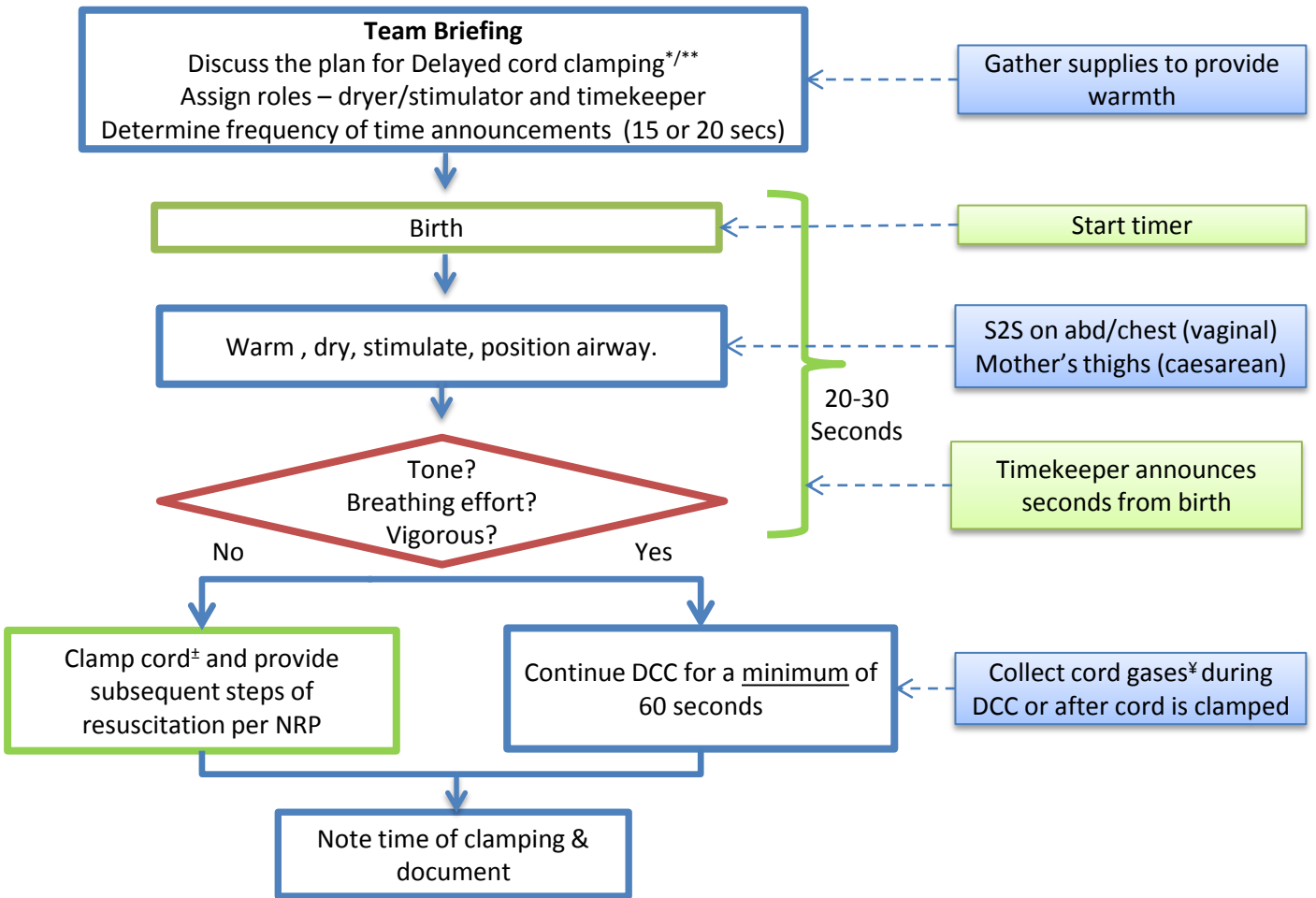


# Delayed Cord Clamping (DCC) - Reference Algorithm

The MRP or resuscitating physician (if present) will determine if DCC is contraindicated



\*DCC is contraindicated with conditions affecting placental circulation. E.G.

