

**IMPERIAL COUNTY**

**EMERGENCY MEDICAL SERVICES AGENCY**

**TRIAL STUDY**

**RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**(ADVANCED EMT-1)**

IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE

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**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**PROGRAM APPLICATION**

REQUEST FOR APPROVAL  
RURAL EMT-I EXPANDED SCOPE OF PRACTICE  
TRIAL STUDY

DATE: 10/20/95

INTRODUCTION:

Small, rural communities are scattered across Imperial County in isolated locations. In addition to year-round residents, these communities attract large numbers of elderly residents ("snowbirds") during the winter season. Many of the residents have chronic illnesses, and EMS calls in those communities involve conditions that may benefit from ALS treatment, especially chest pain and respiratory distress.

These areas are 30-45 minutes from existing ALS units. We have attempted to help these communities maintain ALS, but that proved to be impossible. Typically a paramedic will join a small ambulance service for a short period of time, and then leave due to the isolation, low call volume, and low pay. Simply maintaining EMT-basic level response and transport is difficult. The large time commitment for EMT-II training makes that option impossible.

We are proposing an expansion of the scope of practice for EMT-Is in several isolated communities so that selected ALS skills and medications can be provided. Initial communities would be Bombay Beach, on the eastern shore of the Salton Sea, that includes the "Fountain of Youth" spa; Niland, which also serves the "slabs", a large, informal community of mobile homes in the hills east of the Salton Sea; the Desert Shores/West Shores area on the western shore of the Salton Sea; and, possibly, one or two additional areas, depending on interest and resources. (Please see attached summary of communities and map).

**NAME OF PROPOSED PROCEDURE OR MEDICATION:**

The expanded scope would include:

1. Combitube
2. Automated External Defibrillation (already approved and in use)
3. Determination of blood glucose levels
4. Medications
  - A. Albuterol, metered dose inhalers or nebulized *SOP*
  - B. Activated Charcoal
  - C. Aspirin
  - D. Epinephrine via EpiPen (or similar device) *SOP*
  - E. Glucagon *?*
  - F. Naloxone
  - G. Nitroglycerin, sublingual/lingual preparations *SOP*

**MEDICAL CONDITIONS:**

The expanded scope of practice will be used in clinical conditions that warrant treatment under the following treatment protocols:

Allergic Reaction and/or Anaphylaxis  
Altered Neurologic Function (Non-traumatic)  
Cardiopulmonary Arrest  
Chest Pain (suspected cardiac origin)  
Near Drowning  
Poisoning  
Respiratory Distress  
Smoke, Gas and Toxic Substance Inhalation

**PATIENT POPULATION:**

Patients who fit the Treatment Guidelines above (see below), who are residents of the communities involved in the study.

**RELEVANT STUDIES:**

There is growing recognition that formerly advanced skills may be performed, at least to a limited extent, by basic personnel. The new Department of Transportation EMT-Basic curriculum includes an optional module for endotracheal intubation, and EMTs assisting patients with their own nitroglycerin, glucose solutions, epinephrine injections, and bronchodilators.

A recent abstract reported that EMT-basics successfully performed endotracheal intubation in

46% of candidate patients (Sayre, et al: Field Trial of Endotracheal Intubation by Basic EMT's. Scientific Abstracts National Association of EMS Physicians, 1995). Another recent paper reported on the successful use of epinephrine by rural EMTs among a small group of patients with anaphylaxis (Fortenberry et al: Use of Epinephrine for Anaphylaxis by Emergency Medical Technicians in a Wilderness Setting. Ann Emerg Med, June 1995).

#### PROPOSED STUDY DESIGN:

EMTs will be selected for this program based on satisfactory performance as an EMT-basic and EMT-D. They will be evaluated for their likelihood to remain in the community, and must satisfactorily complete a screening evaluation by their provider agency, EMS agency staff, and the base hospital coordinator. Candidates will be evaluated by a pre-test. All individuals initially selected will be members of a local fire department or employed by an ambulance provider. We anticipate a first class of six individuals, two each from three providers in separate areas.

Didactic education will total 40 hours, followed by two 8 hour clinical sessions in a hospital emergency department and two 8 hour field clinical sessions with an ALS unit and paramedic preceptor. In each location the EMT must successfully complete five ALS contacts. A summary of the lesson plans is attached. The complete curriculum is available for review upon request.

We anticipate the expanded scope EMT-Is will respond to the majority of EMS calls in their communities, but, depending on days off, they may not always be available. They will initiate the study ALS procedures using standing orders and base hospital contact. In the Bombay Beach and West Shores areas they will transport the patient to a hospital with treatment en-route, although in selected cases they may arrange for a rendezvous with an ALS unit. In the Niland area, the expanded scope EMT-Is will be part of the first response agency only, and will be met on-scene by an ALS unit. Patients generally will be transported to Pioneer's Hospital in Brawley (Imperial County), although occasionally they may be transported north into Riverside County.

Continuing education will be provided (see CME requirements). The study will continue for 18 months, and then be evaluated for extension. All required reports will be submitted to the EMS Authority.

The program's effectiveness will be evaluated in several ways. First, the expanded scope EMTs' retention of knowledge, assessment skills and skills performance will be evaluated by post-tests after routine CME, and randomly at other times.

Second, all patient contacts will be reviewed to evaluate EMT performance. There will be an evaluation of patient assessment, including congruence with hospital diagnosis; documentation; appropriateness and performance of field interventions, including whether interventions were actually performed when indicated; and, patient outcome, measured by change in vital signs and outcome. We will use a simple 1-10 analog scale for reporting progression or improvement of symptoms.

