

## Ketamine Dosing

The formula for calculating IBW is:

*Men* = 50 kg + 2.3 kg for every inch over 5 foot tall.

### Males

Hgt	Kgs	Pain Control 0.3mg/kg IV/IO	Chemical Restraint 4mg/kg IM only	Medication assisted Intubation 2mg/kg IV/IO
5'0"	50	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'1"	52.3	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'2"	54.6	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'3"	56.9	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'4"	59.2	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'5"	61.5	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'6"	63.8	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'7"	66.1	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'8"	68.4	20mg 0.4mL	250mg 5 mL	125mg 2.5 mL
5'9"	70.7	20mg 0.4mL	300mg 6 mL	150mg 3 mL
5'10"	73	20mg 0.4mL	300mg 6 mL	150mg 3 mL
5'11"	75.3	25mg 0.5mL	300mg 6 mL	150mg 3 mL
6'0"	77.6	25mg 0.5mL	300mg 6 mL	150mg 3 mL
6'1"	79.9	25mg 0.5mL	300mg 6 mL	150mg 3 mL
6'2"	82.2	25mg 0.5mL	350 mg 7 mL	175mg 3.5 mL
6'3"	84.5	25mg 0.5mL	350 mg 7 mL	175mg 3.5 mL
6'4"	86.8	30mg 0.6mL	350 mg 7 mL	175mg 3.5mL
6'5"	89.1	30mg 0.6mL	400mg 8 mL	200mg 4.0mL
6'6"	91.4	30mg 0.6mL	400mg 8 mL	200mg 4.0mL
6'7"	93.7	30mg 0.6mL	400mg 8 mL	200mg 4.0mL

*Applicable for Ketamine 500mg/10ml concentration only*

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**Ketamine Dosing**

The formula for calculating IBW is:  
Women = 45.5 kg + 2.3 kg for every inch over 5 foot tall.

**Females**

Hgt	Kgs	Pain Control 0.3mg/kg IV/IO	Chemical Restraint 4mg/kg IM only	Medication Assisted Intubation 2mg/kg IV/IO
4'8"	36.3	10mg 0.2 mL	150mg 3 mL	75mg 1.5 mL
4'9"	38.6	10mg 0.2 mL	150mg 3 mL	75mg 1.5 mL
4'10"	40.9	10mg 0.2 mL	150mg 3 mL	75mg 1.5 mL
4'11"	43.2	15mg 0.3 mL	150mg 3 mL	75mg 1.5 mL
5'0"	45.5	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'1"	47.8	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'2"	50.1	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'3"	52.4	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'4"	54.7	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'5"	57	15mg 0.3 mL	200mg 4 mL	100mg 2 mL
5'6"	59.3	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'7"	61.6	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'8"	63.9	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'9"	66.2	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'10"	68.5	20mg 0.4 mL	250mg 5 mL	125mg 2.5 mL
5'11"	70.8	20mg 0.4 mL	300mg 6 mL	150mg 3 mL
6'0"	73.1	25mg 0.5ml	300mg 6 mL	150mg 3ml
6'1"	75.4	25mg 0.5ml	350mg 7 ml	175mg 3.5ml
6'2"	77.7	25mg 0.5ml	350mg 7 ml	175mg 3.5ml
6'3"	80	25mg 0.5ml	350mg 7 ml	175mg 3.5ml
6'4"	82.3	25mg 0.5ml	350mg 7 ml	175mg 3.5ml

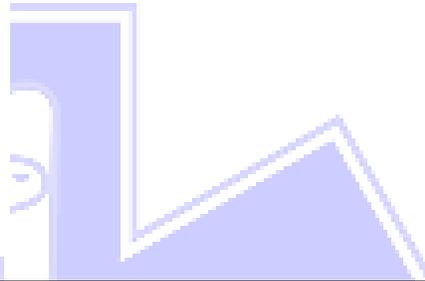
*Applicable for Ketamine 500mg/10ml concentration only*

## Quick Reference Peds Weight/ Vital Signs

**\*\*Per Memorial EMS System Protocol, DO NOT EXCEED THE ADULT DOSE WHEN ADMINISTERING PEDIATRIC MEDICATIONS.**

Approximate weight based on age:

