



# Disposition Instruction Form

## Instructions

The EMS Patient Disposition Information (PDI) form has been designed to be used by EMS personnel to legally document a variety of situations. This duplicate form consists of a single page. The front of the page is used to describe the situation and the back lists a variety of specific patient instructions by complaint.

The form should be used to document any refusal of care by a patient (complete refusal or refusal of specific aspects of care) and to document the patient / guardian's understanding of medical instructions.

To understand the intent of this form, it is probably simplest to walk through several common patient encounter situations.

1. Complete refusal of EMS care or transport: The first box "Patient Refusal" should be marked. In the first section, the appropriate blocks for "paramedic recommendation" should also be marked. This section should be explained to the patient or guardian, who should understand that their refusal may result in complications up to and including death. The patient or guardian should be asked to sign the form, indicating that he/she understands the seriousness of the situation and the information provided. If the situation warrants, the paramedic should explain the risks of the refusal using the patient instructions section and the back of the form for assistance. If the instructions section is used, the appropriate blocks should also be checked.

2. Refusal of a specific procedure (IV therapy, for example): The first box "Patient Refusal" should be marked. In the first section, the specific refused procedure should be marked. The first section should be explained to the patient or guardian, who should understand the potential consequences of their refusal. The patient or guardian should be asked to sign the form, indicating that he/she understands the seriousness of the situation.

3. The box "Patient Instructions" and the appropriate blocks in that section should be marked. This section and the specific instructions (on the back) should all be carefully explained to the patient and/or guardian, who must understand them. The patient or guardian should be asked to sign the form, indicating that he/she understands the instructions and the seriousness of the situation.

In all situations, the top part of the form should be completed, and as much of the signature portion as necessary. It is preferable to have witnesses, particularly if the patient or guardian refuses to sign. The original form should be kept on file, while a duplicate copy should be provided for the patient or guardian.

## Emergency Medical Services (EMS) Patient Disposition Information

PCR Number	<b>Emergency Medical Services (EMS) Patient Disposition Information</b>		
Patient's name	Date of Birth	Date	
Patient's Address	Phone	EMS Professionals Name	No.

<b>PATIENT REFUSAL</b>	<input type="checkbox"/>	<i>This section only applies if this box is marked</i>
	<p><b>The Paramedic has recommended:</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><input type="checkbox"/> Measuring the patient's blood pressure</p> <p><input type="checkbox"/> A backboard and neck collar for the patient</p> <p><input type="checkbox"/> Ambulance transportation for the patient</p> </div> <div style="width: 45%;"> <p><input type="checkbox"/> A complete physical exam of the patient</p> <p><input type="checkbox"/> Giving the patient oxygen</p> <p><input type="checkbox"/> Starting an IV for the patient</p> <p><input type="checkbox"/> Giving the patient medicine _____</p> <p><input type="checkbox"/> Other _____</p> </div> </div> <p>I refuse the care that the Paramedic has recommended. I understand that my refusal may result in serious injury or death to the patient. I accept full responsibility for this decision. I assume all risks and consequences resulting from my refusal of care. I will not hold the EMS service or its officers, agents, or employees responsible for any bad things that happen to the patient because of my refusal.</p> <p>My signature below attests that I understand what has been recommended, what the consequences may be if that is not done, and I still refuse to have the recommended care provided by the EMS service.</p>	

<b>PATIENT INSTRUCTIONS</b>	<input type="checkbox"/>	<i>This section only applies if this box is marked</i>
	<p><b>You have not been evaluated by a doctor.</b></p> <p><b>You should contact or see your doctor immediately.</b></p> <p><b>The patient is being released to:</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p><input type="checkbox"/> Family member</p> <p><input type="checkbox"/> Guardian</p> </div> <div style="width: 35%;"> <p><input type="checkbox"/> Law Enforcement Officer</p> <p><input type="checkbox"/> Other: _____</p> </div> </div> <p><b>Follow the instructions (printed on the back of this form) indicated:</b></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p><input type="checkbox"/> Abdominal Pain</p> <p><input type="checkbox"/> Head Injury</p> <p><input type="checkbox"/> Extremity Injury</p> </div> <div style="width: 30%;"> <p><input type="checkbox"/> Back Pain</p> <p><input type="checkbox"/> Insect Bite/Sting</p> <p><input type="checkbox"/> Vomiting / Diarrhea</p> </div> <div style="width: 35%;"> <p><input checked="" type="checkbox"/> Universal</p> <p><input type="checkbox"/> Fever</p> <p><input type="checkbox"/> Respiratory Distress</p> <p><input type="checkbox"/> Wound Care</p> </div> </div> <p><b>Other instructions:</b> _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	

Guardian's name (printed)	<input type="checkbox"/> Patient	Patient / Guardian Signature	
Guardian's address	<input type="checkbox"/> Guardian	Date of Signatures	EMS Personnel's Signature
<input type="checkbox"/> Same as Patient	<input type="checkbox"/> Refused to Sign		
Witness Signature	Witness Signature	Patient's Physician Name / Phone Number	

