NEWBORN

Estimated Time: 30 minutes • Debriefing Time: 20 minutes

Scan to Begin

Patient Name: Olivia Brooks & Baby

SCENARIO OVERVIEW

Olivia Brooks is a 22-year-old female who was found in a public restroom at a local college after bystanders heard her yelling for help. She gave birth in with the help of a bystander.

Level 4 requires a “Scene Size-Up,” “Primary Survey/Resuscitation, “Secondary Assessment” and “Reassessment” based on the National Registry of Emergency Technicians Advanced Level Psychomotor Exam.

Note: To emphasize the clinical criteria of a 15-minute time limit, timers are in place so that if a student does not make a Transport decision within 10 minutes, they receive a warning. If they do not make a Transport decision within 15 minutes, they will automatically be exited from the scenario.

LEARNING OBJECTIVES

1. Gather information related to dispatch
2. Perform a “Scene Size-up”
3. Perform a “Primary Survey/Resuscitation”
4. Make Transport Decision
5. Perform a “History Taking” and “Secondary Assessment”
6. Perform a reassessment
7. Verbalize proper interventions/treatment

CURRICULUM MAPPING

WTCS EMT-P PROGRAM OUTCOMES

- Prepare for incident response and EMS operations
- Integrate pathophysiological principles and assessment findings to provide appropriate patient care.
- Communicate effectively with others
- Demonstrate professional behavior
- Meet state and national competencies listed for EMT- paramedic certification(s)

SIMULATION LEARNING ENVIRONMENT & SET-UP

PATIENT PROFILE

Patient: Olivia Brooks

DOB: 01/29/XX

Age: 22

Gender: Female

Height: 162.5 cm (5 ft 5 in)

Weight: 70.9 kg (156 lbs)

Patient: Nova Brooks

DOB: Today

Gender: Female

Height: Unknown

Weight: Unknown

EQUIPMENT/SUPPLIES/SETTINGS

Patient

- Street clothes, she is holding her newly born infant
- Bathroom is littered with bloody blankets and towels. There is blood on and around the toilet. Backpacks and books are present as she was at school when this occurred.

Monitor Settings

- None

QR CODES

DISPATCH	SCENE	MOM	BYSTANDER
BABY	PLACENTA	NORMAL SALINE	NOREPINEPHRINE
DOPAMINE	EPINEPHRINE IV	EPINEPHRINE NEO	OXYTOCIN IM
OXYTOCIN PARAMEDIC	MAGNESIUM IV 2G	MAGNESIUM IV 4G	LABETALOL

TEACHING PLAN

PREBRIEF

The facilitator should lead this portion of the simulation. The following steps will guide you through Prebrief.

- Scan the **QR code:** "**Scan to Begin**" while students are in Prebrief
- "Meet Your Patient" (on iPad) and explain how the iPad works in the simulated learning environment including:
    - Facilitator note: This scenario has been designed to flow without scanning additional QR codes for convenience in the classroom. For added flexibility, you may elect to use the QR codes provided above to design your own scenario flow.
- Discuss the simulation "Learning Objective(s)" (on iPad) as well as any other Prebrief materials

STATE 1

RECEIVE DISPATCH

- Play "Dispatch" (on iPad): "ARISE EMS: You're dispatched for a 22-year-old who is about to give birth in the bathroom at ARISE University. Caller was not with the mom at the time of the 911 call and couldn't give any other details. He was instructed to try to get mom to a cleaner area, if possible, and to find clean towels or blankets to keep mom, and possibly baby, warm until your arrival."
- View the "En Route to the scene" message
- Preview the National Registry of EMT Advanced Level Psychomotor Examination form for Trauma Assessment
- Possible Facilitator Question
    - What are your plans based on the dispatch you received?

