

NeolmPACTS Scenario Title:

Meconium Delivery

General Information	
Clinical Diagnosis	Meconium Delivery
Patient Details & Setting	Delivery Room or Emergency Room, delivery of an infant with meconium stained amniotic fluids
Target Learners	Providers who attend deliveries
Location	Emergency Room or Delivery Room
Anticipated Duration	
Scenario Time:	10-15 minutes
Debriefing Time:	30 minutes

Learning Objectives:
Objective 1: Team will recognize and communicate a patient in distress
Objective 2: Care for the patient according to the NRP algorithm for Meconium Aspiration Syndrome
Objective 3: Identify a team leader and assign roles to team members
Objective 4: Demonstrate the elements of team dynamics and crisis resource management

Educational Rationale
Learner will effectively perform neonatal resuscitation of a term infant born with meconium aspiration
Scenario Synopsis
Delivery team responds to L&D staff request to have them attend delivery of a term baby with who ROM for dark green meconium. Newborn will be limp, cyanotic, and apneic, covered in meconium. Care team must perform basic NRP interventions (dry, warm, stimulate, suction, ventilate) as well as provide intubation to improve heart rate.

Scenario Setup

Scenario Description		
Location & Setting	Hospital	L and D
	Unit/Room	Delivery Room
	Debriefing Rm	
Mannequin Set up	Mannequin	Newborn (high or low fidelity)
	Wardrobe	Naked
	Monitor	Delivery room monitor available but not on at the beginning of scenario
	Moulage	Meconium (Pudding/pea soup)
	Access	None
	Other Details	
Embedded Person Roles		Nurse Plant if required
Room Staging		
Medications		None
Equipment for scenario		Standard newborn resuscitation items including warmer, intubation supplies
Medical Chart Information	EHR	N/A
	Lab Results	N/A
	Imaging	N/A

Learner information to be given prior to start of scenario

You are working in L and D where a 30-year-old G3 P2 presents to the hospital's L&D or Emergency Room in labor at 39 weeks. Pregnancy complicated by hyperemesis. Serologies negative but GBS+. Spontaneous rupture of membranes 3 hours prior to delivery complicated by meconium-stained fluid. Meconium is very thick and particulate. Patient was adequately treated with 2 doses of Ampicillin prior to delivery for GBS prophylaxis.

Pre-Sim Checklist	
<input type="checkbox"/>	Video recording enabled (If utilizing)
<input type="checkbox"/>	Debriefing location identified
<input type="checkbox"/>	COVID precautions for institution
<input type="checkbox"/>	
<input type="checkbox"/>	

Expected Participants
Name & Role: <ol style="list-style-type: none"> 1. Physician 2. Nurse 3. Respiratory Therapist

Scenario Logistics

Vital Signs & Events:			
Event/Trigger: Baseline-Room Set Up			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
Transition time: HR: BP: Rhythm: Sat: RR:	Mannequin State: Actors: Handoff once room is set up: Term baby-meconium stained fluid-artificially ruptured 4 hours ago-	Room Set up for delivery by RN	
Time to stay at vitals: 2 minute			

Vital Signs & Events:			
Event/Trigger: Assessment of Infant			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
Transition time: 30 Sec	Mannequin State: Cyanotic, hypotonic, not	Assess	No response

HR: 80 BP: 0 Sat: RR: 0	crying, covered in thick meconium Actors: Notify learner when meconium clear	Dry suction Stimulate	
Time to stay at vitals: 1-2 minute			

Vital Signs & Events:			
Event/Trigger: Providing PPV			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
Transition time: 30 seconds HR: 80 BP: Sat: RR: Other: No chest rise Time to stay at vitals:	Mannequin State: limp-blue-apneic Actors:	- Provide Respiratory support - PPV with NeoPuff or BVM - Place monitors on baby: pulse Oximetry	

Vital Signs & Events:			
Event/Trigger: Failure of PPV			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State

Transition time: 30 seconds	Mannequin State: Limp-blue-apneic	<ul style="list-style-type: none"> - Perform MRSOPA - Perform Intubation 	
HR: 80 BP: Sat: 50% RR: Other: Intubation attempts x2 maximum, then give them chest rise and Saturation improvement	Actors:		
Time to stay at vitals:			

Vital Signs & Events:			
Event/Trigger: Recovery			
Vital Signs	Patient & Actor Actions	Expected Learner Actions	Triggers to Move to Next State
Transition time: 30 seconds HR: 130 BP: Sat: slowly increase to high 80s RR: Time to stay at vitals:	Mannequin State: Actors:	<ul style="list-style-type: none"> - Definitive care - STABLE 	

Scenario Endpoints

Definitive care and (verbalize need to call to NICU attending at transferring facility) if applicable

Final phase of scenario

Debriefing Points

Debriefing Points Following Learning Objectives	
Technical	Assembling equipment, performing intubation,
Cognitive	Roles clearly defined, good communication with team, following NRP guidelines for suctioning meconium
Behavioral/Interpersonal	Delegation of roles, clear communication with respect Back up intubation plan Intubate or not for Meconium (NRP changes)
Other	

Scenario Support Materials, Pre and Post Tests, Evaluations

- Reference List:
 - NRP 8th Edition Update (December 2020)
 - [https://downloads.aap.org/AAP/PDF/NRP%208th%20Edition%20Busy%20People%20Update%20\(1\).pdf](https://downloads.aap.org/AAP/PDF/NRP%208th%20Edition%20Busy%20People%20Update%20(1).pdf)
- Pre-test or Pre-sim work:
- Post-test:
- Session Evaluations: