

Site City: _____ Hospital: _____ Site Number: _____ Patient Number: _____

Influenza A H1N1(Swine Flu) ICU Study - Case Report Form (Page 1):

Introduction: A multidisciplinary group of critical care physicians, infectious diseases practitioners, nurses, and research coordinators, in conjunction with the *Canadian Critical Care Trials Group*, has developed a case report form to allow description of patients who become critically ill with influenza A H1N1 (Swine Flu). We are disseminating this case report form to colleagues in countries that may be affected by the 2009 influenza A (H1N1) pandemic. Our goal is to help anyone who wishes, and who satisfies their local research ethics board regulations, to collect data to better understand and describe the illness in their area, to search for associations with better or worse outcome, and to compare their experiences with colleagues around the world. Individuals are free to use this form in any manner that may help them or their patients. If one health care professional from a hospital site wishes to collaborate with others around the world, we will help to facilitate data entry and combination into a single database that may form the basis for a multi-country descriptive study of critical illness due to influenza A (H1N1). We will also turn this case report form into a secure web-based data entry site so that colleagues from around the world may be better able to collaborate and describe future outbreaks, and work together in real-time to improve the care of affected patients. This project has been approved by the Research Ethics Board of Sunnybrook Hospital, fully affiliated with the University of Toronto, as a Quality Improvement Project. If you wish to contribute or collaborate on this project, please ensure that you comply with your local research ethics board regulations and contact us at the email address below. Sincerely, on behalf of the **Influenza A H1N1 (Swine Flu) ICU Study** organizers, and the *Canadian Critical Care Trials Group*.

Case Report Form Instructions:

1. Contact our office (rob.fowler@sunnybrook.ca) if you wish to be assigned a site number. **Record the city, hospital, and site number** on each page. **Record and number patients at your site** sequentially i.e. 01, 02, 03 ...

2. Complete **the hospital page** (page 2).

3. Determine Eligibility Criteria for Patient Inclusion into the study by determining whether a patient is either a **confirmed, probable or suspected case AND is critically ill** or has died. Please **maintain a separate log of patient study numbers** and hospital IDs at your own site, in order that we may go back to patient charts, if necessary.

4. Complete the **patient pages** (pages 3,4,5,6 for Adult [≥ 18 years of age] and Pediatric [< 18 years of age] Patients): **Demographic** details; influenza A (H1N1) **Symptoms**; Current **Co-morbidities**; **Time-course** and **Outcomes** including cause of death (“Respiratory” = progressive hypoxemia or respiratory acidosis resulting in death, even though the mechanism may involve cardiac arrest, withdrawal of support etc. “Non-respiratory” = other causes, including multi-organ failure); **Treatments**; **Microbiology**; **Daily Physiology** for **days 1, 3, 7, 14, 28** (entered data should be from 0800h or the nearest point to that time, corresponding to your local ICU practice of separating one day from the next).

**Note: “Peak Pressure” indicates the peak pressure on volume-controlled modes or the PEEP + driving pressure on pressure-driven modes. For Chest X-ray: please enter the number of quadrants and whether this is unilateral or bilateral, e.g. 2U would indicate disease involving upper and lower quadrants of one side.

5. Complete for **ADULTS (≥ 18 years of age)**, the **APACHE II score** (page 7) that is derived from the *most abnormal measurements* obtained **within the first 24 hrs in the ICU**. The points scoring is attached to assist in identifying “worst” values. For **PEDIATRIC patients (< 18 years of age)** patients, complete the **PRISM-III Score** (page 8) using the “worst” values **for the first 12 hours after ICU admission**.

6. **Update/complete the hospital page 2** (the number of hospital cases of influenza A (H1N1) since the onset of the outbreak and the number of hospital cases from the time your first patient was enrolled), up until the last day of follow-up for all patients enrolled (28 days after the ICU admission day for the last enrolled patient).