# Discharge Instructions

## UNIVERSAL INSTRUCTIONS:

- YOU HAVE NOT RECEIVED A COMPLETE MEDICAL EVALUATION. SEE A PHYSICIAN AS SOON AS POSSIBLE.
- IF AT ANY TIME AFTER YOU HAVE TAKEN ANY MEDICATION, YOU HAVE TROUBLE BREATHING, START WHEEZING, GET HIVES OR A RASH, OR HAVE ANY UNEXPECTED REACTION, CALL 911 IMMEDIATELY.
- IF YOUR SYMPTOMS WORSEN AT ANY TIME, YOU SHOULD SEE YOUR DOCTOR, GO TO THE EMERGENCY DEPARTMENT OR CALL 911.

## ABDOMINAL PAIN:

- Abdominal pain is also called belly pain. Many illnesses can cause abdominal pain and it is very difficult for EMS to identify the cause.
- Take your temperature every 4 hours.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- Your pain gets worse or is now only in 1 area
- You vomit (throw up) blood or find blood in your bowel movement
- You become dizzy or faint
- Your abdomen becomes distended or swollen
- You have a temperature over 100° F
- You have trouble passing urine
- You have trouble breathing

## BACK PAIN:

- Apply heat to the painful area to help relieve pain. You may use a warm heating pad, whirlpool bath, or warm, moist towels for 10 to 20 minutes every hour.
- Stay in bed as much as possible the first 24 hours.
- Begin normal activities when you can do them without causing pain.
- When picking things up, bend at the hips and knees. Never bend from the waist only.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- You have shooting pains into your buttocks, groin, legs, or arms or the pain increases.
- You have trouble urinating or lose control of your stools or urine.
- You have numbness or weakness in your legs, feet, arms, or hands.

## FEVER:

- Always take medications as directed. Tylenol and Ibuprofen can be taken at the same time.
- If you are taking antibiotics, take them until they are gone, not until you are feeling better.
- Drink extra liquids (1 glass of water, soft drink or gatorade per hour of fever for an adult)
- If the temperature is above 103° F, it can be brought down by a sponge bath with room temperature water. Do not use cold water, a fan, or an alcohol bath.
- Temperature should be taken every 4 hours .

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- Temperature is greater than 101° F for 24 hours
- A child becomes less active or alert.
- The Temperature does not come down with Acetaminophen (Tylenol) or Ibuprofen with the appropriate dose.

## HEAD INJURY:

- Immediately after a blow to the head, nausea, and vomiting may occur.
- Individuals who have sustained a head injury must be checked, and if necessary awakened, every 2 hours for the first 24 hours.
- Ice may be placed on the injured area to decrease pain and swelling.
- Only drink clear liquids such as juices, soft drinks, or water the first 12 hours after injury..
- Acetaminophen (Tylenol) or Ibuprofen only may be used for pain.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- The injured person has persistent vomiting, is not able to be awakened, has trouble walking or using an arm or leg, has a seizure, develops unequal pupils, has a clear or bloody fluid coming from the ears or nose, or has strange behavior.

## INSECT BITE/STING:

- A bite or sting typically is a red lump which may have a hole in the center. You may have pain, swelling and a rash. Severe stings may cause a headache and an upset stomach (vomiting).
- Some individuals will have an allergic reaction to a bite or sting. Difficulty breathing or chest pain is an emergency requiring medical care.
- Elevation of the injured area and ice (applied to the area 10 to 20 minutes each hour) will decrease pain and swelling.
- Diphenhydramine (Benadryl) may be used as directed to control itching and hives.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- You develop any chest pain or difficulty breathing.
- The area becomes red, warm, tender, and swollen beyond the area of the bite or sting.
- You develop a temperature above 101° F.

## RESPIRATORY DISTRESS:

- Respiratory Distress is also known as shortness of breath or difficulty breathing.
- Causes of Respiratory Distress include reactions to pollen, dust, animals, molds, foods, drugs, infections, smoke, and respiratory conditions such as Asthma and COPD. If possible avoid any causes which produce respiratory distress.
- If you have seen a physician for this problem, take all medication's as directed.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- Temperature is greater than 101° F.
- The cough, wheezing, or breathing difficulty becomes worse or does not improve even when taking medications.
- You have Chest Pain.
- Sputum (spit) changes from clear to yellow, green, grey, or becomes bloody.
- You are not able to perform normal activities.

## EXTREMITY INJURY:

- Extremity Injuries may consist of cuts, scrapes, bruises, sprains, or broken bones (fractures).
- Apply ice on the injury for 15 to 20 minutes each hour for the first 1 to 2 days.
- Elevate the extremity above the heart as possible for the first 48 hours to decrease pain and swelling.
- Use the extremity as pain allows.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- Temperature is greater than 101° F.
- The bruising, swelling, or pain gets worse despite the treatment listed above.
- Any problems listed on the **Wound Care instructions** are noted.
- You are unable to move the extremity or if numbness or tingling is noted.
- You are not improved in 24 to 48 hours or you are not normal in 7 to 10 days.

