

# Simulation Scenario

**Simulation Case Title:** 7 Y/O M UTV Roll Over

**Patient Name:** Johnny

**Patient Age:** 7 y/O M

**Chief Complaint:** Multi-system Trauma

<p>Brief narrative description of case <i>Include the presenting patient chief complaint and overall learner goals for this case</i></p>	<p>Dispatch: Units respond to a report of a child involved in a single UTV R/O.</p> <p>Location: Rural off road vehicle area</p> <p>Time: 1055 hours; Weather: partly cloudy, temp: 78°F</p>
<p>Primary Learning Objectives <i>What should the learner gain in terms of knowledge and skill from this case?</i></p>	<ol style="list-style-type: none"> <li>1. Identify critical Trauma/MOI</li> <li>2. Limit scene time in critical trauma</li> <li>3. Perform treatment enroute to Lev 1 trauma facility</li> <li>4. Notification to receiving facility—trauma alert</li> <li>5. Determine transport mode</li> </ol>
<p>Critical Actions <i>List which steps the participants should take to successfully manage the simulated patient. These should be listed as concrete actions that are distinct from the overall learning objectives of the case</i></p>	<ol style="list-style-type: none"> <li>1. Mitigate scene hazard</li> <li>2. Identify and mitigate immediate threat to life</li> <li>3. Secure airway</li> <li>4. Perform rapid trauma assessment</li> <li>5. Package patient for transport</li> <li>6. Provide circulatory support</li> <li>7. Begin transport within 10 minutes</li> <li>8. Identify and treat evolving issues</li> <li>9. Transfer care to next caregiver in continuum</li> </ol>
<p>Learner Preparation <i>What information should the learners be given prior to initiation of the case</i></p>	<p>PAT Pediatric Trauma Assessment</p>

## Initial Presentation

<b>Initial vital signs</b>	HR 126	B/P 90/40	RR 36	O2sat 86%	Temp
Show deterioration	HR 134	B/P 88/38	RR 38	O2sat 80%	Temp
Inappropriate Tx	HR 148	B/P 70/46	RR 44	O2sat 76%	Temp
Appropriate Tx	HR 120	B/P 96/36	RR 30	O2sat 92%	Temp

Overall appearance <i>What do learners see when they first enter the room?</i>	On arrival: You see a UTV on its side with broken plastic strewn across the roadway leading to the UTV. There is fluid leaking out of the vehicle. Bystanders direct you to your patient, who is under the UTV in a supine position not moving.		
HPI <i>Specify what info here and below must be asked vs what is volunteered by patient or caregiver</i>	Pt was riding in UTV, which lost control, and rolled multiple times landing on the patient. You do not note a helmet on the scene. You can assume a moderate to high-speed rollover with excessive damage to the vehicle.		
<b>Past Medical/Surgical History</b>	<b>Medications</b>	<b>Allergies</b>	<b>Family History</b>
	None	NKDA	None
<b>Physical Examination</b>			
<b>Circulation</b>	Faint Pulse present		
<b>Airway</b>	Initially not open		
<b>Breathing</b>	No Breathing initially Pt breathes after opening airway, Rate 40 and shallow		
<b>General</b>	The patient is a 7 Y/O M-- Pt is dressed in Jeans and t-shirt. He is lying L lateral recumbent near the side of the road to the under the UTV. There is significant bleeding noted to the L lateral mid-shaft femur area. After airway is opened, pt appears to be breathing rapidly. No response from the patient to verbal stimuli. Radial/brachial pulses weak and thready.		
<b>HEENT</b>	Severe road rash to chin and full thickness lac to R cheek actively bleeding. Pupils: sluggish at 4mm.		
<b>Neck</b>	W/O apparent trauma, JVD noted		
<b>Lungs</b>	Chest: unequal chest rise and fall. Paradoxical motion noted on the R chest. LS absent on R resent on L. (indicative of tension pneumothorax)		
<b>Cardiovascular</b>	Capillary refill >4 seconds		
<b>Abdomen</b>	rigid bruising to RUQ		
<b>Neurological</b>	Pt not moving extremities/ limp		

<b>Skin</b>	Pale, dirty, road rash
<b>GU</b>	Normal genitalia, W/O trauma
<b>Psychiatric</b>	UTO

**Instructor Notes – Changes and Case Branch Points**

Intervention / Time point	Change in Case	Additional Information
00:15 Scene Survey	Other OHV's converging on the scene	Law enforcement is just arriving
00:10 Manual C-spine and open Airway	Pt goes from apneic to breathing on opening airway	Consider OPA and BVM ventilations immediately
00:10 Assess Circulation	Radial/brachial pulses weak/ thready	Pulsatile bleed from R lateral femur
00:45 Bleeding control	Apply TK	Bleeding controls with use of TK
00:00 Secure airway	May maintain with BVM if adequate	Consider ET if needed
01:00 Baseline VS	Assess VS	ID patient in extremis
00:00 ID need for rapid transport	Closest most appropriate	Lev 1 trauma
00:00 Initiate vascular access	Pt BP improves if successful	Consider I/O
00:00 Complete detailed assessment	Find rest of injuries	As time permits
00:00 Communicate with receiving facility	Trauma alert	Provide a concise report to receiving facility
00:00 Consider tranexamic acid		Teaching point if not accomplished

Ideal Scenario Flow: Ideal is scene time of 10:00 or less. Capture ABC compromise and treat as found.

**Anticipated Management Mistakes:**

- Delay on scene to treat vs immediate transport
- Scoop and run without providing for patient packaging
- Spinal immobilization vs SMR

**Teaching points:**

- Scene safety
- PAT assessment
- XABCDE assessment progression
- Consider tranexamic acid