7. **To participate** in the International **Influenza A H1N1(Swine Flu) ICU Study** as a site investigator, contact Rob Fowler (rob.fowler@sunnybrook.ca Phone 416-480-6100 extension 7471; Fax 416-480-6191) or Stephen Lapinsky (stephen.lapinsky@utoronto.ca) to arrange for transmission of case report forms.



Fill out this page once for your hospital

Hospital Characteristics

Name of your hospital:	
City of your hospital:	
Country of your hospital:	
Number of beds (any type) in your hospital before the outbreak:	
Number of ICU (any type) beds in your hospital before the outbreak:	
Have you increased the number of hospital (non-ICU) beds since the onset of the outbreak?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If YES, how many hospital (non-ICU) beds do you have currently:	
Have you increased the number of beds for critically ill patients since the onset of the outbreak?	Yes <input type="checkbox"/> No <input type="checkbox"/>
If YES, how many beds for critically ill patients do you have currently:	

Number of Influenza A(H1N1) (Swine Flu) Cases in your hospital since onset of the outbreak:

Number of confirmed cases: _____	as of ___ / ___ / ___ dd/mm/yyyy	<input type="checkbox"/> Unknown
Number of probable cases: _____	as of ___ / ___ / ___ dd/mm/yyyy	<input type="checkbox"/> Unknown
Number of suspected cases: _____	as of ___ / ___ / ___ dd/mm/yyyy	<input type="checkbox"/> Unknown

Number of Influenza A(H1N1) (Swine Flu) cases in your hospital since the date of the index patient being enrolled in this study:

Number of confirmed cases: _____	as of ___ / ___ / ___ dd/mm/yyyy	<input type="checkbox"/> Unknown
Number of probable cases: _____	as of ___ / ___ / ___ dd/mm/yyyy	<input type="checkbox"/> Unknown
Number of suspected cases: _____	as of ___ / ___ / ___ dd/mm/yyyy	<input type="checkbox"/> Unknown

Influenza A H1N1(Swine Flu) ICU Study - Patient Case Report Form (Page 3)

Eligibility Criteria – To be eligible, a patient should fulfill one of (A) AND (B)

A.

A **confirmed case** of influenza A H1N1 (Swine Flu) virus infection is defined as a person with an acute febrile respiratory illness with laboratory confirmed influenza A H1N1 (Swine Flu) virus infection (for example at CDC/National Medical Laboratory) by one or more of the following tests: real-time RT-PCR OR viral culture.

OR

A **probable case** of influenza A H1N1 (Swine Flu) virus infection is defined as a person with an acute febrile respiratory illness who is:
-positive for influenza A, but negative for H1 and H3 by influenza RT-PCR, or
-positive for influenza A by an influenza rapid test or an influenza immunofluorescence assay (IFA) plus meets criteria for a suspected case.

OR

A **suspected case** of influenza A H1N1 (Swine Flu) virus infection is defined as a person with acute febrile respiratory illness with onset

-within 7 days of close contact with a person who is a confirmed case of influenza A H1N1 (Swine Flu) virus infection, or

-within 7 days of travel to a community either locally or internationally where there are one or more confirmed influenza A H1N1 (Swine Flu) cases, or resides in a community where there are one or more confirmed influenza A H1N1 (Swine Flu) cases.

AND

B.

Admitted to Adult or Pediatric intensive care unit (ICU) / area of the hospital where critically ill patients receive treatment OR has received $FiO_2 \geq 60\%$ OR has received invasive or non-invasive mechanical ventilation OR is receiving continuous intravenous vasoactive medications OR has died, during current hospitalization.

