**Appendix 2.** Case Example.

**Red Station:** Case 1- HI/Coma: HIFI

**Case History:**

An earthquake has hit the surroundings of the city of Montreal. The island housing an amusement park was affected severely reaching 5.5 on the Richter scale. There was significant damage and there are 13 confirmed cases of injured children who will be transported to your tertiary care pediatric centre, 10 to a second tertiary care pediatric centre. We do not yet have confirmation of total number of casualties.

CRM Objectives/Code Orange Objectives :

1. Manage unstable patients requiring resources, which may be limited; and

2. Prioritize resources to maximize survival versus maximizing individual outcome (paradigm shift).

Medical Objectives:

1. Manage increasing ICP in HI patient; and

2. Stabilize patient for transfer for imaging (CT).

Equipment: Adult HiFI mannequin- BP cuff, leads, monitors, sat probe, O2 (+ tubing and masks) all intubation material, mannitol, 3% saline, Iv tubing and Iv’s, medications including epi, atropine, ketamine, propofol, etomidate, midaz, lidocaine, succ, rocuronium, backboard & c collar on pt, defibrillator.

\*\* 1 actor as EMS bagging pt as pt arrives.

Mannequin should have blood oozing out of nose, eyes, all scratched up and messy, minor cuts and bruises on limbs, nothing on abdomen or back.

EMS brings patient in and says:

“16-year-old male was at the amusement park and ferris wheel came off its bolts. He was at the top of the ferris wheel when it fell. You are the receiving Red area team.”

1. Patient arrives on the scene; monitors should be placed by treating team:

A) airway patent

B) RR: being bagged by ambulance technicians at rate of 16

Sat: 98% RA (bagging)

C) HR: 80

BP: 160/90

Cap refill 3 seconds

D) GCS: 6 (eyes- 1, verbal – 2, motor 3), glucose 10.2,

scratches and bruises over face and laceration over head,

scratches over body

Initial management should include:

A) 2 large bore Iv’s put in place

B) 100% O2 but bagging and plan for intubation

C) mannitol and 3% saline should be drawn up and ready to give

D) intubation meds should be drawn up: including succynylcholine, etomidate

Please see fan out for management options and expectations.

Concluding scenario should include an intubated patient with 2 intravenouses and ready to go to CT.

**EMS Script:**

You are overwhelmed by the disaster you just saw but need to get back asap. You will rush in and give a quick report. If any additional questions are asked you just say “I do not know” and try and leave promptly.

Report: “16-year-old male was at Laronde and ferris wheel came off its bolts. He was at the top of the ferris wheel when it fell. WE found him unconscious at the scene. He has a pulse, is not breathing on his own, GCS 6, vitals en route: HR: 80, BP: 160/90, sat 98% with us bagging with RA.”

**Participant Sheet:**

An earthquake has hit the surroundings of the city of Montreal. Ile St Helene was affected severely reaching 5.5 on the Richter scale. There was significant damage to the LaRonde park and there are 13 confirmed cases of injured children who will be transported to MCH, 10 to ste Justine. We do not yet have confirmation of total number of casualties.

You are awaiting the arrival of a 16-year-old male who was at Laronde when the earthquake hit. The ferris wheel came off its bolts. He was at the top of the ferris wheel when it fell.

**HI: Evaluation Sheet**

**Participant Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Instructions**: Checkmark each item according to the candidate’s level of performance.

###### Medical Expert

Did the **participant** demonstrate the following:

**Yes Borderline No**

Performs 1ry survey

Performs full 2ry survey

Identify that the patient has a severe HI

Postulate raised intracranial pressure

Establish IV access/IO access

Manage increasing ICP in HI pt

###### Manager

Did the candidate demonstrate the following:

**Yes Borderline No**

Evaluates the ABCD

Does not touch the patient unless required

Ensure monitors are properly placed

Directs re-triage and confirms Red

Call for transfer to CT

Call neurosurgery for help

Manage unstable pt given limited resources

Prioritizes resources given Code Orange

Context

Anticipates and plans within circumstances

**Communicator**

**Yes Borderline No**

**The candidate:**

Team leader and team member roles identified

Ensure closed loop communication

Stays calm and in control

Listens to team input

Summarizes progress and changes in case

Documents injuries and treatments succinctly

**Overall performance** at the level of a “pediatric emergentologist”:

**Satisfactory Borderline Unsatisfactory**

Comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_