STATE 2

SURVEY THE SCENE & PRIMARY ASSESSMENT/RESUSCITATION

- Play “Scene Survey” video
- View the “Scene Size-Up” plaque with the following questions:
    - Verbalize appropriate PPE precautions
    - Verbalize how you would perform a “scene size-up”
- View the plaque reminding students “Your transport decision must be made within 15 minutes.”
- Play “Bystander” video
    - Verbalize how you would respond to the bystander
- Play “Patient” video
    - Verbalize how you would respond to the patient
- View the plaque entitled “Primary Survey/Resuscitation” with the following questions:
    - Verbalize how you perform a Primary Survey/Resuscitation for this patient.
    - What is your transport decision?
- View the plaque entitled “Indicate Transport Decision” with text stating “Indicate your transport decision by tapping the Transport tab.”
    - Students should then tap Transport Tab and indicate their decision (see instructions under the Transport Tab below.)
    - Students should tap the Menu icon on the top left corner of the screen, then tap on the Transport tab to indicate their transport decision
- View the plaque entitled “Prepare to Transport”
- Tabbed iPad Content

EMERGENCY HOME SCREEN

This is the home screen. In the top left corner is the "menu" icon where the tabs described below can be accessed.

TRAUMA ASSESSMENT FORM

The National Registry of Emergency Medical Technicians Advanced Level Psychomotor Exam: Patient Assessment-Trauma form is displayed here. (It is also attached in Appendix A so that it can be printed out for the student if desired.)

PATIENT PROFILE

Demographic information about the patient is displayed under this tab.

SCENE SURVEY

Tap here to replay the video of the scene.

BYSTANDER

Tap here to replay the video of the bystander.

MOM

Tap here to replay the video of the mom.

TRANSPORT

Tap here to indicate transport decision. The following text appears:

- "Have you made your transport decision? Yes/No"
    - If student selects "No": a 15-minute timer appears with reminder "Your transport decision must be made within 15 minutes."
    - If student selects "Yes": Another question appears: "Will you transport?"

- If student selects “Yes”: Student will see “Prepare to Transport”
- If student selects No: Student will see “Communicate your decision to dispatch”

Note: Students have 15 minutes to indicate a Transport decision or they are automatically exited from the scenario. Students will receive a 10-minute warning.

LEVEL

Level 2 is displayed. In order to progress to State 3, students must indicate their transport decision using the Transport tab.

SCANNER

Use this to scan optional QR Codes.

EXIT

If the objectives of the program have not been met, the iPad reads, “Are you sure you want to exit? All data will be lost.”

- If “No” is selected, the iPad will return to the tabbed content.
- If “Yes” is selected, the iPad will let the student(s) exit and prompt them to complete an embedded 3-5 minute survey.

STATE 3

HISTORY TAKING & SECONDARY ASSESSMENT: BABY

- Play “Baby & Cord” video with text that reads, “Verbalize the equipment and procedure used for cutting the umbilicus.”
- View the plaque entitled “Vital Signs” with text that reads, “Interpret Nova’s vital signs”:
    - Pulse 136, RR 42, O2 Saturation 85%
- View the plaque entitled “Secondary Assessment: Baby” with the following questions:
    - Verbalize how you would assess the affected body part(s)
- View the plaque entitled “Pulmonary Assessment: Anterior - Baby” with instructions to “Tap on anatomical location(s) to listen to lung sounds.”
    - An image a newborn chest appears with “hot spots” located over each anatomical location of the chest. When a “hot spot” is tapped, lung sounds can be heard (with best audio using ear buds or headphones).
- View the plaque entitled “Pulmonary Assessment: Posterior - Baby” with instructions to “Tap on anatomical location(s) to listen to lung sounds.”
- View the plaque entitled “History Taking” with the following questions:
    - Verbalize how you would obtain a sample history of the baby and pregnancy.
- View the plaque entitled “Verbalize Interventions” with the following questions:
    - Verbalize field impression of patient and assess 5 minute APGAR score
    - Verbalize interventions/proper treatment based on the Protocol provided
        - Student should tap the Protocol: Baby tab as described below for access to the Neonatal Resuscitation Protocol.
- Tabbed iPad Content
    - The iPad will automatically advance to State 4 after the Protocol: Baby is tapped.

BABY

Tap here to replay the video of the baby & cord.

VITAL SIGNS: BABY

This form is open for entry and displays Nova's last vitals: Pulse 136, RR 42, O2 Saturation 85%

PROTOCOL: BABY

The iPad shows the Neonatal Resuscitation Protocol. A printable version is available in Appendix B.