Third, for all cases the estimated time interval will be recorded that ALS would have been provided without the availability of the expanded scope EMT. The reason for any rendezvous with paramedics will be recorded.

We anticipate patients will receive ALS interventions more quickly, that patient conditions will improve during treatment, that any deterioration in a patient's condition will be attributable to the underlying medical problem. In the initial phase our end-points will be accurate assessments congruent with later hospital diagnosis, the provision of correct treatments when indicated, and an estimated decrease in the time interval to the administration of these treatments. We recognize that in some cases now there is not 100% congruence between ALS assessments and hospital diagnoses.

If resources allow in the future, we will attempt to compare this treatment regimen to outcomes without this regimen (BLS only).

#### MEDICAL CONTROL:

Medical control will be through the specific expanded scope EMT-I Treatment Guidelines (attached) and base hospital contact. All patient contacts will be reviewed by the Base Hospital Coordinator (a Registered Nurse) and/or EMS Agency staff (paramedic) within seven days. All cases will be reviewed by the medical director. The EMS Agency will establish policies and procedures regarding certification, continuing education, data collection, and other operational procedures.

#### TRAINING AND COMPETENCY TESTING:

Training will follow a curriculum and lesson plans adapted from the Imperial Valley College paramedic training program. A summary is attached. Training sessions will be conducted by the EMS coordinator (see attached CV). Competency testing, both written and skills examinations, will be included in the training program. There will be both hospital clinical time and field preceptorship time, as outlined above.

Continuing education and on-going evaluation of competence will be provided according to the schedule attached.

#### MEDICAL ADVISORY COMMITTEE:

The study proposal was reviewed and approved by a local medical advisory committee composed of emergency medical technicians, nurses, physicians, trainers, and base hospital personnel active in the EMS system. Letters of endorsement are available.



El Centro  
**REGIONAL MEDICAL CENTER**

1415 Ross Avenue · El Centro, CA 92243-4398 · (619) 339-7100

September 23, 1995

John W. Pritting, EMS Coordinator  
935 Broadway  
El Centro, Calif. 92243-2306

RE: Advanced EMT/1 Trial Study

Dear John:

Today I had the opportunity to review the Imperial County Emergency Medical Services Agency Trial Study, Rural EMT/1 Expanded Scope of Practice. I found this study to be very thorough, and very well prepared. The map illustrations were excellent as well.

I think that this program would be an asset to the Imperial Valley community and once approved should be implemented immediately.

I think this is extremely important in view of the fact that rural communities are scattered across Imperial County.

This will be extremely important for the residents who are 30 to 60 minutes away from ALS units for major medical emergencies. I feel that EMT-1's with this expanded scope of practice would be extremely beneficial to residents or visitors. I feel that the expanded scope of practice for the EMT-1's would greatly benefit the citizens to these rural communities. I feel that the overall medical care for the community would improve dramatically.

Keep up the good work!

Sincerely,

  
Uri Guéfen, M.D.,  
EMS Medical Director

UG/mln

September 27, 1995

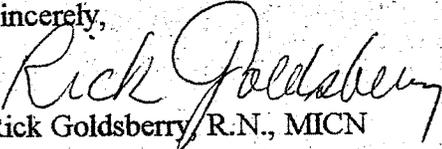
Mr. John Pritting, EMS Coordinator  
Emergency Medical Services  
Imperial County Health Department  
935 Broadway  
El Centro, CA 92243

Dear John,

I have reviewed the information that you sent to me concerning the "Trial Study" for Advanced EMT-I program that is proposed. I am delighted to report that although I was at first skeptical of such an idea, I am impressed with the idea now. As you well know, I am a strong believer in quality EMS, this plan certainly includes quality assurance if implemented as the plan describes.

I want you to know that as a citizen of this county I am proud of your efforts, now and in the past, to improve our EMS system. This is another example of your desire to improve our situation here. If there is any way I can be of assistance with this program please don't hesitate to call on me.

Sincerely,

  
Rick Goldsberry, R.N., MICN

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**DESCRIPTION OF COMMUNITIES**

DATA COLLECTION  
FOR CONSIDERATION OF  
RURAL EXPANDED-SCOPE EMT-1

Report for FY '95 Ending 06/30/95

WEST SHORES AMBULANCE SERVICE - is a private, non-profit, subscription supported ambulance service that services the communities of Desert Shores and Salton Sea Beach located along the west bank of the Salton Sea. These communities have a stable population of approximately 3,000 and a visitor population of 2,000 - 3,000 more during the winter months. There is no real industry that supports these communities. Most of the residents and visitors are retired seniors. Patients are transported to either Pioneers Memorial Hospital in Brawley or to JFK Hospital in Indio - both of which are located approximately 45 miles away.

TOTAL CALLS THIS YEAR - 435  
MONTHLY AVERAGE - 36

<u>CALL TYPE</u>	<u>PERCENT OF TOTAL</u>
Vehicle Accidents	19%
Difficulty Breathing	11%
Chest Pain	8%
CPR	8%
Altered Neurologic Function	11%
All others	43%

<u>LEVEL OF CARE</u>	<u>PERCENT OF TOTAL</u>
EMT-P	6%
EMT-II	3%
EMT-1	91%

BOMBAY BEACH RESCUE AMBULANCE SERVICE - also a private, non-profit, subscription supported ambulance service that services the community of Bombay Beach which is located along the eastern shore of the Salton Sea. Bombay Beach is a wilderness community with a stable population of approximately 2600 and a visitor population of an additional 4000 (mostly retired seniors) who reside at the "Fountain of Youth" Spa just east of town. Patients are transported to either Pioneers Hospital in Brawley or JFK in Indio - both of which are approximately 45 miles from town.

