



## Table of Contents Interfacility

---

<b>GUIDELINE #</b>	<b>NAME</b>	<b>DATE OF ISSUANCE / REVISION</b>	<b># OF PAGES</b>
<a href="#"><u>9901</u></a>	Monitoring Potassium Chloride (KCL) Solutions	02/01/2012	1
<a href="#"><u>9902</u></a>	Monitoring Thoracostomy Tubes	02/01/2012	1
<a href="#"><u>9903</u></a>	Interfacility Transfers	02/01/2012	7



# Monitoring Potassium Chloride (KCL) Solutions

TREATMENT GUIDELINE 9901

---

## 9901.1 PURPOSE

Monitoring an IV solution containing KCL for the treatment of potassium deficiency.

## 9901.2 POLICY

A paramedic may transport a patient who has a pre-existing IV solution containing KCL  $\leq$  40 mEq/L.

## 9901.3 PROCEDURE

- A. Prehospital care providers are not allowed to start or add KCL to the IV solution.
- B. Infusions containing KCL that have been established may be monitored only.
- C. Monitor ECG rhythm to detect dysrhythmias.

## 9901.4 USUAL DOSE

Usual dose is 10-20 mEq added to (one) 1 liter of IV solution and administered at a mechanically controlled rate not to exceed 10 mEq/hour (restrictions in scope of practice limits dose to 40 mEq/L).

## 9901.5 INFILTRATION

Monitor IV site as infiltration may cause necrosis. If patient complains of burning or irritation at the insertion site, the IV should be checked for patency and the infusion rate slowed.

## 9901.6 FLUID BOLUS

If fluid bolus or IV medications are needed, the KCL infusion shall be discontinued and a new IV solution without KCL and administration device shall be used as a replacement.

## 9901.7 ADVERSE EFFECTS

- A. Observe for:
  1. Cardiovascular: dysrhythmias, cardiac arrest.
  2. Respiratory: depression / arrest.
  3. Gastrointestinal: nausea / vomiting, diarrhea, abdominal pain.
  4. Neurological: paresthesia of extremities, muscular paralysis, confusion.
  5. Other: hyperkalemia, venous thrombosis.



# Monitoring Thoracostomy Tubes

TREATMENT GUIDELINE 9902

---

## 9902.1 PURPOSE

To monitor thoracostomy tubes previously established.

## 9902.2 EQUIPMENT

- A. Firm plastic thoracostomy tube.
- B. Negative pressure drainage receptacle attached to the thoracostomy tube to form a closed drainage system.
- C. Rubber-tipped clamp.

## 9902.3 PRECAUTIONS

- A. Keep drainage receptacle below level of chest to prevent drained fluid from re-entering pleural space.
- B. Keep drainage tubing in view.
- C. Do not permit dependent loops or kinks to form, as this will increase pleural pressure, formation of clots or interference with the flow of drainage.
- D. Keep dressing at insertion site secure to prevent air entering the pleural space.
- E. Maintain aseptic technique.
- F. Do not disconnect drainage system or puncture tubing.
- G. Tape all connections securely to prevent violation of sterility and loss of negative drainage pressure.
- H. Avoid pulling on thoracostomy tube to prevent accidental dislodging of the tube.

## 9902.4 COMPLICATIONS

Complications require immediate intervention. Contact the base hospital to report the problem, the intervention taken and to request further assistance.

## 9902.5 TUBE DISLODGE MENT OR WITHDRAWAL

- A. If accidental withdrawal of tube occurs, place occlusive dressing over insertion site.
- B. If the tube becomes dislodged or a malfunction with air leak occurs in the system, clamp the tube close to the chest wall and observe for signs and symptoms of tension pneumothorax.

## 9902.6 DRAINED FLUID RE-ENTERS PLEURAL SPACE

If drained fluid re-enters the pleural space, place receptacle below level of chest to facilitate gravity drainage.

## 9902.7 HEMORRHAGE THROUGH TUBE

If hemorrhage occurs through chest tube, observe for signs and symptoms of shock and refer to Cardiogenic Shock Guideline # 9109.

## 9902.8 RECEPTACLE FILLS IN TRANSIT

- A. If drainage receptacle fills in transit:
  - 1. Keep in position.
  - 2. Do not remove or elevate.



# Inter-Facility Transfers

TREATMENT GUIDELINE 9903

## 9903.1 PURPOSE

It is the intent of these guidelines to assure compliance with Health and Safety Code Section 1798.172, Chapter 1240 (SB 12) to assure that hospitals meet the obligations of their license to provide emergency medical services and that patients requiring transfer to another facility for any reason will be transferred safely and without delay. Hospitals and transport providers shall adhere to any and all standards set forth here when implementing the interfacility transfer of patients. As defined in Chapter 1240, the State Department of Health Services shall be responsible for development of protocols and procedures for implementation as well as review and investigation of reported transfer violations.