## VOMITING/DIARRHEA:

- Vomiting (throwing up) can be caused by many things. It is common in children, but should be watched closely.
- Diarrhea is most often caused by either a food reaction or infection.
- Dehydration is the most serious problem associated with vomiting or diarrhea.
- Drink clear liquids such as water, apple juice, soft drinks, or gatorade for the first 12 hours or until things improve. Adults should drink 8 to 12 glasses of fluids per day with diarrhea. Children should drink 1 cup of fluid for each loose bowel movement.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- Temperature is greater than 101° F.
- Vomiting or Diarrhea lasts longer than 24 hours, gets worse, or blood is noted.
- You cannot keep fluids down or no urination is noted in 8 hours.

## WOUND CARE:

- Wounds include cuts, scrapes, bites, abrasions, or puncture wounds.
- If the wound begins to bleed, apply pressure over the wound with a clean bandage and elevate the wound above the heart for 5 to 10 minutes.
- Unless instructed otherwise, clean the wound twice daily with soapy water, and keep the wound dry. It is safe to take a shower but do not place the wound in bath or dish water.
- See a physician for a tetanus shot if it has been 10 years or more since your last one.

### Call or see a physician, go to the emergency department, or call 911 immediately if:

- See the **Extremity Injury instructions**.
- Temperature is greater than 101° F.
- Bruising, swelling, or pain gets worse or bleeding is not controlled as directed above.
- Any signs of infection, such as redness, drainage of yellow fluid or pus, red streaks extending from the wound, or a bad smell is noted.



# On-Scene Physician Form



This EMS service would like to thank you for your effort and assistance. Please be advised that the EMS Professionals are operating under strict protocols and guidelines established by their medical director and the State of North Carolina. As a licensed physician, you may assume medical care of the patient. In order to do so, you will need to:

1. Receive approval to assume the patient's medical care from the EMS Agencies Online Medical Control physician.
2. Show proper identification including current North Carolina Medical Board Registration/ Licensure.
3. Accompany the patient to the hospital.
4. Carry out any interventions that do not conform to the EMS Agencies Protocols. EMS personnel cannot perform any interventions or administer medications that are not included in their protocols.
5. Sign all orders on the EMS Patient Care Report.
6. Assume all medico-legal responsibility for all patient care activities until the patient's care is transferred to another physician at the destination hospital.
7. Complete the "Assumption of Medical Care" section of this form below.

## Assumption of Medical Care

I, \_\_\_\_\_, MD; License #: \_\_\_\_\_

**(Please Print your Name Here)**

have assumed authority and responsibility for the medical care and patient management for

\_\_\_\_\_

**(Insert Patient's Name Here)**

I understand that I must accompany the patient to the Emergency Department. I further understand that all EMS personnel must follow North Carolina EMS Rules and Regulations as well as local EMS System protocols.

\_\_\_\_\_, MD Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_ AM/PM

**(Physician Signature Here)**

\_\_\_\_\_, EMS \_\_\_\_\_ Witness

**(EMS Lead Crew Member Signature Here)**

**(Witness Signature Here)**



# Apgar Score



The Apgar score should be obtained and recorded initially and at 5 minutes with the birth of delivery of any infant.

- Each of the 5 parameters should be scored and then totaled.
- The Minimum score is 0
- The Maximum score is 10

<b>Sign</b>	<b>0</b>	<b>1</b>	<b>2</b>
Heart Rate	Absent	<100 min.	>100 min.
Respiratory Effort	Absent	Weak Cry	Strong Cry
Muscle Tone	Limp	Some Flexion	Good Flexion
Reflex Irritability (when feet stimulated)	No Response	Some Motion	Cry
Color	Blue; Pale	Body Pink Extremities Blue	Pink



# Los Angeles Prehospital Stroke Screen (LAPSS)



1. Patient Name: \_\_\_\_\_  
(last name) (first name)

2. Information/History from:  Patient  Family Member  Other  
\_\_\_\_\_  
(name - if other than patient) (phone)

3. Last known time patient was at baseline or deficit free and awake:  
\_\_\_\_\_  
(military time) (date)

### SCREENING CRITERIA

	Yes	Unknown	No
4. Age > 45	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. History of seizures or epilepsy absent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Symptom duration less than 24 hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. At baseline, patient is not wheelchair bound or bedridden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Blood glucose between 60 and 400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Exam: <b>LOOK FOR OBVIOUS ASYMMETRY</b>			
	<b>Normal</b>	<b>Right</b>	<b>Left</b>
Facial smile/grimace	<input type="checkbox"/>	<input type="checkbox"/> Droop	<input type="checkbox"/> Droop
Hand grip	<input type="checkbox"/>	<input type="checkbox"/> Weak	<input type="checkbox"/> Weak
		<input type="checkbox"/> No grip	<input type="checkbox"/> No grip
Arm strength	<input type="checkbox"/>	<input type="checkbox"/> Drifts dn	<input type="checkbox"/> Drifts dn
		<input type="checkbox"/> Falls fast	<input type="checkbox"/> Falls fast