TOTAL CALLS THIS YEAR - 316  
MONTHLY AVERAGE - 26

<u>CALL TYPE</u>	<u>PERCENTAGE OF TOTAL</u>
Vehicle Accidents	23%
Difficulty Breathing	8%
Chest Pain	11%
CPR	8%
Altered Neurologic Function	11%

All others 39%

<u>LEVEL OF CARE</u>	<u>PERCENTAGE OF TOTAL</u>
EMT-P	0%
EMT-II	0%
EMT-1	100%

NILAND FIRE DISTRICT - a rural first responder fire service located approximately 20 miles north of Brawley where the nearest ALS ambulance is stationed. The town of Niland is classified as rural and is supported primarily by agriculture. Niland has a stable population of approximately 1,280 and a visitor population (the majority of whom are retired elderly) of approximately 3,000 during the winter months. Many of the visitors will camp at the "slabs" approximately 5 miles east of town (the remnants of a W.W.II military installation) during the winter months - an area without plumbing or electricity.

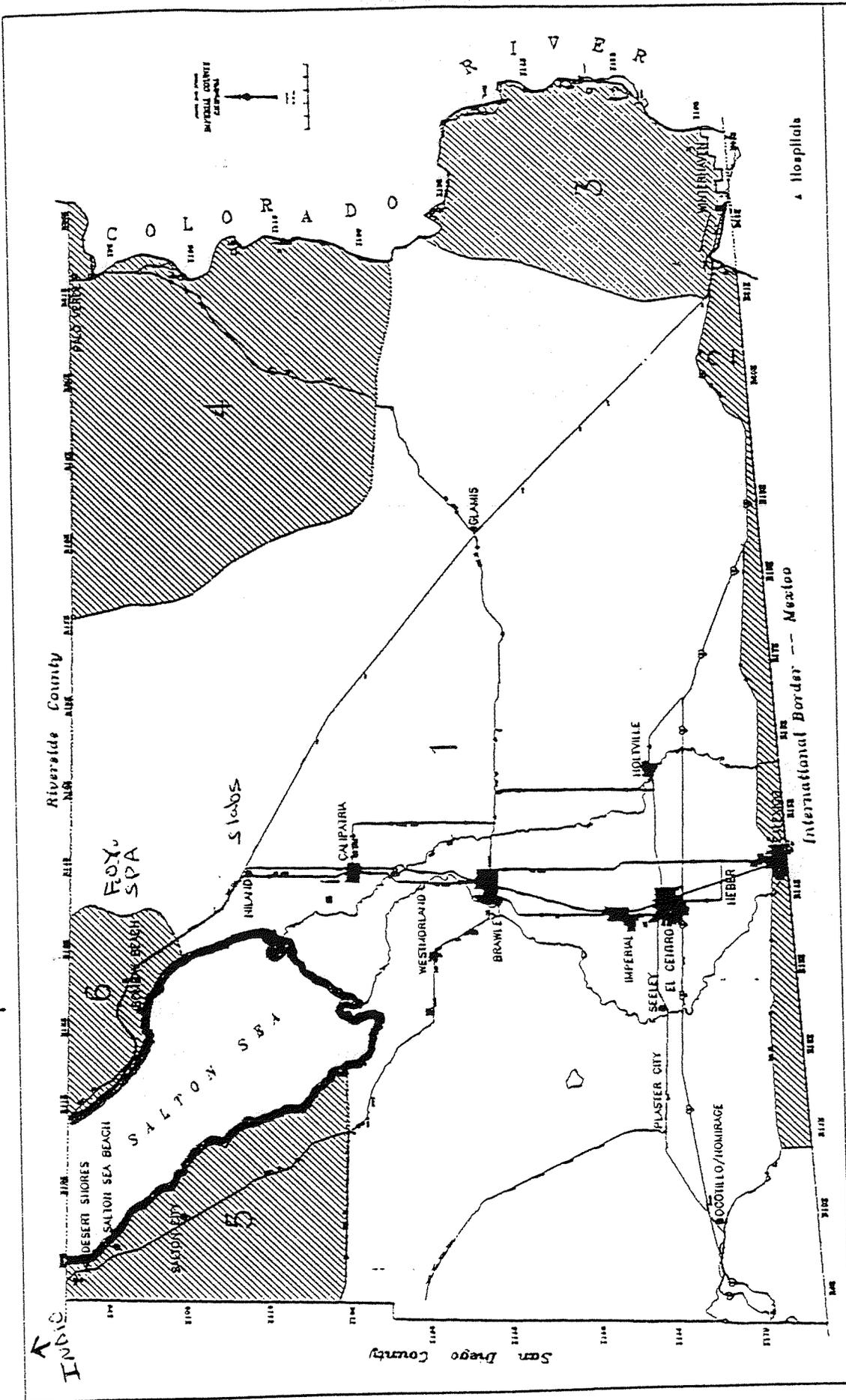
TOTAL CALLS THIS YEAR - 544

MONTHLY AVERAGE - 45

AVERAGE ON-SCENE TIME PRIOR TO ARRIVAL OF AMBULANCE - 32 MINUTES

<u>CALL TYPE</u>	<u>PERCENTAGE OF TOTAL</u>
Vehicle Accidents	36%
Difficulty Breathing	26%
Chest Pain	20%
CPR	2%
Altered Neurologic Function	7%
All others	9%