STATE 4

SECONDARY ASSESSMENT: MOM

- View image of placenta with text that reads, “Verbalize the procedure for the handling the placenta.”
- View the plaque entitled “Vital Signs” with text that reads, “Interpret Olivia’s vital signs”:
    - Pulse 84, RR 22, BP 108/62, O2 Saturation 96%
- View the plaque entitled “Secondary Assessment: Mom” with the following questions:
    - Verbalize how you would assess the affected body part(s)
- View the plaque entitled “Pulmonary Assessment: Anterior - Mom” with instructions to “Tap on anatomical location(s) to listen to lung sounds.”
    - An image a chest appears with “hot spots” located over each anatomical location of the chest. When a “hot spot” is tapped, lung sounds can be heard (with best audio using ear buds or headphones).
- View the plaque entitled “Pulmonary Assessment: Posterior - Mom” with instructions to “Tap on anatomical location(s) to listen to lung sounds.”
- View the plaque entitled “History Taking” with the following questions:
    - Verbalize how you would obtain a sample history of the mom.
- View the plaque entitled “Verbalize Interventions: Mom” with the following questions:
    - Verbalize field impression of patient
    - Verbalize interventions/proper treatment based on the Protocol provided
        - Student should tap the Protocols: Mom tab as described below for access to OB, Seizure and Shock Protocols.
            - The iPad automatically advances to State 5 after ALL three protocols are viewed.
        - Facilitator Note: All medications listed in the protocols are available via QR Code for further scenario flexibility.
- Tabbed iPad Content

VITAL SIGNS: MOM

This form is open for entry and displays Olivia's last vitals: Pulse 84, RR 22, BP 108/62, O2 Saturation 96%

PROTOCOL: MOM

The iPad reads, "Use these protocols to make decisions regarding patient interventions and treatment."

Printable versions of OB, Seizure, and Shock protocols are available in Appendix C.

STATE 5

REASSESSMENT: BABY

- View video of mom and baby
- View the plaque entitled “Verbalize Response” with the following questions:
    - Verbalize how you should respond and ALL the necessary actions for this situation
        - Students should tap on the Protocol: Baby again and then verbalize their interventions.
- Tabbed iPad Content

EXIT

Students may exit the scenario after tapping the Protocol: Baby tab and verbalizing their interventions.

At that point the iPad will read, “All objectives have been met. Would you like to exit the scenario?”

- If “No” is selected, the iPad will return to the tabbed content.
- If “Yes” is selected, the iPad will let the student(s) exit and prompt them to complete an embedded 3-5 minute survey.

The Level tab disappears at this time as well.

DEBRIEF

Nothing needed from the iPad.

QUESTIONS

1. How did you feel this scenario went?
2. Review understanding of scenario learning objectives.
    a. What PPE precautions were appropriate and why?
    b. Was the scene/situation safe? Explain.
    c. What was the nature of the patient's condition?
    d. What was the number of patients and how did you prioritize your actions?
    e. Did you require additional assistance? Why or why not?
    f. What did you discover during your Primary Survey/Resuscitation?
    g. What was your transport decision? Why?
    h. What information did you gather while performing History Taking?
    i. What information did you gather during your Secondary Assessment and Vital Signs interpretation?
    j. What treatments did you initiate per protocol?
    k. What was your response when reassessing the baby? How did you respond to mom at this time?
    l. If you could "do over," would you do anything differently?
3. Summary/Take Away Points:
    a. "Today you analyzed the scene and performed a Scene Size-up, Primary Survey/Resuscitation, and Secondary Assessment for a 22-year-old pregnant female who gave birth in a public restroom of a local college. What is one thing you learned from participating in this scenario that you will take with you into your EMS practice?" (Each student must share something different from what the others' share.)

NOTE: Debriefing technique is based on INASCL Standards for Debriefing

SURVEY

Print this page and provide to students.

Students, please complete a brief (2-3 minute) survey regarding your experience with this ARISE simulation. There are two options:

1. Use QR Code: Survey
    a. Note: You will need to download a QR Code reader/scanner onto your own device (smartphone or tablet). There are multiple free scanner apps available for both Android and Apple devices from the app store.
    b. This QR Code will not work in the ARIS app.

