

# Newborn Critical Care Center (NCCC) Clinical Guidelines

## Management of the Infant with Meconium-Stained Amniotic Fluid

A rapid assessment is done following birth, asking the following three questions:

1. Is the baby term?
2. Does the baby have good tone?
3. Is the baby breathing or crying?

If you answer 'yes' to all three, the infant does not need resuscitation and should not be separated from its mother. The baby should be dried, placed skin-to-skin with the mother and covered with dry linen to maintain temperature. Observation of breathing, color and activity should be ongoing.

The following are recommendations regarding attendance to deliveries of infants born through MSAF:

1. The obstetrical team will explain to parents, prior to pediatric team arrival, that meconium-stained amniotic fluid may indicate fetal distress and increases the risk that the infant will require resuscitation after birth. Therefore, a team that includes an individual skilled in tracheal intubation should be present at the time of birth.
2. At the time of delivery, the neonatal team leader will perform rapid assessment to determine if immediate intervention is needed.
3. **Non-vigorous infant born through MSAF:** Move the infant to a radiant warmer and perform initial steps of resuscitation. PPV should be initiated if the infant is not breathing or if the heart rate is less than 100 bpm after the initial steps are completed. **Routine intubation and tracheal suction is not recommended. However, use of a meconium aspirator may still be used to clear the airway of amniotic fluid, vernix, blood, or cellular debris that is interfering with establishing effective ventilation.**
4. **Vigorous infant born through MSAF:** Verbalize to the obstetrician that the infant may be placed skin-to-skin with mother. The labor and delivery RN assumes responsibility for the vigorous infant at birth. Neonatal team will document delivery room attendance, noting that the infant was term, without distress at birth. It is not necessary to document a physical exam, simply document: *"Physical exam was deferred."*
5. If any member of the obstetric team is uncomfortable with the infant's clinical appearance, they may request that the infant be evaluated by the NICU team.

**References:**

1. Aziz K, Lee C, Henry C, Escobedo MB, Hoover AV, Kamath-Rayne, BD, Kapadia V, Magid DJ, Niermyer S, Szyld E, Weiner GM, Wykof MH, Yamada NK, Zaichkin JG. (2021). Part 5: Neonatal resuscitation 2020 American Heart Association (AHA) guidelines update for cardiopulmonary resuscitation and emergency cardiovascular care. *Pediatrics*. 147(supple 1): e2020038505E
2. Chabra S, Sawyer T, Strand M. The "Meconium Aspirator": Still a Useful Tool during Newborn Resuscitation. *Am J Perinatol*. 2019;36(13):1420-1422. doi:10.1055/s-0038-1677477