<u>LEVEL OF CARE</u>	<u>PERCENTAGE OF TOTAL</u>
EMT-1	100%



**IMPERIAL COUNTY (AMBULANCE DISTRICTS) - 1994**  
 Imperial County Planning/Building Department  
 County of Imperial, California (1994)

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**CURRICULUM VITAE**

**COURSE DIRECTOR**

JOHN WILLIAM PRITTING

671 Sequoia Street \* Imperial, California 92251  
(619) 352-5664

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EDUCATION

UNIVERSITY OF PHOENIX Imperial County Extension  
Bachelor of Science - Business Administration

UNIVERSITY OF CALIFORNIA San Diego, California

Fulfilled requirements to obtain California Community College  
Instructor Credential for subject area of Health and Physical  
Care Services and Related Technologies

UNIVERSITY OF CALIFORNIA San Diego, California

Mobile Intensive Care Paramedic Course

PROFESSIONAL EXPERIENCE

IMPERIAL COUNTY HEALTH DEPARTMENT Present Employer  
Imperial County, CA

Emergency Medical Services Coordinator

RESPONSIBILITIES:

- \* Develop, implement, evaluate, and enforce system-wide policies and procedures which govern the medical, operational and administrative functions of the EMS system
- \* Negotiate and administer service provider contracts
- \* Organize and coordinate the various EMS activities of government and private agencies
- \* Coordinate the quality improvement program to ensure medical accountability in all stages of the system
- \* Monitor basic and advanced life support training programs to ensure compliance with State regulations and as part of the quality improvement program
- \* Coordinate, in cooperation with users, the EMS communication system
- \* Develop and maintain plans and procedures for a coordinated emergency medical response to catastrophic disasters
- \* Conduct continuing medical education training courses for EMS system participants
- \* Provide staff support to EMS councils and committees \*

SCHAEFER'S AMBULANCE SERVICE November 1975 - August 1994  
Los Angeles, CA

Regional Manager  
San Diego & Imperial County Operations

RESPONSIBILITIES:

- \* Responsible for all phases of operations for two divisions to include staffing, training, contract negotiations, bid proposals, billing, work schedules, and fleet maintenance (combined fleet of 23 vehicles) \* Supervised beginning management levels and field operations \* Identified transportation and scheduling conflicts to produce optimal unit utilization \*

ACHIEVEMENTS:

- \* Four years management experience;
- \* Negotiated and secured the following contracts:
  - ▶ Imperial County "911" ALS contract and Exclusive Operating Area for all emergency ambulance service;
  - ▶ University Hospital & Medical Center, San Diego for all transports to include: CCT, Neonate, BLS, Air & Ground ambulance service;
  - ▶ Balboa Naval Hospital, San Diego, for all transports to include: CCT, Neonate, BLS, Air & Ground ambulance service;
- \* Established and coordinated air ambulance service in San Diego County (Montgomery Field) as subdivision of Schaefer's Air Service, Los Angeles.

Paramedic, Field Supervisor  
Imperial County Division

RESPONSIBILITIES:

- \* Supervise daily performance of paramedics and EMTs to ensure quality of care and service and compliance with contract requirements \* Maintain, revise, and implement field safety and training programs and associated manuals \* Maintain adequate staffing of paramedics and EMTs through recruitment and training \*

**ACHIEVEMENTS:**

- \* Fifteen years experience as MIC Paramedic;
- \* Ten years experience as Field Supervisor;
- \* Ten years experience as Field Training Officer;
- \* Voted by peers to be Imperial County "Advanced Life Support Provider of the Year 1990"

IMPERIAL VALLEY COLLEGE                      September 1982 - June 1994  
Imperial, CA

**Emergency Medical Services Training Instructor**

**RESPONSIBILITIES:**

- \* Primary instructor for the following programs: Emergency Medical Technician - I, II, and Paramedic, Mobile Intensive Care Nurse, First Responder, CPR/BLS, and Advanced Cardiac Life Support
- \* Developed learning objectives, lesson plans, testing and grading criteria \*

**ACHIEVEMENTS:**

- \* Developed curriculum for first "Mobile Intensive Care Nurse" program to be offered in Imperial Valley \*

BOULEVARD FIRE DEPARTMENT                      August 1984 - November 1987  
Boulevard, Ca

**Captain, Firefighter**

**RESPONSIBILITIES:**

- \* Medical Officer - provide training for initial certification and recertification for CPR/BLS, First Responder, and Emergency Medical Technician-I through local community college
- \* Maintain adequate medical supplies and equipment
- \* Oversee firefighters in the performance of their duties to ensure quality medical care and service
- \* Perform required duties as Firefighter to ensure public safety \*

**ACHIEVEMENTS:**

- \* Conducted first EMT-1 Training Program through Imperial Valley College for fire department first responders in east San Diego County. A total of 36 volunteer firefighters from Boulevard, Jacumba, and Ocotillo Volunteer Fire Departments received EMT-1 certification \*

## COMMUNITY AFFILIATIONS

EMS Administrators Association of California  
Imperial County Emergency Medical Care Committee  
Binational Emergency Medical Care Committee  
American Heart Association  
California Rescue Paramedic Association  
Imperial Valley Fire Chief's Association



No 249607

# The California Community Colleges

JOHN WILLIAM PRITTING

The Board of Governors of the California Community Colleges, acting in accordance with the authority vested in it, awards to the person named above an

## Instructor Credential

12

This document, earned by meeting the provisions established by law and the requirements established by the Board of Governors of the California Community Colleges, authorizes the holder to perform all services permitted by these provisions and requirements.