SURVEY

2. Copy and paste the following survey link into your browser.
    a. https://ircvtc.co1.qualtrics.com/SE/?SID=SV_6Mwfv98ShBfRnBX

APPENDIX A

National Registry of Emergency Medical Technicians®
Emergency Medical Technician Psychomotor Examination

PATIENT ASSESSMENT/MANAGEMENT – MEDICAL

Candidate:_____ Examiner: _____

Date: _____ Signature: _____

Scenario # _____

Actual Time Started: _____

	Possible Points	Points Awarded
Takes or verbalizes appropriate PPE precautions	1	
SCENE SIZE-UP		
Determines the scene/situation is safe	1	
Determines the mechanism of injury/nature of illness	1	
Determines the number of patients	1	
Requests additional EMS assistance if necessary	1	
Considers stabilization of the spine	1	
PRIMARY SURVEY/RESUSCITATION		
Verbalizes the general impression of the patient	1	
Determines responsiveness/level of consciousness (AVPU)	1	
Determines chief complaint/apparent life-threats	1	
Assesses airway and breathing -Assessment (1 point) -Assures adequate ventilation (1 point) -Initiates appropriate oxygen therapy (1 point)	3	
Assesses circulation -Assesses/controls major bleeding (1 point) -Checks pulse (1 point) -Assesses skin [either skin color, temperature or condition] (1 point)	3	
Identifies patient priority and makes treatment/transport decision	1	
HISTORY TAKING		
History of the present illness -Onset (1 point) -Quality (1 point) -Severity (1 point) -Provocation (1 point) -Radiation (1 point) -Time (1 point) -Clarifying questions of associated signs and symptoms related to OPQRST (2 points)	8	
Past medical history -Allergies (1 point) -Past pertinent history (1 point) -Events leading to present illness (1 point) -Medications (1 point) -Last oral intake (1 point)	5	
SECONDARY ASSESSMENT		
Assesses affected body part/system -Cardiovascular -Neurological -Integumentary -Reproductive -Pulmonary -Musculoskeletal -GI/GU -Psychological/Social	5	
VITAL SIGNS		
-Blood pressure (1 point) -Pulse (1 point) -Respiratory rate and quality (1 point each)	4	
States field impression of patient	1	
Interventions [verbalizes proper interventions/treatment]	1	
REASSESSMENT		
Demonstrates how and when to reassess the patient to determine changes in condition	1	
Provides accurate verbal report to arriving EMS unit	1	
Actual Time Ended: _____ **TOTAL**	42	

CRITICALCRITERIA

____ Failure to initiate or call for transport of the patient within 15 minute time limit
____ Failure to take or verbalize appropriate PPE precautions
____ Failure to determine scene safety before approaching patient
____ Failure to voice and ultimately provide appropriate oxygen therapy
____ Failure to assess/provide adequate ventilation
____ Failure to find or appropriately manage problems associated with airway, breathing, hemorrhage or shock
____ Failure to differentiate patient's need for immediate transportation versus continued assessment or treatment at the scene
____ Performs secondary examination before assessing and treating threats to airway, breathing and circulation
____ Orders a dangerous or inappropriate intervention
____ Failure to provide accurate report to arriving EMS unit
____ Failure to manage the patient as a competent EMT
____ Exhibits unacceptable affect with patient or other personnel
____ Uses or orders a dangerous or inappropriate intervention

You must factually document your rationale for checking any of the above critical items on the reverse side of this form.

e202/10-16

APPENDIX B

ARISE EMERGENCY MEDICAL PROTOCOLS

NEONATAL RESUSCITATION

(See OBSTETRICAL DELIVERY Procedure)

EMR

- **Initial Pediatric Care**
- After baby delivers, note the time of the delivery
- Warm and dry the infant
- Position and clear airway using bulb syringe, provide tactile stimulation
    - Suction mouth, oropharynx, and then nose
- Evaluate respirations, heart rate, color, and muscle tone:
    - **Pt. Breathing, HR >100, pink** – observational care
    - **Pt. Breathing, HR >100, cyanotic** – supplemental oxygen
    - **Pt. Apneic (or) HR <100 (or) persistent cyanosis**:
        - Positive pressure ventilation: **40-60 ventilations per minute**
    - **HR <60**
        - Chest compressions and ventilations – **3:1 ratio (120 events per minute)**

Use 21-30% oxygen with ventilations and titrate up if goal SpO2 levels based on age are not met (see table below). Avoid flow >10L/min.