Site City: _____ Hospital: _____ Site Number: _____ Patient Number: _____

Influenza A H1N1(Swine Flu) ICU Study - Patient Case Report Form (Page 4)

Demographic details

Sex:	Male <input type="checkbox"/>	Female <input type="checkbox"/>
Age OR Date of Birth:	____/____/____ (dd/mm/yyyy) OR ____ (yrs)	
Health Care Worker:	Yes <input type="checkbox"/>	No <input type="checkbox"/> Unknown <input type="checkbox"/>
Body Weight:	____ kg <input type="checkbox"/>	OR ____ lbs <input type="checkbox"/>
Height:	____ cm <input type="checkbox"/>	OR ____ inches <input type="checkbox"/>
Influenza Vaccination in 2008-2009:	Yes <input type="checkbox"/>	No <input type="checkbox"/> Unknown <input type="checkbox"/>
Travel to or residence in Mexico within 7 days of onset of symptoms?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Unknown <input type="checkbox"/>
Contact with person with influenza-like symptoms within 7 days of onset of Flu?	Yes <input type="checkbox"/>	No <input type="checkbox"/> Unknown <input type="checkbox"/>

Influenza A H1N1 (Swine Flu) Symptoms During Illness

Fever ≥ 38°C	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Gastrointestinal (nausea/vomiting or diarrhea, etc)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Headache	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Myalgias	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Respiratory (cough, dyspnea or wheeze, etc)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Weakness	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Current Co-morbidities/Conditions (medical record OR patient / surrogate documentation)

Diabetes (Type I or II)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Pregnancy	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Ischemic Heart Disease / Angina	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Congestive Heart Failure	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Congenital Heart Disease	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Valvular Heart Disease	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Arrhythmia	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Bronchopulmonary Dysplasia	Yes <input type="checkbox"/>	No <input type="checkbox"/>
COPD	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Asthma	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Smoker (ever)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Other Chronic Lung Disease	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Hypertension	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Cerebrovascular Disease	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Peripheral Vascular Disease	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Other Neurological Disease	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Metastatic Solid Cancer	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Hematologic Malignancy	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Gastrointestinal Disease	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Cirrhosis of the Liver	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Seizure Disorder	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Cerebral Palsy/Development Delay	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Scoliosis	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Spina Bifida	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Chronic Renal Insufficiency	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Immunosuppression: _____	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Other Co-morbidities (specify)					

Time Course and Outcomes (follow to 28 days)

Date of onset of initial symptoms	____/____/____ (dd/mm/yyyy)
Hospital admission date	____/____/____ (dd/mm/yyyy)
ICU admission date	____/____/____ (dd/mm/yyyy)
Invasive mechanical ventilation in hospital?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Non-invasive mechanical ventilation in hospital?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Date any ventilation initiated	____/____/____ (dd/mm/yyyy)
Date of final extubation (i.e. not re-intubated and not receiving non-invasive ventilation within 48h of this date)	____/____/____ (dd/mm/yyyy)
Date of live ICU discharge (if applicable)	____/____/____ (dd/mm/yyyy)
Date of live hospital discharge (if applicable)	____/____/____ (dd/mm/yyyy)
Date of Death (if applicable)	____/____/____ (dd/mm/yyyy)
Location of Death (if applicable)	Hospital Ward <input type="checkbox"/> ICU <input type="checkbox"/> Other <input type="checkbox"/>
Cause of death (if applicable)	Primary respiratory <input type="checkbox"/> Non-respiratory <input type="checkbox"/> Specify Cause _____
Alive at day 14 (day 1=1st day of ICU admission)?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Requires O ₂ ?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Requires ventilation?	Invasive Yes <input type="checkbox"/> No <input type="checkbox"/> Non-Invasive Yes <input type="checkbox"/> No <input type="checkbox"/>
Alive at day 28 (day 1=1st day of ICU admission)?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Requires O ₂ ?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Requires ventilation?	Invasive Yes <input type="checkbox"/> No <input type="checkbox"/> Non-Invasive Yes <input type="checkbox"/> No <input type="checkbox"/>

Treatments (at any time during Influenza illness)