Based on exam, patient has only unilateral (not bilateral) weakness:  YES  NO

10. Items 4, 5, 6, 7, 8, 9 all YES's (or unknown) --- LAPSS screening criteria met:

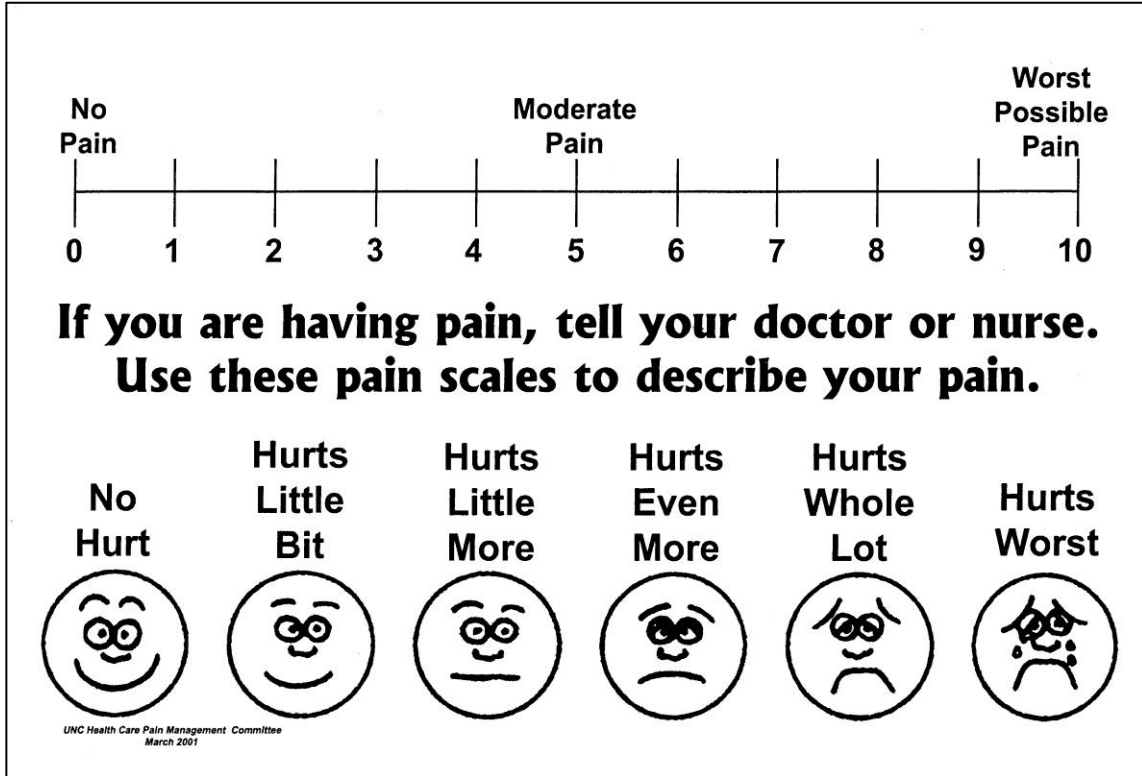
YES  NO

11. If LAPSS criteria for stroke are met, alert the receiving hospital of a possible stroke patient. If not, then return to the appropriate treatment protocol.

(Note: the patient may be experiencing a stroke even if the LAPSS criteria are not met.)

12. Time LAPSS Exam Performed: Military Time: \_\_\_\_\_







13. Form Completed by: \_\_\_\_\_



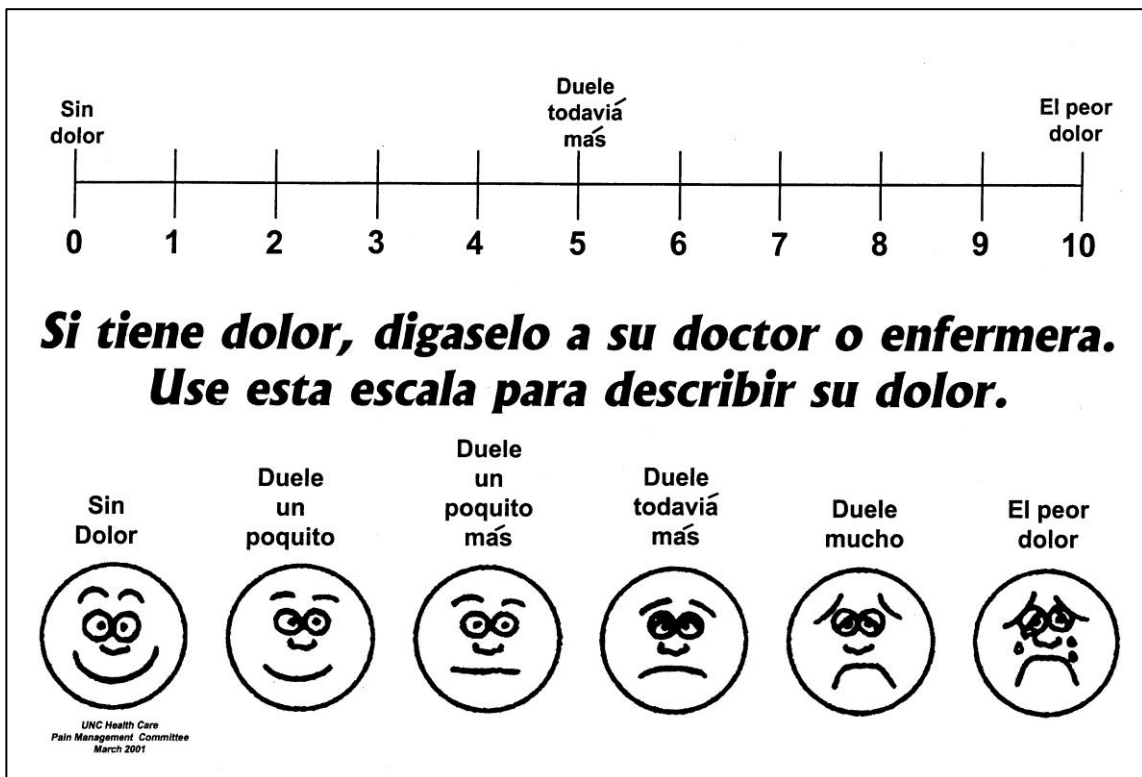
No Pain Moderate Pain Worst Possible Pain