Target SpO2 based on time after birth:

1 min	**60-65%**
2 min	**65-70%**
3 min	**70-75%**
4 min	**75-80%**
5 min	**80-85%**

EMT

10 min	85-95%

- Notify medical control ASAP
- Determine **APGAR** score at 1 and 5 minutes

APGAR SCORE			
SIGN	**0**	**1**	**2**
Appearance: (Skin Color)	**Blue / Pale**	**Pink body / Blue extremities**	**PINK**
Pulse: (Heart Rate)	**Absent**	**< 100**	**> 100**
Grimace: (Irritability)	**No response**	**Grimaces**	**Cries**
Activity: (Muscle Tone)	**Limp**	**Some flexion of extremities**	**Active motion**
Respiratory: (Effort)	**Absent**	**Slow and irregular**	**Strong cry**
Score (1 minute)			
Score (5 minutes)			

Advanced EMT

HR < 60 without response after 30 seconds of PPV and chest compressions

- Establish IV/IO
- Consider a fluid bolus: **10cc/kg**

Chippewa Valley Regional Emergency Medical Services Protocols (2016). Medical Protocols.

APPENDIX C

ARISE EMERGENCY MEDICAL PROTOCOLS

OBSTETRICS & OBSTETRICAL EMERGENCIES

EMR | EMT | AEMT | Intermediate | Paramedic

- **Initial Medical Care**

- If delivery is not imminent**:**
    - Transport patient in left lateral recumbent or semi-fowlers for ease of breathing
    - Monitor contractions including duration and time between contractions

- **If any of the following are present, notify Medical Control immediately:**
    - Heavy bleeding
    - Limb presentation
    - Multiple fetus'
    - Trauma to abdomen
    - **Prolapsed cord**
        - Place patient in Trendelenburg or knee to chest position
        - Advise patient not to "bear down" or push
        - Insert two fingers into birth canal and hold the presenting part off the cord to relieve pressure on the cord
        - DO NOT remove hand/fingers until receiving facility directs you to

- **If delivery is imminent with a normal presentation (crowning noted):**
    - Refer to **Neonatal Resuscitation** protocol following delivery

- **Important documentation points:**
    - Frequency and strength of contractions
    - Rupture of membranes
    - Meconium staining
    - Fetal presentation
    - Onset of labor
    - Due date
    - Gravida (# of pregnancies)
    - Para (# of live births), any known anomalies
    - APGAR score at 1 and 5 minutes.
    - Prenatal provider (physician or midwife name) if possible

Routine Delivery

A side view as the baby's head is born. The face is pointed posteriorly and to one side. Note the position of the hands for a right handed EMT. A left-handed EMT would have the hands reversed. The hands support and exert gentle pressure to prevent rapid delivery of baby.

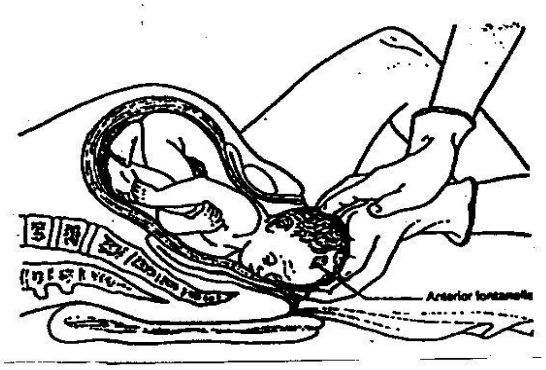

Figure 1

If the umbilical cord is wrapped tightly around the baby's neck, you must free, clamp, and cut it.

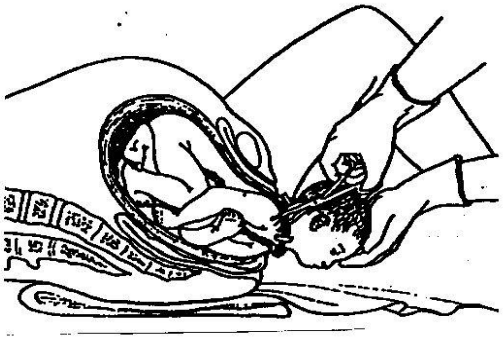

Figure 2

Once delivery of the head is complete, you should suction the baby's mouth and nostrils for the first time, using the bulb syringe.