## 9903.2 SCOPE

This policy addresses the interfacility transfer of patients accompanied by prehospital care personnel. This policy applies to transfers originating at a facility in Napa County with destination within or out of the same region. The EMTs and paramedics may perform any activity identified in their scope of practice, California Administrative Code, Title 22, Division 9, which has been approved by their local EMS Agency.

## 9903.3 DEFINITIONS

Transferring Facility: The facility from which the patient is being transferred.

Base Hospital: Approved base hospital directing the paramedic transfer call.

Receiving Facility: The facility to which the patient is being transferred.

## 9903.4 BASIC RESPONSIBILITIES FOR TRANSFER

- A. A variety of reasons may exist for the transfer of a patient to another hospital or health facility including:
  - 1. Needed services not available at the transferring facility;
  - 2. A shortage of needed beds at the transferring facility;
  - 3. Patient request;
  - 4. Patient repatriation;
  - 5. Patient needing a lower level of care.
- B. Hospitals licensed to provide emergency services must fulfill their obligation under the California Health and Safety Code to provide emergency treatment to all patients regardless of their ability to pay. Transfers made for reasons other than immediate medical necessity must be evaluated to assure that the patient can be safely transferred without medical hazard to the patient's health and without decreasing the patient's chances for or delaying a full recovery. In these cases, physicians and hospitals should take a generally conservative view, deciding in favor of patient safety.
- C. Patient transfers involve the following physician and hospital responsibilities:
  - 1. Each hospital is expected to process all transfers in accordance with Title 22 of the California Code of Regulations, Chapter 1240 of the 1987-88 California Legislative Session, the Joint Commission on Accreditation of Hospital Standards, the OSHA Consent Manual and those conditions specified by these transfer guidelines.
  - 2. Each hospital shall have its own written transfer policy clearly establishing administrative and professional responsibilities. Transfer agreements must also be negotiated and signed with hospitals that have specialized services not available at the transferring facility. In addition, hospitals seeking consent to transfer patients to county hospitals shall execute formal transfer agreements implementing these guidelines.

- D. All hospitals with basic emergency room permits must maintain a roster of specialty physicians available for consultation at all times. Hospitals shall ensure that physician specialists or services are available for the treatment of emergency patients regardless of ability to pay.
- E. All hospitals in with stand by emergency room permits must have transfer agreements with other hospitals that maintain a roster of specialty physicians available for consultation at all times.
- F. Notwithstanding, the fact that the receiving facility or physicians at the receiving facility have consented to the patient transfer, the transferring physician and facility have responsibility for the patient until arrival at the receiving hospital. The transferring physician, in consultation with the receiving physician, decides what professional medical assistance should be provided for the patient during the transfer.
- G. The transferring physician has a responsibility to candidly and completely inform the receiving physician of the patient's condition so that the receiving physician can make suitable arrangements to receive the patient.
- H. A hospital shall not accept a patient in transfer when the appropriate level of care cannot be provided.

### 9903.5 TRANSFER STANDARDS

- A. **Patient Safety** - Physicians considering patient transfer should exercise conservative judgment, always deciding in favor of patient safety.
- B. **Emergency Care** - If the patient presents themselves to an emergency room, the transferring physician or other appropriate medical personnel operating under a physician's direction, must examine and evaluate the patient to determine if the patient has an emergency medical condition or is in active labor and if so, perform emergency care and emergency services where appropriate facilities and qualified personnel are available.
- C. **Emergency Medical Condition** - The term "emergency medical condition" means a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in:
  - 1. Placing the patient's health in serious jeopardy;
  - 2. Serious impairment to bodily functions, or
  - 3. Serious dysfunction of any body organ or part;
  - 4. Potential for death.
- D. **Active Labor** - The term "active labor" means labor at a time at which:
  - 1. There is inadequate time to safe transfer to another hospital prior to delivery; or
  - 2. A transfer may pose a threat to the health and safety of the patient or unborn child.
- E. **Unavailability of Services** - Facilities and personnel for emergency care and emergency services shall be consistently available to patients regardless of ability to pay. If, however, a transferring physician is, for whatever reason, faced with the unavailability of needed emergency facilities and/or personnel, and therefore a greater risk exists to the patient if there is no transfer, then the transferring physician may initiate transfer and the receiving physician may accept the transfer.
- F. **Consent of Receiving Physician** - No transfer shall be made without the consent of the receiving physician and confirmation by the receiving hospital that the patient meets the hospital's admissions criteria relating to appropriate bed, personnel and equipment necessary to treat the patient.
- G. **Medical Fitness of Patient** - For all other circumstances except those outlined above, the transferring physician must determine whether the patient is medically fit to transfer. This determination may include but should not be limited to:
  - 1. Establishing and assuring an adequate airway and adequate ventilation;
  - 2. Initiating control of hemorrhage;