<u>Age</u>	<u>Weight</u>
Newborn	3 kg / 7 lbs
2 months	5 kg / 8 lbs
6 months	7 kg / 15 lbs
1 year	10 kg / 22 lbs
5 years	20 kg / 44 lbs
10 years	30 kg / 66 lbs
15 years	Adult values



Normal Pediatric Vital Sign Ranges			
	Heart Rate	Respiratory Rate	Minimum Blood Pressure
Infant	100-160 bpm	30-60 rpm	> 60mmHg systolic
Toddler	90-150 bpm	24-40 rpm	> 70mmHg systolic
Preschooler	80-140 bpm	22-34 rpm	> 75mmHg systolic
School Age	70-120 bpm	18-30rpm	> 80mmHg systolic
Adolescent	60-100 bpm	12-16 rpm	> 90mmHg systolic

**Quick Reference Peds Morphine/Fentanyl Dosing**

<b>Morphine Sulfate</b>	0.1mg/kg IV/IM ( <b>Max single dose: 4 mg</b> ) every 15 minutes (I.V.) and 30 minutes (I.M.) to reduce the patient's anxiety and severity of pain.
<b>Fentanyl</b>	1mcg/kg IV over 2 minutes for pain ( <b>Max single dose: 50mcg</b> ). Fentanyl 1mcg/kg may be repeated every 15 minutes (I.V.). If unable to establish IV access may administer Intranasal Fentanyl. ( <b>Max single dose: 100mcg Intranasal</b> ). <i>See intranasal dosing sheet below.</i>

**Intranasal Fentanyl Dosing Chart**

Patient Weight	Dosage (2mcg/kg)	Dead Space Volume
3-5kg (6-11 Lbs)	10 mcg (0.2 ml)	(+0.1 ml)
6-10kg (13-22 Lbs)	20 mcg (0.4. ml)	(+0.1 ml)
11-15kg (24-33 Lbs)	30 mcg (0.6 ml)	(+0.1 ml)
16-20kg (35-44 Lbs)	40 mcg (0.8 ml)	(+0.1 ml)
21-25kg (46-55 Lbs)	50 mcg (1.0 ml)	(+0.1 ml)
26-30kg (57-66 Lbs)	60 mcg (1.2 ml)	(+0.1 ml)
31-35kg (68-77 Lbs)	70 mcg (1.4 ml)	(+0.1 ml)
36-40kg (79-88 Lbs)	80 mcg (1.6 ml)	(+0.1 ml)
41-45kg (90-99 Lbs)	90 mcg (1.8 ml)	(+0.1 ml)
46-50kg (101-110 Lbs)	100 mcg (2.0 ml)	No Extra
51-55kg (112-121 Lbs)	100 mcg (2.0 ml)	No Extra
56-60kg (123-132 Lbs)	100 mcg (2.0 ml)	No Extra
61-70kg (134-154 Lbs)	100 mcg (2.0 ml)	No Extra
71-80kg (156-176 Lbs)	100 mcg (2.0 ml)	No Extra
81-90kg (178-198 Lbs)	100 mcg (2.0 ml)	No Extra
91-100kg (200-220 Lbs)	100 mcg (2.0 ml)	No Extra

\*\*Max 1 ml per nare

## Quick Reference Peds Versed Dosing

Intranasal Midazolam (Versed) Dosing Chart					
Patient Age (years)	Weight	5mg/5mL Concentration		10mg/2mL Concentration	
		Dose (mg)	Dose (mL)	Dose (mg)	Dose (mL)
Neonate	3kg (6) Lbs	0.6 mg	0.7 ml	0.6 mg	0.3 mL
< 1 yr.	6kg (13) Lbs	1.2 mg	1.3 ml	1.2 mg	0.4 mL
1	10kg (22) Lbs			2.0 mg	0.5 mL
2	14kg (30) Lbs			2.8 mg	0.7 mL
3	16 kg (35) Lbs			3.2 mg	0.8 mL
4	18kg (40) Lbs			3.6 mg	0.9 mL
5	20kg (44) Lbs			4.0 mg	1.0 mL
6	22kg (48) Lbs			4.4 mg	1.0 mL
7	24kg (53) Lbs			4.8 mg	1.1 mL
8	26kg (57) Lbs			5.2 mg	1.2 mL
9	28kg (62) Lbs			5.6 mg	1.3 mL
10	30kg (66) Lbs			6.0 mg	1.4 mL
11	32kg (70) Lbs			6.4 mg	1.4 mL
12	34kg (75) Lbs			6.8 mg	1.5 mL
Small Teenager	40kg (88) Lbs			8.0 mg	1.8 mL
Full Grown Teen or Adult	>50kg (>110) Lbs			10.0 mg	2.0 mL