0 1 2 3 4 5 6 7 8 9 10

**If you are having pain, tell your doctor or nurse.  
Use these pain scales to describe your pain.**

No Hurt	Hurts Little Bit	Hurts Little More	Hurts Even More	Hurts Whole Lot	Hurts Worst
					







UNC Health Care Pain Management Committee  
March 2001



Sin dolor Duele todavía más El peor dolor

0 1 2 3 4 5 6 7 8 9 10

**Si tiene dolor, dígaselo a su doctor o enfermera.  
Use esta escala para describir su dolor.**

Sin Dolor	Duele un poquito	Duele un poquito más	Duele todavía más	Duele mucho	El peor dolor
					

UNC Health Care  
Pain Management Committee  
March 2001

From Hockenberry MJ, Wilson D, Winkelstein ML; Wong's Essentials of Pediatric Nursing, ed. 7, St. Louis, 2005, p. 1259. Used with permission. Copyright, Mosby.





# Restraint Checklist



Patient's Name: \_\_\_\_\_

PCR Number: \_\_\_\_\_ Date: \_\_\_\_\_

**It is recommended that a Restraint Checklist be completed with any restraint use.**

**1. Reason for restraint (check all that apply):**

- Patient attempting to hurt self
- Patient attempting to hurt others
- Patient attempting to remove medically necessary devices

**2. Attempted verbal reassurance / redirection?**

- Yes
- No

**3. Attempted environmental modification? (i.e. remove patient from stressful environment)**

- Yes
- No

**4. Received medical control order for restraints?**

- Yes \_\_\_\_\_, MD
- No (Medical Control Physician Name Here)

**5. Time and Type of restraint applied (check all that apply):**

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_AM/PM

**Limb restraints:**

- LUE
- RUE
- LLE
- RLE

**Chemical Restraint:**

- Yes
- No

If Yes: Drug Used: \_\_\_\_\_

Total Dose: \_\_\_\_\_

**6. Vital signs and extremity neurovascular exam should be taken every 15 minutes.**

**7. Transport Position (Patient should NOT be in prone position)**

- Supine position for transport
- Lateral recumbent position for transport

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

**(EMS Lead Crew Member)**





# Approved Medical Abbreviations



The following is a list of approved medical abbreviations. In general, the use of abbreviations should be limited to this list.

A&O x 3	- alert and oriented to person, place and time
A&O x 4	- alert and oriented to person, place, time and event
A-FIB	- atrial fibrillation
AAA	- abdominal aortic aneurysm
ABC	- airway, breathing, circulation
ABD	- abdomen (abdominal)
ACLS	- advanced cardiac life support
AKA	- above the knee amputation
ALS	- advanced life support
AMA	- against medical advice
AMS	- altered mental status
AMT	- amount
APPROX	- approximately
ASA	- aspirin
ASSOC	- associated
BG	- blood glucose
BILAT	- bilateral
BKA	- below the knee amputation
BLS	- basic life support
BM	- bowel movement
BP	- blood pressure
BS	- breath sounds
BVM	- bag-valve-mask
C-SECTION	- caesarean section
C-SPINE	- cervical spine
C/O	- complaint of (complains of)
CA	- cancer
CABG	- coronary artery bypass graft
CAD	- coronary artery disease
CATH	- catheter
CC	- chief complaint
CEPH	- cephalic
CHF	- congestive heart failure
CNS	- central nervous system
COPD	- chronic obstructive pulmonary disease
CP	- chest pain
CPR	- cardiopulmonary resuscitation
CSF	- cerebrospinal fluid
CT	- cat scan
CVA	- cerebrovascular accident (stroke)