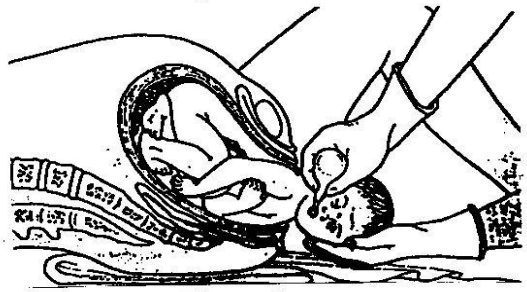

Figure 3

Support the baby's head with one hand, its trunk with your other hand. Remember that the baby is slippery, and you must hold it firmly but gently.

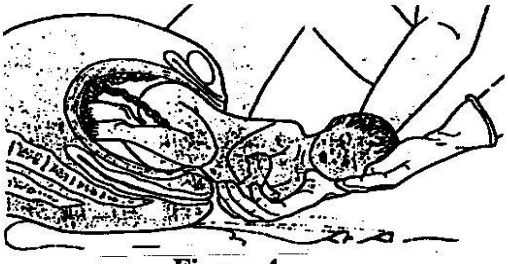

Figure 4

Figure 5

After delivery, place the baby at the level of the vagina, with its head lowered slightly. Clear the airway with the bulb syringe a second time.

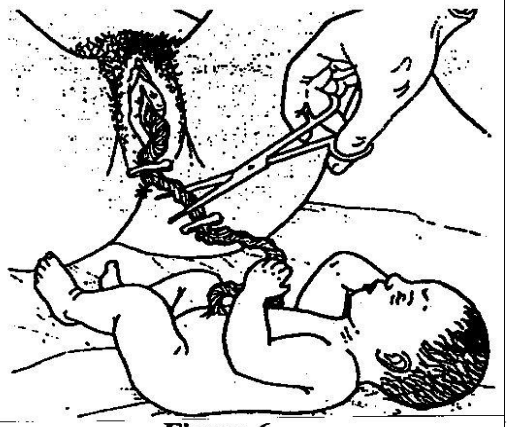

Figure 6

Clamp the umbilical cord with two sterile clamps, about 3 inches apart, placed halfway between the baby and the mother's vagina. Cut the cord between the 2 clamps. As an extra safeguard, tie the cord near the baby's navel with the special umbilical tape. Leave the clamps on the cord.

Vaginal Bleeding Pre-Delivery

EMR | EMT

- Initial Medical Care
- Place on left lateral side, recumbent, for transport.
- Treat for shock.
- Monitor vital signs frequently.

AEMT | Intermediate | Paramedic

Consider **Fluid Bolus** to maintain MAP > 65

Vaginal Bleeding Post-Delivery

Emergency Medical Responder

- Initial Medical Care
- Treat for shock.
- Monitor vital signs frequently.

Emergency Medical Technician

- Massage the fundus vigorously. Place non-dominant hand at the base of the uterus prior to massaging the fundus. This will anchor the uterus in place and prevent uterine inversion.
- Place baby to breast and have mom encourage baby to breastfeed
- Loose bulky dressings (do not pack)

Advanced EMT | Intermediate

- Fluid Bolus to maintain MAP > 65

Paramedic

Oxytocin (Pitocin): 20 units IM	(OR)	Oxytocin (Pitocin) Infusion: 20 units in 1000ml NS, run at 200 ml/hour

---

Pre – Eclampsia / Eclampsia

- Determine if patient is 20 WEEKS OR MORE pregnant or within four weeks post partum
- Clarify history of pre-eclampsia
- Patients with **SBP >180** or **DBP >100**
- Treat patients even if the seizure resolves

EMR

EMT

- Initial Medical Care
- Ensure patent airway.
- Provide a quiet non-stimulating environment.
- Place in left lateral recumbent position.
- Refer to ***SEIZURE*** protocol

Advanced EMT

Intermediate

- Refer to ***SEIZURE*** protocol

Paramedic

- **Magnesium Sulfate: 4g in 250 cc D_5W, run over 20 minutes**
- **Labetolol: 20 mg** slow IV
    - May repeat **40 mg** every 10 minutes for persistent severe hypertension

- **Max: 300 mg**
- Refer to ***SEIZURE*** protocol

Per MCPO:

- **Repeat Magnesium Sulfate: 2 grams in 250 cc D_5W, run over 20 minutes**

Chippewa Valley Regional Emergency Medical Services Protocols (2016). Medical Protocols.