Oseltamivir (Tamiflu)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Start: ____/____/____ Stop: ____/____/____ (dd/mm/yyyy)
Zanamivir (Relenza)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Start: ____/____/____ Stop: ____/____/____ (dd/mm/yyyy)
Amantadine (Symmetrel)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Start: ____/____/____ Stop: ____/____/____ (dd/mm/yyyy)
Rimantadine (Flumadine)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Start: ____/____/____ Stop: ____/____/____ (dd/mm/yyyy)
Antibiotics	Yes <input type="checkbox"/> No <input type="checkbox"/>	Start: ____/____/____ Stop: ____/____/____ (dd/mm/yyyy)
Corticosteroids	Yes <input type="checkbox"/> No <input type="checkbox"/>	Start: ____/____/____ Stop: ____/____/____ (dd/mm/yyyy)
Influenza Vaccination	Yes <input type="checkbox"/> No <input type="checkbox"/>	____/____/____ (dd/mm/yyyy)
Other Influenza-specific medication	1. _____	____/____/____ (dd/mm/yyyy)
	2. _____	____/____/____ (dd/mm/yyyy)

Microbiology

Positive <i>blood</i> culture (specify organism <i>Genus species</i>) at any point during hospitalization	1. _____	4. _____
	2. _____	5. _____
	3. _____	6. _____
Positive <i>respiratory</i> culture (specify organism <i>Genus species</i>) at any point during hospitalization	1. _____	4. _____
	2. _____	5. _____
	3. _____	6. _____

Site City: _____ Hospital: _____ Site Number: _____ Patient Number: _____
Influenza A H1N1 (Sine Flu) ICU Study - Patient Case Report Form (Page 6)

All measurements at 0800 or closest time measured on study days 1, 3, 7, 14, 28

Assist control AC / Pressure Support PS / High Frequency Oscillation HFO / Synchronized Intermittent Mandatory SIMV / Non-invasive NIV / Face Mask FM / Nasal prongs NP / Other O	Day 1 Date: ____/____/____ (dd/mm/yyyy)	Day 3 Date: ____/____/____ (dd/mm/yyyy)	Day 7 Date: ____/____/____ (dd/mm/yyyy)	Day 14 Date: ____/____/____ (dd/mm/yyyy)	Day 28 Date: ____/____/____ (dd/mm/yyyy)
Ventilatory mode (see codes above)					
FiO2 (0.21-1.0)					
Tidal volume (use expiratory) ml					
Set PEEP cmH ₂ O					
Peak pressure (PEEP + driving Pressure) cmH ₂ O					
Plateau pressure (if measured) cmH ₂ O					
Mean airway pressure cmH ₂ O					
Respiratory rate (total) or Frequency (if HFO)					
Enter Other e.g. "Nitric", "Prone", "ECMO"					
ABG / Saturation / CXR ("ND" if not done)					
pH					
PaCO ₂ mmHg <input type="checkbox"/> kPa <input type="checkbox"/>					
PaO ₂ mmHg <input type="checkbox"/> kPa <input type="checkbox"/>					
HCO ₃ mEq/L					
Saturation (Pulse oximetry if no ABG)					
Chest X-ray (no. quadrants/unilat-bilateral) e.g. 1U	1/2/3/4 U/B	1/2/3/4 U/B	1/2/3/4 U/B	1/2/3/4 U/B	1/2/3/4 U/B
Barotrauma (pneumothorax/mediastinum)	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Organ Dysfunction ("ND" if not done)					
MAP (lowest) despite fluids mmHg					
Systolic BP (lowest) despite fluids mmHg					
Heart Rate (highest) beats per minute					
Renal oliguria: <500 ml/day is 3 <200 ml/day is 4	3 or 4	3 or 4	3 or 4	3 or 4	3 or 4
Vasopressors in mcg/kg/min (dop ≤5 or dob or milr is 2 ; dop 5-15 or epi ≤0.1 or nor ≤0.1 or vasopressin or phenyl is 3 ; dop >15 or epi >0.1 or nor >0.1 is 4)	2 or 3 or 4	2 or 3 or 4	2 or 3 or 4	2 or 3 or 4	2 or 3 or 4
Creatinine level <input type="checkbox"/> umol/L <input type="checkbox"/> mg/dL					
Platelet count					
Platelet ↓ by 50% during current admission	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Bilirubin level <input type="checkbox"/> umol/L <input type="checkbox"/> mg/dL					
White Blood Cell Count					
AST/SGOT					
Coagulation <input type="checkbox"/> INR or <input type="checkbox"/> PT (sec)					
Glasgow coma scale (see page 7 for calculation)					
Pupils (R =Both Reactive; F =Both Fixed)					