# Approved Medical Abbreviations



D5W	- 5% dextrose in water
DKA	- diabetic ketoacidosis
DNR	- do not resuscitate
DOA	- dead on arrival
DT	- delirium tremens
Dx	- diagnosis
ECG	- electrocardiogram
EEG	- electroencephelogram
ET	- endotracheal
ETOH	- ethanol (alcohol)
ETT	- endotracheal tube
EXT	- external (extension)
FB	- foreign body
FLEX	- flexion
Fx	- fracture
g	- gram(s)
GI	- gastrointestinal
GSW	- gunshot wound
gtts	- drops
GU	- gastrourinary
GYN	- gynecology (gynecological)
H/A	- headache
HEENT	- head, eyes, ears, nose, throat
HR	- heart rate (hour)
HTN	- hypertension
Hx	- history
ICP	- intracranial pressure
ICU	- intensive care unit
IM	- intramuscular
IV	- intravenous
JVD	- jugular vein distension
kg	- kilogram
KVO	- keep vein open



# Approved Medical Abbreviations



L-SPINE	- lumbar spine
L/S-SPINE	- lumbar sacral spine
L&D	- labor and delivery
LAT	- lateral
lb	- pound
LLQ	- left lower quadrant
LMP	- last menstrual period
LOC	- level of consciousness (loss of consciousness)
LR	- lactated ringers
LUQ	- left upper quadrant
MAST	- military anti-shock trousers
mcg	- microgram(s)
MED	- medicine
mg	- milligram(s)
MI	- myocardial infarction (heart attack)
min	- minimum / minute
MS	- mental status
MS	- mental status change
MSO4	- morphine
MVC	- motor vehicle crash
N/V	- nausea/vomiting
N/V/D	- nausea/vomiting/diarrhea
NAD	- no apparant distress
NC	- nasal cannula
NEB	- nebulizer
NKDA	- no known drug allergies
NRB	- non-rebreather
NS	- normal saline
NSR	- normal sinus rhythm
OB/GYN	- obstetrics/gynecology
PALP	- palpation
PAC	- premature atrial contraction
PE	- pulmonary embolus
PEARL	- pupils equal and reactive to light
PMHx	- past medical history
PO	- orally
PRB	- partial rebreather
PRN	- as needed
PT	- patient
PVC	- premature ventricular contraction



# Approved Medical Abbreviations



RLQ	- right lower quadrant
RUQ	- right upper quadrant
Rx	- medicine
RXN	- reaction
S/P	- status post
SOB	- shortness of breath
SQ	- subcutaneous
ST	- sinus tachycardia
SVT	- supraventricular tachycardia
Sx	- symptom
SZ	- seizure
T-SPINE	- thoracic spine
T	- temperature
TIA	- transient ischemic attack
TKO	- to keep open (refers to IV's - same as KVO)
Tx	- treatment
UOA	- upon our arrival
URI	- upper respiratory infection
UTI	- urinary tract infection
VF	- ventricular fibrillation
VS	- vital signs
VT	- ventricular tachycardia
WAP	- wandering atrial pacemaker
WNL	- within normal limits
YO (YOA)	- years old (years of age)
M or ♂	- male
F or ♀	- female
+	- positive
-	- negative
?	- questionable
Ψ	- psychiatric
~	- approximately
>	- greater than
<	- less than
=	- equal



# Approved Medical Abbreviations



↑	- upper (increased)
ā	- before
p̄	- after
c̄	- with
s	- without
Δ	- change
L	- left
R	- right
↓	- lower (decreased)
1°	- primary
2°	- secondary



# Reperfusion Checklist



The Reperfusion Checklist is an important component in the initial evaluation, treatment, and transport of patients suffering from an acute ST-elevation myocardial infarction (STEMI) or acute Stroke. Both of these conditions can be successfully treated using fibrinolysis (thrombolytics) if the patient arrives at the appropriate hospital within the therapeutic window of time.

This form should be completed for all acute STEMI and acute Stroke patients.

Patient's Name: \_\_\_\_\_

PCR Number: \_\_\_\_\_ Date: \_\_\_\_\_

**1. Has the patient experienced chest discomfort for greater than 15 minutes and less than 12 hours?**

Yes     No

**2. Has the patient developed a sudden neurologic deficit with a positive Los Angeles Prehospital Stroke Screen?**

Yes     No

**3. Are there any contraindications to fibrinolysis?**

If any of the following are checked "Yes", fibrinolysis MAY be contraindicated.

- Yes     No    Systolic Blood Pressure greater than 180 mm Hg
- Yes     No    Diastolic Blood Pressure greater than 110 mm Hg
- Yes     No    Right vs. Left Arm Systolic Blood Pressure difference of greater than 15 mm Hg
- Yes     No    History of structural Central Nervous System disease (tumors, masses, hemorrhage, etc.)
- Yes     No    Significant closed head or facial trauma within the previous 3 months
- Yes     No    Recent (within 6 weeks) major trauma, surgery (including laser eye surgery), gastrointestinal bleeding, or severe genital-urinary bleeding
- Yes     No    Bleeding or clotting problem or on blood thinners
- Yes     No    CPR performed greater than 10 minutes
- Yes     No    Currently Pregnant
- Yes     No    Serious Systemic Disease such as advanced/terminal cancer or severe liver or kidney failure.