- placental abruption
- bleeding placenta previa
- bleeding vasa previa
- cord avulsion

\*\*DCC should be considered on a case-by-case basis with:

- Fetal intrauterine growth restriction (IUGR)
- Abnormal umbilical artery Doppler measurements
- Abnormal placentation
- Other situations affecting utero-placental perfusion or umbilical cord blood flow
- Multiple gestations

‡ **Cord Gases**

- Are recommended for every delivery
- Document time of collection and clamping

± subsequent steps of resuscitation (i.e., ventilation) may be provided with the cord intact if the infrastructure and team composition allow

## Recommendation Highlights

For term and preterm infants, unless contraindicated or the delivering MRP or resuscitating physician (if present) determines cord clamping is indicated immediately:

- Provide initial steps of resuscitation\* while the cord is attached regardless of the mode of delivery. This may also include ventilation should the infrastructure and team composition allow.
- During this time (approximately 20 to 30 seconds) assess the newborn's tone and breathing effort to determine if the infant is vigorous or non-vigorous.
  - **Vigorous** - DCC for at least 60 seconds
  - **Non-vigorous** - after the initial steps of resuscitation\*, consider clamping the cord and provide subsequent steps of resuscitation per the NRP algorithm

\*providing warmth, drying, stimulating and positioning to open airway

## Procedure

<b>Team Briefing</b>	<ul style="list-style-type: none"> <li>• Patient, MRP and resuscitation team establishes plan for DCC; anticipated length of delay based on contraindications, clinical situation, newborn's condition at delivery (i.e., vigorous/non-vigorous) and maternal preference.</li> </ul>
<b>Assign Roles</b>	<ul style="list-style-type: none"> <li>• Dryer/stimulator, timekeeper (confirm intervals to be announced)</li> </ul>
<b>Supplies to facilitate DCC</b>	<ul style="list-style-type: none"> <li>• Sterile hand towels/large lap sponges (in OR)</li> <li>• &lt;32 weeks; polyethylene bag (sterile in OR)</li> </ul> <p>Please refer to <a href="#">clinical protocol: Code Pink</a> for a complete list of supplies required for resuscitation</p>
<b>Time of birth</b>	<ul style="list-style-type: none"> <li>• Start timing; Apgar timer</li> </ul>
<b>Initial steps of resuscitation and positioning</b>	<ul style="list-style-type: none"> <li>• Place baby:                             <ul style="list-style-type: none"> <li>○ &lt;32 weeks wet in bag</li> <li>○ skin to skin on abdomen/chest (vaginal)</li> <li>○ sterile drape on mother's thighs (cesarean)</li> </ul> </li> <li>• Do not stretch or pull on the cord</li> <li>• Provide warmth, dry, stimulate, position to open airway</li> <li>• Assess breathing and tone</li> </ul>
<b>Announce Delay/Concern</b>	<ul style="list-style-type: none"> <li>• Announce time at 15 or 20 second intervals</li> <li>• Any team member can verbalize concerns</li> </ul>
<b>Clamp Cord</b>	<ul style="list-style-type: none"> <li>• If baby is noted to be vigorous (breathing effort, tone/flexion present) continue delayed cord clamping for a minimum of 60 seconds</li> <li>• If the baby is noted to be non-vigorous (no/poor breathing effort, hypotonic)                             <ul style="list-style-type: none"> <li>○ clamp the cord and proceed with the next steps of NRP</li> <li>○ initiated ventilation with an intact cord, if the infrastructure and team composition allow</li> </ul> </li> <li>• Note time and document (labour birth summary record)</li> </ul>
<b>Follow-up care</b>	<ul style="list-style-type: none"> <li>• Provide routine care (skin to skin)/continue next steps of resuscitation per NRP</li> </ul>
<b>Cord Gases</b>	<ul style="list-style-type: none"> <li>• Document time cord gasses are collected</li> </ul>