Subject Matter Area: HEALTH AND PHYSICAL CARE SERVICES  
AND RELATED TECHNOLOGIES\*\*\*\*\*  
\*\*\*\*\*

*Mano Camara*

President, Board of Governors  
California Community Colleges

*Donald C. Hyland*

Chancellor  
California Community Colleges

VALID FOR LIFE

Issued: JULY 7, 1989

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**TREATMENT PROTOCOLS**

**SCOPE OF PRACTICE OF EXPANDED SCOPE EMT-I  
IN IMPERIAL COUNTY**

Policy Number:

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An Expanded Scope EMT-I, currently affiliated with an approved EMT-I service provider, may, in accordance with Imperial County EMS Policies, Procedures and Protocols:

1. Perform any activity identified in the California Code of Regulations, Division 9, Section 100063 (Scope of Practice of an EMT-I).
2. Perform the following procedures:
  - ▶ Blood glucose measurement by venous blood/finger stick
  - ▶ Defibrillation using AED
  - ▶ Intubation (using Combitube)
  - ▶ Injections (subcutaneous, intramuscular)
  - ▶ Oral medication administration
3. Administer the following medications:
  - ▶ Activated charcoal
  - ▶ Aspirin
  - ▶ Albuterol, nebulized (Proventil)
  - ▶ Epinephrine (1:1,000)
  - ▶ Glucagon hydrochloride
  - ▶ Naloxone (Narcan)
  - ▶ Nitroglycerine (NTG), sublingual tablets or spray
  - ▶ Oxygen

**ALLERGIC REACTION AND/OR ANAPHYLAXIS**

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Policy Number:

- ▶ Institute and/or maintain BLS procedures.
- 1. **ALLERGIC REACTION (Acute angioedema, threatened airway):**
  - BH▶ Epinephrine (1:1,000) 0.3 mg SC, may repeat. Use caution for patients over age 40, and/or heart disease, hypertension.
- 2. **ANAPHYLAXIS (Urticaria/angioedema, hypotension, wheezing):**
  - SO▶ Epinephrine (1:1,000) 0.3 mg SC.
  - BH▶ If wheezing: Albuterol 1 vial (2.5 mg) via nebulizer.
  - BH▶ May repeat Epinephrine, Albuterol as needed.

**PEDIATRIC DOSAGES:**

- BH▶ Albuterol 2.5 mg/dose.
- BH▶ Epinephrine (1:1,000): SC, 0.01 mg/kg up to 0.3 mg/dose.

**ALTERED NEUROLOGIC FUNCTION (NON-TRAUMATIC)**

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Policy Number:

> Institute and/or maintain BLS procedures.

SO> Analyze blood sample via Glucometer.

1. **SUSPECTED HYPOGLYCEMIA:**

SO> Determine blood sugar level by Glucometer reading.

SO> Glucagon 1 mg IM if blood sugar level < 60 or unobtainable.

**PEDIATRIC DOSAGES:**

SO- Glucagon 0.5 ml IM < 1 year of age.  
Glucagon 1 ml IM  $\geq$  1 year of age.

**CARDIOPULMONARY ARREST (NON-TRAUMATIC)**

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Policy Number:

- ▶ Refer to Determination of Death in the Field policy, if appropriate.
- ▶ Institute and/or maintain BLS procedures.
- SO▶ Apply AED and perform defibrillation if indicated.
- SO▶ Insert Combitube.
- ▶ Consider transport after defibrillation, airway control.

If hypovolemia suspected:

- ▶ Immediate transport.

NOTE: Transport pregnant cardiac arrest patient who appears near term immediately (if ETA < 15 min.) with treatment en-route.

IMPERIAL COUNTY EMERGENCY MEDICAL SERVICES AGENCY  
Policy and Procedures Manual

Medical Control: Expanded Scope EMT-I Patient Care Protocols

Date: DRAFT 10/26/95

**CHEST PAIN (SUSPECTED CARDIAC ORIGIN)**

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Policy Number:

- Institute and/or maintain BLS procedures.
- BH> Nitroglycerine 0.4mg (gr 1/150) SL for pain q 5 minutes x 2 as long as BP remains 100 mm Hg systolic or greater.
- BH> Two chewed baby aspirin (160 mg).

**NEAR DROWNING**

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**Policy Number:**

- ▶ Initiate and/or maintain BLS procedures.
  - SO▶ Insert Combitube with in-line spinal stabilization pm.
  - BH▶ Consider nebulized albuterol for wheezing.
- NOTE: All patients in this category should be evaluated in the hospital.

**POISONING**

Policy Number:

- 
- ▶ Institute and/or maintain BLS procedures.
  - BH▶ For ingested agent, consider activated charcoal 50 gm PO. (Exceptions: Acids, alkalies, petroleum distillates, or drugs that cause rapid onset of seizures e.g., camphor, tricyclics).
  - 1. **NARCOTIC:**
    - SO▶ Naloxone 2 mg IM in patients with depressed respirations  $\leq$  12/minute, pinpoint pupils, and/ or circumstantial evidence of drug use. If no IV 2 mg IM x 1. Additional naloxone administration requires BH order.
    - ▶ If restraint is necessary, restrain in lateral position.

**PEDIATRIC DOSAGES:**

- BH▶ Activate Charcoal 1 gm/kg.
- BH▶ Naloxone 0.1 mg/kg IM (limit 2 mg).