3. Stabilizing and splinting the spine or fractures;
  4. Establishing access routes for fluid administration as needed;
  5. Initiating fluid and/or blood replacement as needed;
  6. Determining that the patient's vital signs (including blood pressure, pulse, respirations as indicated) are sufficient to sustain adequate perfusion. The vital signs should remain within these parameters for a reasonable period of time prior to transfer;
  7. Determining that the patient has a stable level of consciousness for a reasonable period of time prior to transfer;
  8. Providing that patient receives cardiac monitoring, if appropriate; and
  9. In the case of pregnant women, determining with reasonable certainty that delivery will not occur during the expected duration of transfer and that neither the mother nor fetus show any signs of distress.
- H. **Advisement of Patient** - The patient or the patient's legal representative must be advised, if possible, of the need for the transfer and the alternatives, if any, to the transfer as well as adequate information regarding the proposed transportation plans and the benefits and risks, if any, of the proposed transfer.
- I. **Patient Needs** - Once the decision to transfer the patient has been reached, every effort should be made to transfer as rapidly and safely as possible. The transferring physician must take into account the needs of the patient during transport and the ability of the transport personnel to care for the patient.
- J. **Scope of Practice of Transport Personnel** - Transport personnel are not authorized and will not provide services beyond their scope of practice. Should services beyond scope be required, a person qualified in its performance shall accompany the patient during transport.

### 9903.6 PREARRANGED TRANSFER AGREEMENTS

Interfacility transfers shall be accomplished by prearranged transfer agreements between the transferring and receiving hospitals and transport shall be performed by an ALS ambulance, BLS ambulance, wheelchair / gurney car in accordance with the Interfacility Transfer Policy. The designated ALS transfer units shall be ALS equipped and staffed to the level required of ALS emergency response ambulances in Response and Transportation Section of Napa County EMSA policy manual. If patient transport needs exceed the paramedic scope of practice, then the transferring physician will order a critical care or emergency care level Registered Nurse and any other personnel, equipment or supplies necessary for patient care. This is true even when ambulances are staffed with paramedic personnel.

### 9903.7 ADDITIONAL REQUIREMENTS FOR TRANSFER FOR NON-MEDICAL REASONS

When patients are transferred for non-medical reasons such as an inability to pay; the transferring hospital must follow all of the above requirements. In particular, the transferring physician must ensure that emergency care and emergency services have been provided and shall determine that the transfer would not create a medical hazard to the patient and would not decrease that patient's chances for or delay the patient's full recovery. The transferring physician must verify these determinations on the patient transfer form. The transferring physician must still arrange for an accepting physician at the receiving facility.

### 9903.8 REPORTING REQUIREMENTS

The receiving hospital personnel, physicians, emergency department personnel and prehospital care providers are required to report all apparent violations of these guidelines and regulations relating to patient transfers. The transferring hospital personnel are permitted to report all apparent violations of these guidelines and regulations relating to patient transfers. These reports shall be made to the State Department of Health Services on a form prescribed by the State Department, within seventy-two (72) hours of the occurrence of the violation for the purpose of review and investigation.

**9903.9 TRANSFER DETERMINATION**

- A. Attending physician makes a determination that an interfacility transfer is needed and the level of transfer care required, as defined in "Guidelines for Determining Level of Transfer" following:
1. Receiving physician and facility agree to accept patient.
  2. Transferring facility requests appropriate level transfer unit from an EMS provider unless agreed between transferring and receiving facility that receiving facility is to make arrangement.
  3. Transferring facility will advise EMS provider of the following:
    - a. Patient's name.
    - b. Diagnosis / level of acuity.
    - c. Destination.
    - d. Transfer date and time.
    - e. Unit transferring patient.
    - f. Level of transfer requested.
    - g. Sending doctor's name.
    - h. Treatment received.
    - i. History, medication, allergies and orders.
    - j. Special equipment with patient.
    - k. Additional hospital personnel attending patient.
  4. If patient requires a ventilator, respirator, or in situations where additional airway management may be advantageous, a respiratory therapist or R.N. will accompany patient to assist in airway management.
  5. The EMS provider agrees to accept the transfer based on reported information and advises ETA of transfer unit.
  6. The transfer unit notifies their operational area dispatch of destination per county protocol.