ARISE EMERGENCY MEDICAL PROTOCOLS

SEIZURES

Emergency Medical Responder

Initial Medical Care

Place patient in left lateral recumbent position and protect from injury.

Assess blood glucose level and follow ***HYPOGLYCEMIA*** protocol if necessary.

Document the length and number of seizures and the type and dosage of seizure medications.

If seizures persist call for a paramedic intercept

Emergency Medical Technician

Advanced EMT

Consider fluid bolus.

Intermediate

Midazolam (Versed): **5 mg** slow IV; **Intranasal / IM / IO** if unable to establish an IV

- May repeat (x1) in 5 minutes if seizures continue

Contact Medical Control for sustained seizures:

Paramedic

*****Seizures suspected to be pre-eclamptic / eclamptic in origin*****

- Determine if patient is in 3rd trimester pregnancy or within one week post partum

- Clarify history of pre-eclampsia and/or previous history of seizure

Suspected Eclampsia
(Treat even if seizure resolves)

- **Magnesium Sulfate: 4 g in 250cc D_5W**, Run over 20 minutes
- If severe hypertension, follow ***OBSTETRICAL*** protocol

Per MCPO:

- **Repeat Magnesium Sulfate: 2 grams in 250 cc D_5W, Run over 20 minutes**

Chippewa Valley Regional Emergency Medical Services Protocols (2016). Medical Protocols.

ARISE EMERGENCY MEDICAL PROTOCOLS

Medical 21-1

SHOCK

Advanced EMT	Intermediate

Hypovolemic / Neurogenic:

- **Fluid bolus**: (Maintain systolic BP at 90-100 mm hg)

  Initial **500 ml** NS bolus is appropriate for most

  - Consider starting at **250 cc** for elderly, pulmonary edema or history of renal failure patients.

  Reassess patient and repeat as needed based on clinical response and situation

Contact Medical Control for persistent Hypovolemic or Neurogenic shock despite 2 fluid boluses:

- **Possible Permissive Hypotension**

Septic:

- **Fluid bolus**: (Maintain systolic BP at 90-100 mm hg)

  Start with 1L NS fluid bolus

  Consider starting at **250 cc** for elderly, pulmonary edema or history of renal failure patients.

  Reassess patient and repeat as needed based on clinical response and situation.

Cardiogenic Shock: Assess rhythm and treat any abnormality first. Use **caution** with fluid.

Fluid bolus: 250 cc (re-evaluate patient)

May repeat to max of 500 cc NS

Per MCPO, may repeat NS fluid bolus

Medical 21-2

SHOCK

Paramedic

- If the patient is exhibiting signs / symptoms of a tension pneumothorax perform a needle decompression

Neurogenic / Cardiogenic / Septic / Hypovolemic Shock:

Use vasopressors in **Hypovolemic Shock** only if refractory to fluid administration. Consultation with medical control is strongly suggested in this case.

Vasopressor Infusions – Titrate to achieve MAP ≥ 65: (See Drip Charts – Appendix A)		
Norepinephrine: • **4mg in 250ml NS** • **Start at 4-6 mcg/min**	**Dopamine:** • **800mcg/ml** • **2 – 10 mcg/kg/ min**	**Per MCPO:** **Epinephrine:** • **1mg in 250ml NS** • **2 – 10 mcg / min**

Use Dopamine only if Norepinephrine is not available

If Neurogenic shock with bradycardia, dopamine or epinephrine is preferred

Epinephrine Infusion is per Medical Control Physician Order

Chippewa Valley Regional Emergency Medical Services Protocols (2016). Medical Protocols.

CREDITS

Chippewa Valley Regional Emergency Medical Services Protocols (2016).

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Video of baby & cord and image of placenta purchased from Shutterstock

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