**4. (STEMI Patients Only) Does the patient have severe heart failure or cardiogenic shock?**

These patients may benefit more from a percutaneous coronary intervention (PCI) capable hospital.

- Yes     No    Presence of pulmonary edema (rales greater than halfway up lung fields)
- Yes     No    Systemic hypoperfusion (cool and clammy)

**If any contraindication is checked as "Yes" and an acute Stroke is suspected by exam or a STEMI is confirmed by ECG, activate the EMS Stroke Plan or EMS STEMI Plan for fibrinolytic ineligible patients. This may require the EMS Agency, an Air Medical Service, or a Specialty Care Transport Service to transport directly to an specialty center capable of interventional care within the therapeutic window of time.**

## Evaluating for the difficult airway

Between 1 – 3% of patients who require endotracheal intubation have airways that make intubation difficult. Recognizing those patients who may have a difficult airway allows the paramedic to proceed with caution and to keep as many options open as possible. It also allows the paramedic to prepare additional equipment (such as a cricothyrotomy kit) that may not ordinarily be part of a standard airway kit. The mnemonic LEMON is useful in evaluating patients for signs that may be consistent with a difficult airway and should raise the paramedic's index of suspicion.

### Look externally

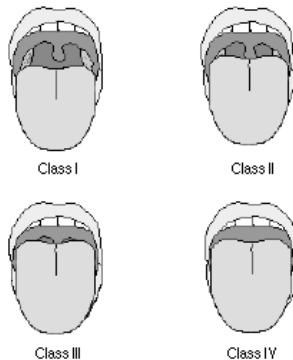
External indicators of either difficult intubation or difficult ventilation include: presence of a beard or moustache, abnormal facial shape, extreme cachexia, edentulous mouth, facial trauma, obesity, large front teeth or "buck teeth", high arching palate, receding mandible, short bull neck.

### Evaluate 3-3-2 Rule

- 3 fingers between the patient's teeth (patient's mouth should open adequately to permit three fingers to be placed between the upper and lower teeth)
- 3 fingers between the tip of the jaw and the beginning of the neck (under the chin)
- 2 fingers between the thyroid notch and the floor of the mandible (top of the neck)

### Mallampati

This scoring system is based on the work of Mallampati et al published in the Canadian Anaesthesia Society Journal in 1985. The system takes into account the anatomy of the mouth and the view of various anatomical structures when the patient opens his mouth as wide as possible. This test is performed with the patient in the sitting position, the head held in a neutral position, the mouth wide open, and the tongue protruding to the maximum. Inappropriate scoring may occur if the patient is in the supine position (instead of sitting), if the patient phonates or if the patient arches his or her tongue.



Class I (easy) = visualization of the soft palate, fauces, uvula, anterior and posterior pillars.

Class II = visualization of the soft palate, fauces and uvula.

Class III = visualization of the soft palate and the base of the uvula.

Class IV (difficult) = soft palate is not visible at all.

### Obstruction?

Besides the obvious difficulty if the airway is obstructed with a foreign body, the paramedic should also consider other obstructers such as tumor, abscess, epiglottitis, or expanding hematoma.

### Neck Mobility

Ask the patient to place their chin on their chest and to tilt their head backward as far as possible. Obviously, this will not be possible in the immobilized trauma patient.





# Burns Resources

## Fluid Formula



### Formula for Fluid Resuscitation of the Burn Patient (Also known as the Parkland Formula)

Pts Wt kg x %TBSA x 4.0cc LR infused over 24 hours with half given in the first 8 hours.

(For the equation, the abbreviations are: PW x TBSA x 4.0 cc )

EMS focuses on the care given during the 1st hour or several hours following the event. Thus the formula as adapted for EMS and the first 8 hours is:

$$PW \times TBSA \times 4.0 \text{ cc, divide by 2}$$

to take this to the hourly rate, divide that solution by 8 and the equation becomes:

$$PW \times TBSA \times 4.0\text{cc} / 2 / 8 = \text{total to be infused for each of the first 8 hours.}$$

Another way to state the equation is to use:

$$PW \times TBSA \times 0.25\text{cc} = \text{total to be infused for each hour of the first 8 hours.}$$