Medical Control: Expanded Scope EMT-I Patient Care Protocols

Policy Number:

## RESPIRATORY DISTRESS

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- Institute and/or maintain BLS procedures.
- 1. UNCONSCIOUS PATIENT WITH APNEA/INEFFECTIVE RESPIRATIONS:
  - SO- Combitube if unconscious.
- 2. RESPIRATORY DISTRESS OF SUSPECTED CARDIAC (CHF) ETIOLOGY:
  - BH- Nitroglycerine 0.4 mg (1/150gr) SL q 5 minutes x2 for severe distress (if BP >100 mm Hg systolic).
- 3. RESPIRATORY DISTRESS WITH BRONCHOSPASM (SUSPECTED ASTHMA/COPD):
  - BH- Nebulized albuterol 1 unit dose vial (2.5 mg). Continuous administration for severe distress per BH, pm.

NOTE: Base contact for smoke, toxic gas inhalation.

### PEDIATRIC DOSAGE:

BH- Albuterol 2.5 mg/dose.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**COURSE CONTENT**

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 1  
INTRODUCTION  
(allow approximately 1 hour)**

Introduction to course

Roles & Responsibilities

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 2  
LECTURE PLAN  
PROTOCOLS  
(allow approximately 2 hours)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. State the importance of using protocols in algorithm form for patient care.
2. Identify the eight (8) protocols included in this program.
3. Given a list of patient scenarios, identify the correct protocol to be used for each scenario.
4. State the importance of continuous quality improvement in EMS to evaluate the effectiveness and compliance with these protocols.
5. Define on-line medical control, standing orders and scope of practice.
6. Describe the procedure to use in the event of communication failure when the patient's condition warrants medical intervention.

IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE

SECTION 3  
LECTURE PLAN  
PATIENT ASSESSMENT  
(allow approximately 2 hours)

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Identify the components of a field "medical team".
2. Identify the six parts of a run.
3. Identify the components of the PQRST for evaluating a chief complaint of pain.
4. Explain the modified PQRST for a chief complaint of dyspnea.
5. Identify the special questions for a chief complaint of overdose/poisoning.
6. Identify the special assessment for altered neurological function.
7. Identify the components of the physical examination.
8. Identify the criteria for establishing priorities of care.
9. Identify the modified physical exam for a chief complaint of chest pain.
10. Identify the modified physical exam for a chief complaint of dyspnea.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 4  
LECTURE PLAN  
PHARMACOLOGY  
(allow approximately 4 hours)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Explain the importance of developing expertise in the administration of drugs.
2. List the four reasons for giving drugs.
3. Differentiate between the generic and trade names of various drugs.
4. Understand the basic drug terminology of the following terms:
  - a. antagonism
  - b. cumulative
  - c. synergism
  - d. hypersensitivity
5. Identify the general characteristics for drugs to be administered to include:
  - a. indications
  - b. actions
  - c. dose/route
  - d. contraindications
  - e. side effects
  - f. classification
6. Identify the 5 "Rights" to ensure safe administration of drugs:
  - a. right drug
  - b. right patient
  - c. right dose

- d. right route
  - e. right time
7. Identify the sympathetic and parasympathetic components of the autonomic nervous system (ANS).
  8. Identify how drugs can influence or alter the ANS.
  9. Identify the general characteristics for drugs (outlined in 5 above) for each of the following medications:
    - a. epinephrine 1:1,000
    - b. albuterol
    - c. naloxone
    - d. nitroglycerin
    - e. glucogan
    - f. activated charcoal
    - h. aspirin
  10. Identify the onset of actions and what information should be obtained in order to assess the effectiveness of administration for each of the above listed medications.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 5  
LECTURE PLAN  
SKILLS OF PHARMACOLOGY  
(allow approximately 6 hours)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Identify the routes by which medications can be delivered and explain the possible complications and absorption rates for each.
2. Calculate drug dosages for administration via the PO, sublingual, subcutaneous, and intramuscular routes.
3. Prepare medications for administration from the following:
  - a. vials
  - b. ampules
  - c. pre-loaded syringes
4. Explain the importance of evaluating a patient for response to medications.
5. Explain and demonstrate the proper procedure for administering medications via the following routes:
  - a. P.O.
  - b. nebulizer
  - c. sublingual
  - d. subcutaneous
  - e. intramuscular

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 6  
LECTURE PLAN  
CHEST PAIN  
Suspected Cardiac Origin  
(allow approximately 2 hours)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Identify the pathophysiology of angina pectoris and acute myocardial infarction.
2. List the signs and symptoms for angina and acute MI.
3. Differentiate angina from an MI in the onset, duration, and relief of pain.
4. List the pertinent special questions (PQRST) and physical exam for a chief complaint of chest pain.
5. List the field treatment for a patient with chest pain.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 7  
LECTURE PLAN  
CHEST PAIN: DIFFERENTIAL DIAGNOSIS  
(allow approximately 2 hours)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. List the signs and symptoms of the following non-cardiac causes of chest pain:
  - a. cholecystitis
  - b. costochondritis
  - c. dissecting aortic aneurysm
  - d. esophagitis
  - e. hiatal hernia
  - f. indigestion/ulcer
  - g. pancreatitis
  - h. pleurisy
  - i. pneumonia
  - j. pneumothorax (spontaneous)
  - k. pulmonary embolism
2. Identify the general field treatment for patients complaining of chest pain.
3. Identify treatment priorities for patient's suspected of having dissecting aortic aneurysm, pneumothorax, pulmonary embolism.

IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE

SECTION 8  
LECTURE PLAN  
CONGESTIVE HEART FAILURE/PULMONARY EDEMA  
(allow approximately 1 hour)

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Give the pathophysiology of congestive heart failure/pulmonary edema (CHF/PE) to include left and right heart failure.
2. List the signs and symptoms of acute CHF/PE and explain how to differentiate between other causes of respiratory distress.
3. List the pertinent special questions and physical exam to be elicited from a patient with respiratory distress.
4. List the field treatment for CHF/PE.

IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE

SECTION 9  
LECTURE PLAN  
RESPIRATORY DISTRESS  
(allow approximately 2 hours)

LESSON OBJECTIVES

At the end of this session, the student will be able to:

1. List the pertinent special questions to be elicited from a patient with respiratory distress.
2. Explain the physical exam to be performed on a patient with respiratory distress.
3. List the causes, pathophysiology, signs and symptoms, and field treatment of:
  - a. hyperventilation syndrome
  - b. asthma
  - c. COPD
    - emphysema
    - chronic bronchitis
  - d. smoke, gas, toxic substance inhalation

IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE

SECTION 10  
LECTURE PLAN  
ALTERED NEUROLOGIC FUNCTION  
Non-traumatic  
(allow approximately 2 hours)

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Identify causes of altered neurologic function to include coma and decreased level of consciousness.
2. Identify how to use "BRIM" as an assessment tool.
3. Identify the various levels of consciousness.
4. Identify the pertinent special questions and physical exam to be elicited from a patient with an altered level of consciousness.
5. Identify the field treatment of a patient with altered neurologic function.
6. Explain the use of glucagon and narcan as diagnostic tools for altered neurologic function.

IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE

SECTION 11  
LECTURE PLAN  
ALLERGY AND ANAPHYLAXIS  
(allow approximately 2 hours)

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Identify the pathophysiology of allergy/anaphylaxis.
2. List the signs & symptoms for an allergic reaction to include:
  - a. localized, non-acute
  - b. systemic, acute
3. List the signs & symptoms for anaphylaxis to include:
  - a. less severe
  - b. more severe
4. List the pertinent special questions and physical exam to be elicited from a patient with allergic reaction/anaphylaxis.
5. Explain the importance of prompt treatment in anaphylaxis.
6. List the field treatment for allergic reaction and anaphylaxis.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 12  
LECTURE PLAN  
POISONING  
(allow approximately 1 hour)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. List the characteristic signs and symptoms of a toxic ingestion from the following:
  - a. aspirin
  - b. acids/alkalis
  - c. petroleum products
  - d. various plants
  - e. cyanide
  - f. organophosphate poisoning
  
2. List the field treatment for suspected poisoning.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 13  
LECTURE PLAN  
NEAR DROWNING  
(allow approximately 1 hour)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Identify the pathophysiology of near drowning.
2. Identify post-immersion syndrome (parking lot drowning).
3. List the signs and symptoms of near drowning.
4. Identify the special questions and pertinent physical exam to be elicited from a patient who has an episode of near drowning.
5. List the field treatment for near drowning.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 14  
LECTURE PLAN  
COMBITUBE  
(allow approximately 5 hours)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. List the indications, contraindications, and potential complications of use of the COMBITUBE.
2. Indicate the use of the COMBITUBE in conjunction with other airway adjuncts.
3. Explain the use of the COMBITUBE in conjunction with the semi-automatic defibrillator in accordance with local policy - procedure - protocol.
4. Explain and demonstrate the proper procedure for intubating a patient with the COMBITUBE.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**SECTION 15  
LECTURE PLAN  
RADIO COMMUNICATIONS  
(allow approximately 3 hours)**

**LESSON OBJECTIVES**

At the end of this session, the student will be able to:

1. Identify the role of the radio person.
2. Identify the role of the MICN.
3. Identify the indications for radio contact with the base hospital.
4. List the pertinent information that should be communicated initially in a:
  - a. critical call
  - b. non-critical call
5. Identify the proper method of initiating & terminating a radio call.
6. List all pertinent information that constitutes a complete radio report.
7. Identify the more commonly used radio codes & proper radio terminology.
8. Identify appropriate handling of disagreements over the radio.
9. List the special considerations to be taken when communicating using a simplex radio.
10. Describe the procedures to follow under the "Communication Failure" protocol.

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**GRADING CRITERIA, CLINICAL/FIELD REQUIREMENTS, REFERENCES**

IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE

**EQUIPMENT/MATERIALS LIST** - whiteboard or chalkboard with writing instrument; overhead projector and screen; handouts.

**TESTING & CRITERIA CRITERIA** - There will be daily quizzes at the start of each session on all material learned in previous session; and a comprehensive written and practical final exam (which shall also be the certifying exam) at the end of the program. Students will be required to pass all quizzes and the written and practical final exam with no less than 80%.

**CLINICAL AND FIELD REQUIREMENT** - There will be a clinical requirement of sixteen (16) hours (two - eight (8) hour shifts) with a minimum five (5) ALS patient contacts conducted under the supervision of the clinical coordinator and emergency department nurses and physicians at the Base Hospital emergency department. In addition to the patient contacts, students will be expected to gain familiarity with the Base Hospital's role in prehospital care and with the MICN's role in on-line medical control. There will also be a field requirement of sixteen (16) hours (two - eight (8) hour shifts) with a minimum of five (5) ALS patient contacts which will be conducted under the supervision of select paramedic preceptors. Students will be evaluated during the clinical and field component and they must pass these evaluations with a minimum rating of 80%.