**9903.10 GUIDELINES FOR DETERMINING LEVEL OF TRANSFER**

Determination of level of transfer required. (X=Minimum level of service required)	Wheelchair or Gurney Van	Basic Life Support (EMT)	Advanced Life Support (paramedic)	RN	Physician
Vital signs stable	X	X			
Oxygen by mask or cannula		X			
Level of consciousness stable		X			
IV fluids running (no additives)		X			
Continuous respiratory assistance needed (including ventilations)				X*	
Peripheral IV medications running or anticipated (refer to following chart)					
IV medications outside county protocols running or anticipated				X	
Paramedic level interventions			X		
Central IV line in use		X			
PA line in use				X	
Arterial line in place				X	
Temporary pacemaker in place				X	
ICP line in place				X	
IABP in place				X	
Chest tube			X		
Neonatal transport				X	

\*Respiratory therapist or R.N.

**9903.11 APPROVED FOR PARAMEDIC (ALS) TRANSFERS**

- A. 10%, 25% and 50% dextrose.
- B. adenosine.
- C. aerosolized or nebulized beta-2 specific bronchodilators.
- D. amiodarone.
- E. aspirin.
- F. atrovent.
- G. atropine sulfate.
- H. calcium chloride.
- I. diazepam.
- J. diphenhydramine hydrochloride.
- K. dopamine hydrochloride.
- L. epinephrine.
- M. fentanyl.



- N. furosemide.
- O. glucagon.
- P. midazolam.
- Q. morphine sulfate.
- R. naloxone hydrochloride.
- S. nitroglycerin preparations, except intravenous.
- T. ondansetron.
- U. potassium < 20 mEq.
- V. sodium bicarbonate.

**9903.12 APPROVED FOR EMT (BLS) TRANSFER**

- A. Monitor IV lines delivering intravenous glucose solutions or isotonic balanced salt solutions including lactated ringers for volume replacement.
- B. Monitor, maintain and adjust as necessary to maintain a preset rate of flow and/or turn off the flow of intravenous fluid.
- C. Transfer a patient, who is deemed appropriate for transfer by the transferring physician, and who has nasogastric (NG) tubes, gastrostomy tubes, heparin locks, foley catheters, tracheostomy tubes and/or indwelling vascular access lines, excluding arterial lines.

**9903.13 APPROVED FOR WHEELCHAIR / GURNEY CAR TRANSFER**

- A. Any patient who does not require monitoring or intervention by transport personnel. Any medical devices on the patient will not be in use nor available to transporting personnel.
- B. Any transdermal medication applications must have been in use for twelve (12) hours or more.

**9903.14 COMMUNICATION**

- A. Transport personnel shall receive appropriate patient status report from transferring physician and/or R.N.
- B. The paramedic shall receive the transferring orders from the transferring physician prior to leaving the hospital, including a telephone number where the transferring physician can be reached during the patient transport.
- C. Copies of all pertinent medical records, lab reports, x-rays, and transfer forms accompany patient to receiving facility.
- D. Transport personnel shall receive the patient's report and confirm appropriate level of care for transfer. If transport personnel and transferring physician are unable to agree, they will confer with the base hospital physician.
- E. All levels of transfer will have a patient care record completed by the transport personnel.

**9903.15 TRANSFER SUMMARY**

- A. The records transferred with the patient shall include a "transfer summary" signed by the transferring physician which contains relevant transfer information. The form of the "transfer summary" shall, at a minimum, contain the patient's name, address, sex, race, age and medical condition; the name and address of the transferring doctor or emergency department personnel authorizing the transfer; the time and date the patient was first presented at the transferring hospital; the name of the physician at the receiving hospital consenting to the transfer and the time and date of the consent; the time and date of the transfer; the reason for the transfer; and the declaration of the signor that the signor is assured,

within reasonable medical probability, that the benefits of the transfer outweigh any medical risk to the patient.

- B. Neither the transferring physician nor transferring hospital shall be required to duplicate in the "transfer summary" information contained in medical records transferred with the patient. In addition, the "transfer summary" shall include any other information pertinent to patient care as outlined in this policy.

#### **9903.16 TRANSFER PROCEDURES FOR PATIENTS WITH DNR ORDERS**

Patients who are being transferred with Do Not Resuscitate (DNR) orders shall also have orders to the effect of the destination of the patient in the case of death during transfer. Options for destination include the patient's intended receiving facility (i.e. home, skilled nursing home, hospital), predetermined funeral home or the coroner's office. It shall be the responsibility of the transferring facility and the provider of the transport to ensure that these arrangements have been made prior to the initiation of the transfer.

#### **9903.17 EXCEPTIONS TO TRANSFER PROCEDURE**

If an ALS transfer unit is unavailable, the transferring physician may request a BLS unit staffed with at least one (1) R.N. and appropriate equipment.

#### **9903.18 QUALITY IMPROVEMENT**

ALS interfacility transfer calls will be reviewed as per the NCEMSA Quality Improvement Policy Manual, policies # 6001 and # 6002.