**Midazolam (Versed): 0.2mg/kg IM**  
 (Max single dose: 5mg)  
**Midazolam (Versed): 0.1mg/kg IV/IO**  
 (Max single dose: 2.5 mg)  
 over 1 minute for seizure activity.

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## Pediatric Cyanokit dosing

### Pediatric Cyanokit dosing

COLOR	DOSE	WEIGHT
GREY	14 ml _____ (350mg)	5 KG
PINK	20 ml _____ (490mg)	7 KG
RED	25 ml _____ (630mg)	9 KG
PURPLE	31 ml _____ (770mg)	11 KG
YELLOW	39 ml _____ (980mg)	14 KG
WHITE	50 ml _____ (1260mg)	18 KG
BLUE	62 ml _____ (1540mg)	22 KG
ORANGE	78 ml _____ (1960mg)	28 KG
GREEN	100 ml _____ (2520mg)	36 KG

!!MUST USE A SYRINGE TO PUSH OVER 15 MINUTES!!

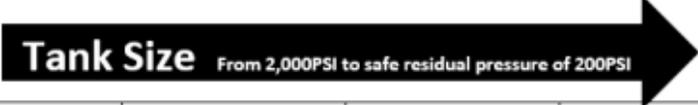
**ADULT DOSE IS 200ml over 15mins IV (5000mg)**

## Post ROSC Cardiac Arrest Checklist

- ASSESS CO<sub>2</sub> (should be >20 with good waveform).
- FINGER on pulse maintain, for 5 minutes. DO NOT TRANSPORT; prepare for transport during the 5-minute waiting period.
- Continuous visualization of cardiac monitor rhythm.
- Check O<sub>2</sub> supply and pulse O<sub>x</sub> to TITRATE to SaO<sub>2</sub> 94-99%.
- Do not try to obtain a “normal” ETCO<sub>2</sub> by increasing respiratory rate.
- Obtain 12 lead EKG, send for consult or STAT STEMI if possible, concern for STEMI on EKG, expedite CONTROLLED movement for transport; prepare for transport during the 5-minute waiting period.
- Assess for & TREAT bradycardias < 60 bpm.
- IVF set-up on pressure bag in preparation for hypotension.
- Prepare (spike) Norepinephrine in preparation for hypotension.
- Obtain B/P -- Norepinephrine indicated for SBP < 90mmHg or MAP < 65mmHg.
- Evaluate for post-resuscitative airway placement (e.g., ETT).
- If available place mechanical CPR device on patient before movement, in anticipation of possible re-arrest during transport.
- When patient is moved, perform CONTINUOUS PULSE CHECK and MONITORING of cardiac rhythm – pads must be on patient before any movement.
- Mask is available for BVM in case advanced airway fails.
- Once in the ambulance, confirm pulse, breath sounds, SpO<sub>2</sub>, EtCO<sub>2</sub>, and cardiac rhythm.
- Appropriate personnel and number of personnel for transport in case of re-arrest.

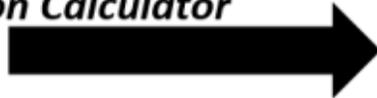
## Oxygen Consumption Calculator

In EMS, Oxygen consumption and the time it takes to deplete an Oxygen tank are dependent on multiple factors, including tank size, tank pressure, percentage of Oxygen being administered (in some cases), and rate of consumption (LPM). This appendix will help the EMS professional in determining the Oxygen consumption for the safe transport of a patient requiring Oxygen therapy. Please note: To safely transport a patient, the EMS crew must factor 150% of transport time. This will allow for adverse weather conditions, traffic issues, and any other potential delays a crew could encounter.