**Example. 80 kg patient with 50 %TBSA x 0.25 cc = 1000 cc/hr.**

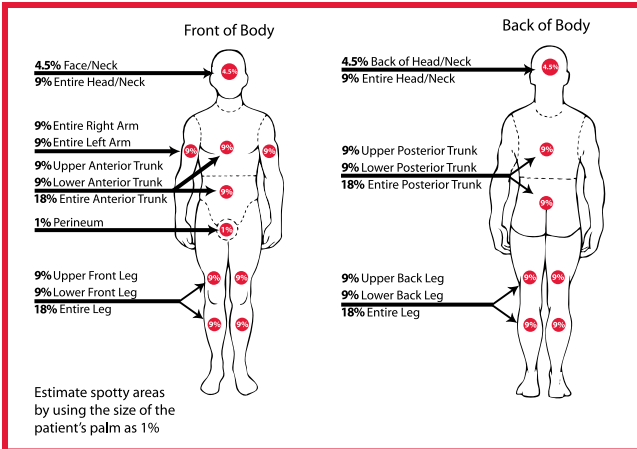
Remember:

Patient's Weight in kg (2.2 lbs = 1.0 kg) example: 220 lbs adult = 100 kg

% TSBA = Rule of Nine Total Body Surface Area

Factor for the 1st hr. and each hr. for the 1st 8 hrs. = 0.25

(Reminder, if two IV's are running, divide total amount to be infused each hr. by 2)



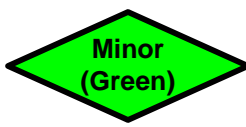
Wt (kg)	% TBSA	Factor	/Hr for 1st 8 Hrs of Care	60 gtt set, gtt/min	20 gtt set, gtt/min	15 gtt set, gtt/min	10 gtt set, gtt/min
10	10	0.25	25	25	8.3	6.3	4.2
10	20	0.25	50	50	16.7	12.5	8.3
10	30	0.25	75	75	25.0	18.8	12.5
10	40	0.25	100	100	33.3	25.0	16.7
10	50	0.25	125	125	41.7	31.3	20.8
20	10	0.25	50	50	16.7	12.5	8.3
20	20	0.25	100	100	33.3	25.0	16.7
20	30	0.25	150	150	50.0	37.5	25.0
20	40	0.25	200	200	66.7	50.0	33.3
20	50	0.25	250	250	83.3	62.5	41.7
30	10	0.25	75	75	25.0	18.8	12.5
30	20	0.25	150	150	50.0	37.5	25.0
30	30	0.25	225	225	75.0	56.3	37.5
30	40	0.25	300	300	100.0	75.0	50.0
30	50	0.25	375	375	125.0	93.8	62.5
40	10	0.25	100	100	33.3	25.0	16.7
40	20	0.25	200	200	66.7	50.0	33.3
40	30	0.25	300	300	100.0	75.0	50.0
40	40	0.25	400	400	133.3	100.0	66.7
40	50	0.25	500	500	166.7	125.0	83.3
50	10	0.25	125	125	41.7	31.3	20.8
50	20	0.25	250	250	83.3	62.5	41.7
50	30	0.25	375	375	125.0	93.8	62.5
50	40	0.25	500	500	166.7	125.0	83.3
50	50	0.25	625	625	208.3	156.3	104.2
60	10	0.25	150	150	50.0	37.5	25.0
60	20	0.25	300	300	100.0	75.0	50.0
60	30	0.25	450	450	150.0	112.5	75.0
60	40	0.25	600	600	200.0	150.0	100.0
60	50	0.25	750	750	250.0	187.5	125.0
70	10	0.25	175	175	58.3	43.8	29.2
70	20	0.25	350	350	116.7	87.5	58.3
70	30	0.25	525	525	175.0	131.3	87.5
70	40	0.25	700	700	233.3	175.0	116.7
70	50	0.25	875	875	291.7	218.8	145.8
80	10	0.25	200	200	66.7	50.0	33.3
80	20	0.25	400	400	133.3	100.0	66.7
80	30	0.25	600	600	200.0	150.0	100.0
80	40	0.25	800	800	266.7	200.0	133.3
80	50	0.25	1000	1000	333.3	250.0	166.7
90	10	0.25	225	225	75.0	56.3	37.5
90	20	0.25	450	450	150.0	112.5	75.0
90	30	0.25	675	675	225.0	168.8	112.5
90	40	0.25	900	900	300.0	225.0	150.0
90	50	0.25	1125	1125	375.0	281.3	187.5
100	10	0.25	250	250	83.3	62.5	41.7
100	20	0.25	500	500	166.7	125.0	83.3
100	30	0.25	750	750	250.0	187.5	125.0
100	40	0.25	1000	1000	333.3	250.0	166.7
100	50	0.25	1250	1250	416.7	312.5	208.3



>15% TBSA 2<sup>nd</sup>/3<sup>rd</sup> Degree Burn  
Burns with Multiple Trauma  
Burns with definitive airway compromise  
(When reasonable accessible, transport to a Burn Center)



5-15% TBSA 2<sup>nd</sup>/3<sup>rd</sup> Degree Burn  
Suspected Inhalation injury or requiring intubation for airway stabilization  
Hypotension  
GCS < 14  
(When reasonable accessible, transport to either a Level I Burn Center or a Trauma Center)



< 5% TBSA 2<sup>nd</sup>/3<sup>rd</sup> Degree Burn  
No inhalation injury, Not Intubated, Normotensive  
GCS > 14  
(Transport to the Local Hospital)