Site City: _____ Hospital: _____ Site Number: _____ Patient Number: _____
Influenza A H1N1(Swine Flu) ICU Study-Patient Case Report Form (Page 7) Adult APACHE II
 For Patients ≥18 years of age: calculate from the most abnormal values in 1st 24 h of ICU admission

A. Physiologic Variables Points

PHYSIOLOGIC VARIABLE	Raw Data	HIGH ABNORMAL RANGE					LOW ABNORMAL RANGE				PT SCORE	
		4	3	2	1	0	1	2	3	4		
Temperature - core (°C)		> 41	39-40.9			38.5-38.9	36-38.4	34-35.9	32-33.9	30-31.9	≤ 29.9	
MAP (mmHg)		≥ 160	130-159	110-129			70-109		50-69		≤ 49	
Heart Rate		≥ 180	140-179	110-139			70-109		55-69	40-54	≤ 39	
Respiratory Rate (non-ventilated or ventilated)		≥ 50	35-49			25-34	12-24	10-11	6-9		≤ 5	
Oxygenation: [A-aDO ₂ = (FiO ₂ x 710) - (PCO ₂ x 1.25) - PO ₂]						FiO ₂ =	PCO ₂ =	PO ₂ =				
a. FiO ₂ > 0.5 record A-aDO ₂		≥ 500	350-499	200-349		< 200						
b. FiO ₂ < 0.5 record only PaO ₂						PO ₂ > 70	PO ₂ 61-70		PO ₂ 55-60	PO ₂ < 55		
Arterial pH		≥ 7.7	7.6-7.69			7.5-7.59	7.33-7.49		7.25-7.32	7.15-7.24	< 7.15	
Serum Na (mmol/L)		≥ 180	160-179	155-159	150-154	130-149			120-129	111-119	≤ 110	
Serum K (mmol/L)		> 7	6-6.9		5.5-5.9	3.5-5.4	3-3.4	2.5-2.9			< 2.5	
Serum Creatinine ** (μmol/L) (mg/dL)		> 305	170-304	130-169		53-129		<53				
		>3.5	2-3.4	1.5-1.9		0.6-1.4		<0.6				
Hematocrit (%)		≥ 60		50-59.9	46-49.9	30-45.9			20-29.9		< 20	
WBC (total/mm ³)		≥ 40		20-39.9	15-19.9	3-14.9			1-2.9		< 1	
Glasgow Coma Score (GCS)		Score = 15 minus actual GCS (see below)										
Serum HCO ₃ (venous mmol/L) - not preferred, use if no ABG's		≥ 52	41-51.9			32-40.9	22-31.9		18-21.9	15-17.0	< 15	

ACUTE PHYSIOLOGY SCORE (APS): Sum of the 12 individual variable points =

B. Age Points - Assign points to age as follows:

AGE (yrs):	POINTS
< 44	0
45-54	2
55-64	3
65-74	5
≥ 75	6

AGE SCORE =

Chronic Health Points - If the patient has:

severe organ system insufficiency (see below) or is immunocompromised assign points as follows:

- a. For nonoperative or emergency postoperative pt -- 5 points
- b. For elective postoperative pt -- 2 points

CHRONIC HEALTH SCORE =

D. APACHE II SCORE - Sum of A + B + C

A. APS points	
B. Age points	
C. Chronic Health points	

APACHE II SCORE =

GLASCOW COMA SCALE		
Parameter	Response	Points Assigned (please circle)
Eyes Open	Spontaneously	4
	On spoken command	3
	On pain	2
	No response	1
Best Motor Response	To spoken command	6
	To painful stimulus:	
	Localized pain	5
	Flexion withdrawal	4
	Flexion abnormal	3
	Extension	2
Best Verbal Response	No response	1
	(Not on ventilator)	
	Oriented & converses	5
	Disoriented & converses	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
	(On ventilator)	
Appears oriented	5	
Questionably oriented	3	
Generally unresponsive	1	