		 <b>Tank Size</b> From 2,000PSI to safe residual pressure of 200PSI				
 <b>O2 Use</b>		<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>K</b>
		About 1.5ft tall	About 2ft tall	About 3.5ft tall	About 4ft tall	About 4.5ft tall
	<b>2</b> Liters/Min	2 hours 50 minutes	5 hours, 5 minutes	10 hours 10 minutes	25 hours 30 minutes	53 hours 15 minutes
	<b>6</b> Liters/Min	51 minutes	1 hour 40 minutes	3 hours 20 minutes	8 hours 30 minutes	17 hours 45 minutes
	<b>8</b> Liters/Min	38 minutes	1 hour 15 minutes	2 hours 30 minutes	6 hours 20 minutes	13 hours 15 minutes
	<b>10</b> Liters/Min	30 minutes	1 hour	2 hours	5 hours 5 minutes	10 hours 35 minutes
<b>15</b> Liters/Min	20 minutes	40 minutes	1 hour 20 minutes	3 hours 20 minutes	7 hours 5 minutes	

\*\*\*All time values are approximate\*\*\*

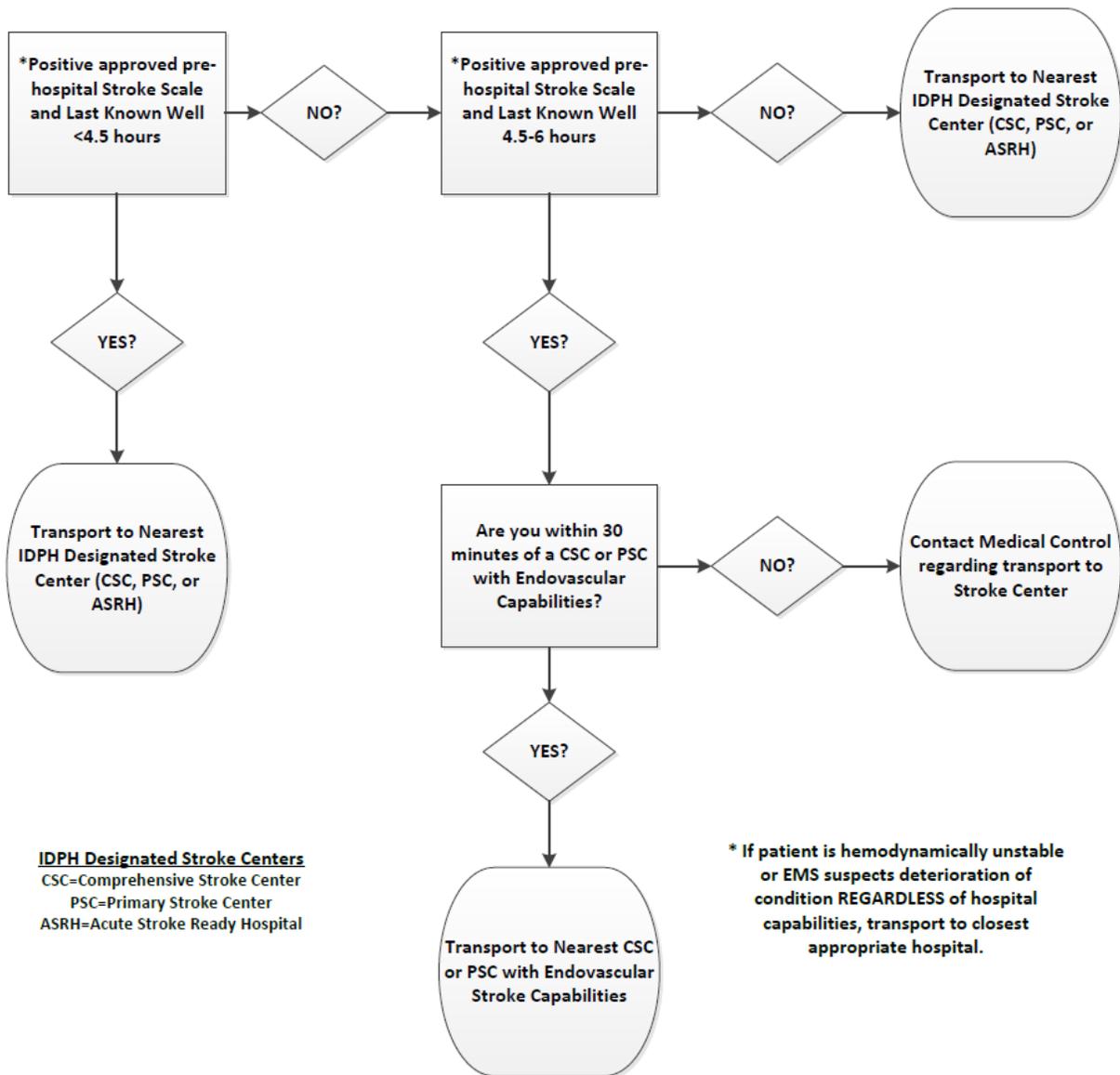
**Oxygen Cylinder Duration Calculator**



## Suspected Stroke Protocol

# Region 3 Stroke Transfer Protocol

Approved by: EMS Regional committee  
 Date: 7.16.2014



<http://www.ihatoday.org/health-care-issues/hospital-preparedness.aspx>

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**Emergency Childbirth Record**  
(Complete and attach to the newborn patient care record)

1. Presentation (head or feet): \_\_\_\_\_
2. Date of Birth: \_\_\_\_\_
3. Time of Birth (*military time*): \_\_\_\_\_
4. Nuchal Cord:   **YES**       **NO**       # of times cord wrapped around neck: \_\_\_\_\_
5. Time membranes ruptured (*military time*): \_\_\_\_\_
6. Appearance of amniotic fluid:   **CLEAR (Cloudy)**   **MECONIUM**   **BLOOD-TINGED**
7. **APGAR Score:** Must be completed at **1 minute** and again at **5 minutes**.

<i>Element</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>1 minute Score</i>	<i>5 minute Score</i>