**REFERENCES**

1. Caroline, Nancy L., M.D., Emergency Care in the Streets, 4th ed., Little, Brown & Co.
2. Walraven/Jones/Ochs/Nerney, Advanced Prehospital Care, 2nd ed., Brady
3. Imperial County, Emergency Medical Services, Policies/Procedures/Protocols
4. Calif. Code of Regulations, Title 22, Division 9
5. UCSD/EMSTO, MICN & EMT-P Course Syllabus

**IMPERIAL COUNTY  
RURAL EMT-1 EXPANDED SCOPE OF PRACTICE**

**CERTIFICATION/RECERTIFICATION**

**AND**

**CONTINUING MEDICAL EDUCATION**

Medical Control

**ADVANCED EMT-1 CERTIFICATION/RECERTIFICATION REQUIREMENTS**      Policy Number:

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- I. In order to be eligible for certification, an individual shall:
  - A. Have a valid Advanced EMT-1 course completion record and apply for certification within 30 days of course completion.
  - B. Pass, by preestablished standards developed and/or approved by the EMT-1 certifying authority, a competency-based written and skills certifying examination.
  - C. Complete a statement that the individual is not precluded from certification for reasons defined in Section 1798.200 of the Health and Safety Code.
  - D. Pay the established fee.
  - E. Furnish a current photograph for identification purposes.
  - F. Comply with other reasonable requirements, as may be established by the EMT-1 certifying authority.
  
- II. Certification as an Advanced EMT-1 shall be for a maximum of two (2) years from the date the individual satisfactorily completes all certification requirements and has applied for certification. The certification expiration date will be the final day of the final month of the two (2) year period.
  
- III. In order to maintain certification, an Advanced EMT-1 shall participate in continuing education courses which shall include:
  - A. An organized field care audit of recorded or written patient care records no less than six (6) times per year.
  
  - B. Monthly training sessions or structured clinical experience or a combination thereof in EMT-1 (basic) and Advanced EMT-1 knowledge and skills, including CPR and required field care audits, totaling no less than forty-eight (48) hours every two years.
  
  - C. A monthly demonstration of selected skills proficiency documented by the local EMS Agency. The following skills shall be demonstrated on a regular bases:
    - ▶ patient assessment, communications, and reporting techniques;
    - ▶ use of combitube;
    - ▶ preparation and administration of the drugs in the Advanced EMT-1 formulary;
    - ▶ review of selected basic life support procedures;
    - ▶ use of semi-automatic defibrillator.
  
  - D. Monthly demonstration of skills may be reduced to quarterly demonstration of skills after six (6) months based on program evaluation.

## EMERGENCY MEDICAL SERVICES AUTHORITY

1930 9TH STREET, SUITE 100  
SACRAMENTO, CA 95814-7043  
(916) 322-4336  
FAX (916) 324-2875



January 5, 1996

Bruce E. Haynes, MD,  
Medical Director  
Imperial County EMS.  
935 Broadway  
El Centro, CA 92243-2396

Dear Dr. Haynes:

This is to inform you that I have reviewed the material you submitted concerning a trial study of EMT-Is performing certain advanced procedures.

Although not required by regulations, I requested the EMDAC SOP committee to review the material and provide me with their comments. It is their recommendation, and I agree, that approval be granted for the trial study to be implemented.

In addition, I recommend that you modify that portion of the study that makes reference to *certification* as an "Advanced EMT-I." Neither statute nor regulation provides for *certification* of the EMT-I as other than an EMT-I. I realize that there is a need to identify the level of competence of those EMT-Is who will be trained in the additional skills requested in your trial study. It seems that *accreditation* of EMT-I with additional skills is more appropriate and is allowed by regulations.

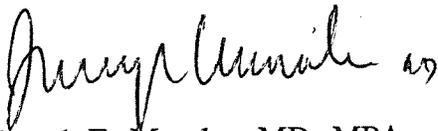
I realize this may be viewed as a matter of semantics, but there already is confusion and controversy in terminology concerning "BLS" and "ALS." Adding a new "certification" as *advanced* would only add to the difficulty of standardization and reciprocity of EMS personnel both within and outside the state.

It is not necessary to submit a revised document to reflect this change, but rather make changes locally as suggested and confirm that the changes have been made. Also please let me know the date you anticipate the trial study to begin.

January 5, 1996  
Trial Study  
Page 2

Please contact me if you have any questions or concerns regarding this letter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joseph E. Morales".

Joseph E. Morales, MD, MPA,  
Director

cc: John Priting  
EMS Administrator

JM:AM\letters\Imptrisd.196

*49 pages*

**Bruce E. Haynes, M.D.-**  
Diplomate, American Board of Emergency Medicine

EMT  
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*OK*  
*[Signature]*  
*11/3*

Medical Director  
Emergency Medical Services

Imperial County Health Department  
935 Broadway  
El Centro, CA 92243-2396  
(619) 339-4468

October 20, 1995

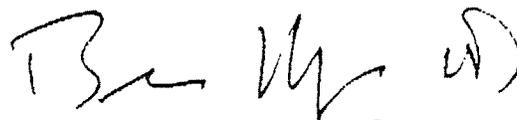
Joseph E. Morales, M.D.  
Director, EMS Authority  
1930 9th Street, Suite 100  
Sacramento, CA 95814-7043

Dear Dr. Morales:

The Imperial County EMS Agency wishes to submit the enclosed EMT-I trial study proposal. We believe this program will greatly assist the citizens in remote areas of Imperial county. Please let us know should you have any questions, or need additional information.

Thank-you in advance for your assistance, and we look forward to hearing from you in the near future.

Sincerely,



Bruce E. Haynes, M.D.  
Medical Director