CHRONIC HEALTH DEFINITIONS

Organ insufficiency or immuno-compromised state evident prior to this hosp admission and conform to the following criteria:

LIVER: Biospy proven cirrhosis and documented portal hypertension; episodes of past upper GI bleeding attributed to portal hypertension; or prior episodes of hepatic failure/encephalopathy/coma

CARDIOVASCULAR: New York Heart Association Class IV

RESPIRATORY: Chronic restrictive, obstructive, or vascular disease resulting in severe exercise restriction ie. unable to climb stairs or perform household duties; or documented chronic hypoxia, hypercapnia, secondary polycythemia, severe pulmonary hypertension (>40 mmHg), or respirator dependency

RENAL: Receiving chronic dialysis

IMMUNO-COMPROMISED: The patient has received therapy that suppresses resistance to infection ie. Immuno-suppression, chemotherapy, radiation, long term or recent high dose steroids, or has a disease that is sufficiently advanced to suppress resistance to infection (i.e. leukemia, lymphoma, AIDS)

**** Double Points for Acute Renal Failure**

Site City: _____ Hospital: _____ Site Number: _____ Patient Number: _____
Influenza A H1N1(Swine Flu) ICU Study - Patient Case Report Form (Page 8)-PEDIATRIC PRISM III Score on Admission to ICU

For Patients to 17 years of age: identify the "highest score" i.e. worst reading for first 12hr in ICU. Circle the appropriate units. GCS: use the lowest value. If the patient is sedated, paralyzed or intubated, record the estimated GCS before these events and/or use best-documented notation.

Variable	Actual Value	1	2	3	4	5	6	7	11	Points
Systolic BP (mmHg)*										
Neonate				40 - 55				< 40		
Infant				45 - 65				< 55		
Child				55 - 75				< 55		
Adolescent				65 - 85				< 65		
Heart Rate (beats/min)*										
Neonate				215 - 225				> 225		
Infant				215 - 225				> 225		
Child				185 - 205				> 205		
Adolescent				145 - 155				> 155		
Temperature (circle route) (Rectal/Oral/Blood/Axillary)				< 33 ⁰ C or > 40.0 ⁰ C						
Pupillary Reflexes								1 fixed, 1 reactive	both fixed	
GCS (lowest)						stupor/coma (GCS < 8)				
Acidosis										
pH			7.0-7.28 or 7.48-7.55	<7.55				< 7.0 or total CO ₂ < 5		
Total CO ₂			or total CO ₂ 5-16.9							
Total CO₂ (mmol/L)					> 34.0					
pH			7.48 - 7.55	> 7.55						
PaO₂ (mmHg)				42.0 - 49.9			< 42.0			
PaCO₂ (mmHg)		50 - 75		> 75						
Glucose			>11.0							
mmol/L			> 200							
mg/dL										
Potassium (mmol/L)				> 6.9						
Creatinine* μmol/L(mg/dL)										
Neonate			> 75 (0.85)							
Infant			> 80 (0.90)							
Child			> 80 (0.90)							
Adolescent			>115 (1.30)							
BUN* mmol/L(mg/dL)										
Neonate				> 4.3 (11.9)						
All other ages				> 5.4 (14.9)						
WBC 10⁹/L (cells/mm³)					< 3.0 (3000)					
PT or PTT* (seconds)										
Neonate				PT > 22; PTT > 85						
All other ages				PT > 22; PTT > 57						
Platelet Count (cells/mm³) (10⁹/L)			100,000 - 200,000		50,000-99,999	<50,000				
			100 - 200		50-90	<50				
*Neonate (0 < 1 month) Infant (1 month - 1 year) Child (1 - 12 years) Adolescent (>12-17 years)									Total score:	