<b>Appearance (Color)</b>	Body and extremities blue, pale	Body pink, extremities blue	Completely pink		
<b>Pulse rate</b>	Absent	< 100 bpm	> 100 bpm		
<b>Grimace (Irritability)</b>	No response	Grimace	Cough, sneeze, cry		
<b>Activity (Muscle tone)</b>	Limp	Some flexion of extremities	Active motion		
<b>Respirations</b>	Absent	Slow and irregular	Strong cry		
<b>TOTAL SCORE:</b>					

8. Time placenta delivered (*military time*): \_\_\_\_\_   **INTACT**   **NOT INTACT**
9. Number of vessels in cord: \_\_\_\_\_
10. Infant resuscitation:   **STIMULATION only**       **OXYGEN**       **O<sub>2</sub> with BVM**
  - **CPR**   **Time CPR began:** \_\_\_\_\_   **Time CPR terminated:** \_\_\_\_\_
11. Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
12. Signature & ID# of Paramedic/EMT: 1. \_\_\_\_\_ 2. \_\_\_\_\_

## SCHOOL BUS INCIDENT FORM/ EMS MULTIPLE CASUALTY RELEASE FORM



All individuals on the bus, ages 18 and older, should sign in the indicated space next to their name. A parent or legal guardian should sign in the indicated space next to their child's name. A signature indicates that no EMS treatment/ transport is requested at this time.

Date	Location	School District		Bus #
Time of Incident	Department Alarm/ Run Number	Total Patients	Total Transported	Total Refused
Adult Name (age 18+)	Function/Role	Address & Phone Number	Signature	
Child/Student Name	Age/DOB	Address & Phone Number	Signature of Parent or Guardian 18 years or older	

EMS has determined those persons listed above do not require EMS treatment/ transport. Medical Control was contacted and approved release to the custody of school officials, parent or guardian, or to self if age 18 or older.

