obstet Gynecol 2014 Aug;211(2):124-7

⁴ <https://awhonn.org/novel-coronavirus-covid-19/> (AWONN's Update on Oxygen Use for Fetal Resuscitation during the COVID-19 Pandemic, Update March 26, 2020)

MATERNITY CENTER COVID-19 LABOR, DELIVERY & POSTPARTUM MANAGEMENT

		- Minimize # of providers
Third Stage Labor		<ul style="list-style-type: none"> - Standard oxytocin (bolus with slow subsequent continuous infusion) for PPH ppx - (if increased EBL or e/o PPH, be quick to administer other uterotonics and TXA)
CD	<ul style="list-style-type: none"> - OR with portable HEPA filter <ul style="list-style-type: none"> - filter runs after OR case over - subsequently housekeeping goes in for terminal cleaning - Neptune for smoke evacuation (not suction) - Avoid crash & emergent CD AMAP by anticipating needs - Think ahead to OR availability and logistics (call Main OR prn) - Wear N95 as per PPE/Mask chart - Minimize # of providers - Avoid Toradol with mod-severe sxs - Avoid Decadron as antiemetic 	<p>(- If surveillance testing still pending, tx as PUI in OR but can still have labor support person ←)</p> <ul style="list-style-type: none"> - Think ahead to OR availability and logistics (call Main OR prn) - Wear mask as per PPE/Mask chart
Code	CODE WHITE PLUS (Level A fit-tested N95) - try to avoid with anticipation of needs and commit to CD once called; leave N95 and face shield on between room and OR	CODE WHITE
Delayed Cord Clamping⁵⁶	Yes as per usual caveats	Yes as per usual caveats
Skin to Skin	No	Yes per usual caveats
Placenta Disposal	Send for pathologic exam and indicate PUI/COVID+ (handled under biosafety hood with PPE until formalin fixation/viral neutralization)	Usual care

⁵ <https://www.acog.org/clinical-information/physician-faqs/covid-19-faqs-for-ob-gyns-obstetrics> (ACOG COVID-19 FAQs for Obstetrician-Gynecologists, Obstetrics; Is delayed cord clamping still appropriate in a patient who has suspected or confirmed COVID-19?) Accessed March 26, 2020

⁶ ACOG CO 684 Delayed Umbilical Cord Clamping After Birth

MATERNITY CENTER COVID-19 LABOR, DELIVERY & POSTPARTUM MANAGEMENT

	Research	PUI/COVID+ moms will be approached for participation in research with collection of biologic specimens: vag swab at admission, stool sample at delivery, cord blood, placenta tissue among others Contact: Dr. Leftwich – CARES study	NA
Postpartum & Neonate	PP BTL & Immediate PP LARC	<p>- BTL OK at CD; ppBTL after VD subject to anesthesia availability if not COVID+</p> <p>If no sepsis or chorio:</p> <p>- Postplacental IUD placement prn (MassHealth, faculty/resident)</p> <p>- Nexplanon placement prn (MassHealth, faculty/resident)</p>	
	Postpartum Room	Mother in negative pressure LDRP Rms. 66-75	Transfer to usual PP Room
	Neonate Hand-off (Ped/NICU team)	In Pt Room: Team present in room ideally 6 feet away from pt In OR: Hand infant to NICU team in Resuscitation Area outside OR	In Pt Room: Team present in room In OR: whether hand-off in OR or Resuscitation Area outside of OR dependent on CD indication, type of anesthesia and urgency of case
	Newborn Location/Isolation	<ul style="list-style-type: none"> - Newborn is a PUI - For symptomatic mothers, newborn should be transported in isolette into a separate room, as close to mother's room as possible. - No non-medical care in nursery - If appropriate negative pressure infant rooms are unavailable, or if mother is asymptomatic and discussion of risks of transmission are undertaken in a shared decision-making model, co-location with mother is permissible, separated by 6 feet and a physical barrier (curtain, isolette) - testing of neonate as per pediatric protocol 	<ul style="list-style-type: none"> - Usual care - Mother-child room-in - Nurses transport neonate to nursery for care that cannot be performed in the room - No non-medical persons in nursery
	Support Persons (SP)	- Sx SP will be asked to leave if that becomes an issue	Usual care

MATERNITY CENTER COVID-19 LABOR, DELIVERY & POSTPARTUM MANAGEMENT

	<ul style="list-style-type: none"> - Asx SP will be considered PUI regardless of testing status - Asx SP should wear mask and gloves when caring for baby in the crib or isolette (i.e. changing a diaper) - In addition to gloves and mask, SP should wear a disposable gown when holding the newborn (e.g. feeding). Face shields and N95 masks are not necessary. - SP should be taught appropriate hand hygiene and appropriate doffing techniques to remove gowns, gloves and masks. - If newborn located in another room, the Asx SP can travel between rooms as needed for care and support of mother and baby 	
Breastmilk	<ul style="list-style-type: none"> - Milk expressed with mask, gloves, and attention to self and pump hygiene and neonate fed by nurse - Breastfeeding at breast with maternal mask/gloves and appropriate hand hygiene to be considered on a case by case basis depending on illness severity of mother 	Usual care
Newborn vitals	Q30 minutes x 2 hours then q4h	Usual care
Newborn bathing	As soon as possible, in newborn's room	Usual care - 12-24 hours
Newborn meds	Hep B vaccine, vitamin K, erythromycin as per usual	
Newborn Screening	Blood spot at 24 hours; obtain and dry sample in room; place in biohazard bag once dry; CCHD screening at 24 hours; Wash equipment with soap/water or appropriate disinfectant wipes; Hearing screen will be performed in identified COVID nursery by Pediatrix team donning appropriate PPE per protocol. Car seat challenge: can be completed if temporary nursery room is established; otherwise defer with anticipatory guidance re: safe infant travel	Usual care

MATERNITY CENTER COVID-19 LABOR, DELIVERY & POSTPARTUM MANAGEMENT

Newborn SARS-Covid-2 PCR testing	As per pediatric protocols	
Newborn Circumcision	Per parent request in patient room, or designated temporary negative pressure nursery room if multiple infants co-locating	Usual care
Expedite Maternal Discharge	<ul style="list-style-type: none"> - VD – PPDx or PPD1; CD – POD2-3 (if meeting milestones) - Discuss with Peds/NICU to determine timing of infant discharge <ul style="list-style-type: none"> - Home supplies for BP follow-up - If not immediate PP LARC, provide with alternative contraception 	
Newborn Discharge	<p>With healthy caregiver after routine stay of 24-48 hours. Discharge with mother if mother’s symptoms allow her to be discharged. Self-quarantine at home per latest CDC guidelines:</p> <p>https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html</p> <p>Alert PCP to arrange follow up (telehealth, visit with PPE, etc)</p>	Usual care
Outpt Maternal Postpartum Care	<ul style="list-style-type: none"> - Arrange 2 week via telehealth including wound checks (e.g. photo upload or video) - Arrange 6 week via telehealth or in person prn needs (e.g. ppBC) 	