\_\_\_\_\_  
Name of EMS Provider

\_\_\_\_\_  
Name of School-Authorized Representative

\_\_\_\_\_  
EMS Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
School-Representative Signature

\_\_\_\_\_  
Date

## NOTICE OF EMERGENCY MEDICAL SERVICES RESPONSE TO A MINOR

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Date: \_\_\_\_\_ From: \_\_\_\_\_

Child's Name: \_\_\_\_\_

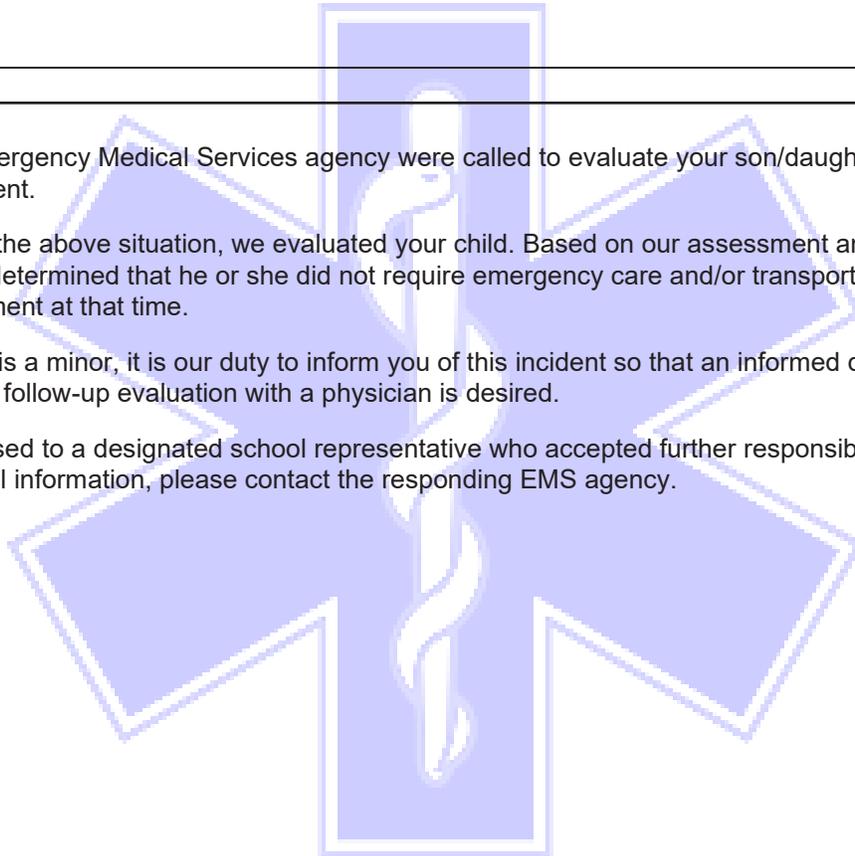
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Members of our Emergency Medical Services agency were called to evaluate your son/daughter/ward today because of an incident.

After responding to the above situation, we evaluated your child. Based on our assessment and statements made by the child, it was determined that he or she did not require emergency care and/or transportation to an Emergency Department at that time.

Whereas your child is a minor, it is our duty to inform you of this incident so that an informed decision can be made as to whether follow-up evaluation with a physician is desired.

The child was released to a designated school representative who accepted further responsibility for the child. If you desire additional information, please contact the responding EMS agency.







## EMS DECISION MAKING CAPACITY CHECKLIST

### ASSESSMENT OF CAPACITY

The patient is able to demonstrate the following:

- Understanding:** The patient is able to comprehend the information being provided by EMS providers regarding illness/injury and the risk and benefits of receiving and/or refusing care.
- Appreciation:** The patient is able to apply the information provided by EMS to their current situation.
- Reasoning:** The patient is able to weigh the risk and benefits of the situation in a rational and logical manner to reach a decision.
- Expression of Choice:** The patient is able to reach a clear decision that is consistent with their values.
- Patient has not expressed suicidal or homicidal thoughts.**

### RESOLUTION *(check all that apply)*

- Med Control contacted.
- This patient has successfully demonstrated the required components of decision-making capacity and is able to make their own decisions. The patient has been explained the risks and benefits of refusing care and is still consistently refusing additional treatment and/or transport. Further details in Refusal Document.
- This patient does not demonstrate the required components of decision-making capacity and cannot refuse care. Leaving this patient unattended risks serious harm and/or death if medical care is not pursued. The patient will be transported to the nearest appropriate facility for assessment and further stabilization. Further details in PCR.

Agency: \_\_\_\_\_ Run #: \_\_\_\_\_

Completed by: \_\_\_\_\_

Signature: \_\_\_\_\_