

# PREHOSPITAL and DISASTER MEDICINE

Médecine Pré-Hospitalière et Médecine de Catastrophe

Volume 8, Number 1

January–March 1993

## **Original Research**

Omission of Vital Signs  
Prehospital Use of Nitroglycerin  
Do-Not-Resuscitate Orders  
Non-Use of 9-1-1 by Trauma Victims  
SARA: Physicians' Knowledge, Beliefs, and Actions  
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Telemedicine and International Disaster Response

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Utsein, Kaiser, and Scrooge  
Guidelines for the Use of Guidelines

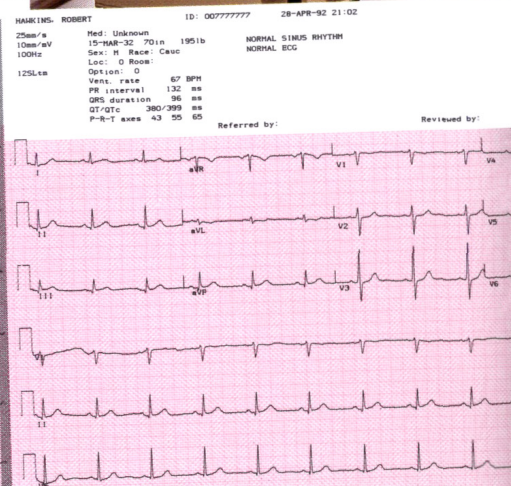
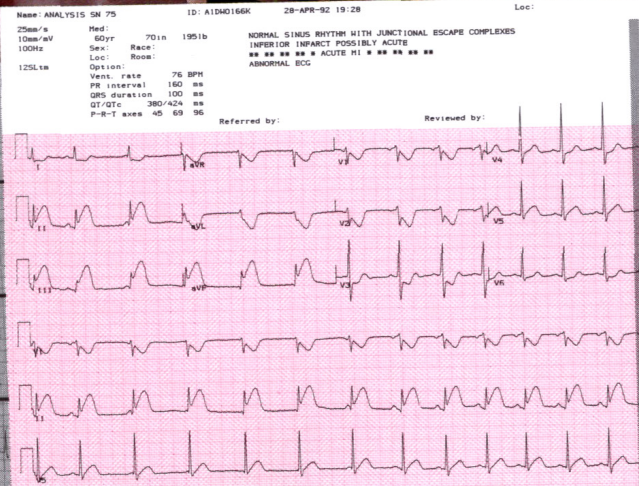
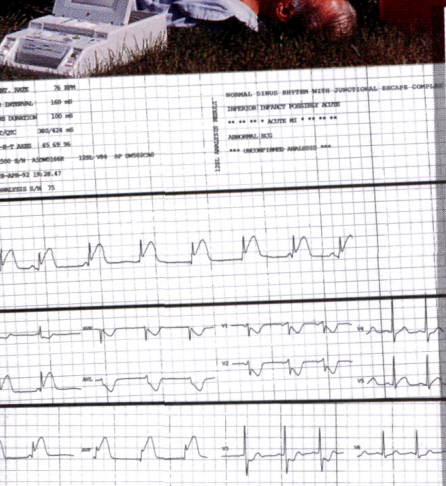
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Research in Prehospital Care Systems

The Official Journal of the  
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World Association for Emergency and Disaster Medicine  
in association with the  
Acute Care Foundation and the  
National Association of State EMS Directors

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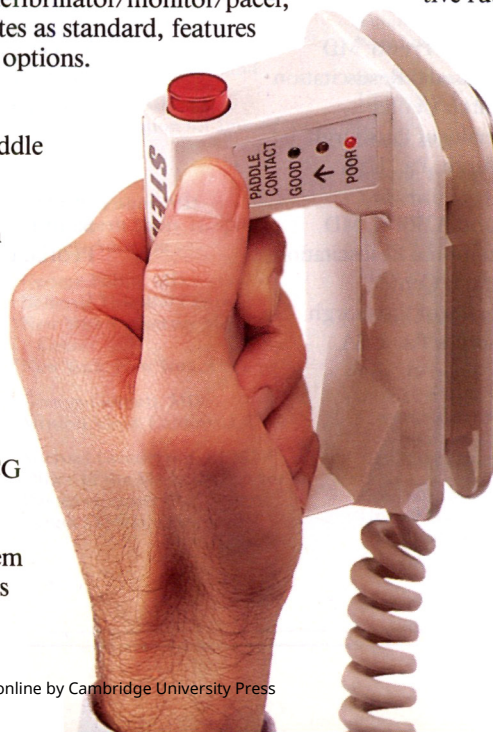
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**CLINICAL PHARMACOLOGY:** Epinephrine is a sympathomimetic drug, acting on both alpha and beta receptors. It is the drug of choice for the emergency treatment of severe allergic reactions (Type 1) to insect stings or bites, foods, drugs, and other allergens. It can also be used in the treatment of idiopathic or exercise-induced anaphylaxis. Epinephrine when given subcutaneously or intramuscularly has a rapid onset and short duration of action.

**INDICATIONS AND USAGE:** Epinephrine is indicated in the emergency treatment of allergic reactions (anaphylaxis) to insect stings or bites, foods, drugs and other allergens as well as idiopathic or exercise-induced anaphylaxis. The EpiPen Auto-Injector is intended for immediate self-administration by a person with a history of an anaphylactic reaction. Such reactions may occur within minutes after exposure and consist of flushing, apprehension, syncope, tachycardia, tremor or unobtainable pulse associated with a fall in blood pressure, convulsions, vomiting, diarrhea and abdominal cramps, involuntary voiding, wheezing, dyspnea due to laryngeal spasm, pruritis, rashes, urticaria or angioedema. The EpiPen is designed as emergency supportive therapy only and is not a replacement or substitute for immediate medical or hospital care.

**CONTRAINDICATIONS:** There are no absolute contraindications to the use of epinephrine in a life-threatening situation.

**WARNINGS:** Epinephrine is light sensitive and should be stored in the tube provided. Store at room temperature (15°-30°C/59°-86°F). Do not refrigerate. Before using, check to make sure solution in Auto-Injector is not discolored. Replace the Auto-Injector if the solution is discolored or contains a precipitate. Avoid possible inadvertent intravascular administration. Select an appropriate injection site such as the thigh. DO NOT INJECT INTO BUTTOCK. Large doses or accidental intravenous injection of epinephrine may result in cerebral hemorrhage due to sharp rise in blood pressure. DO NOT INJECT INTRAVENOUSLY. Rapidly acting vasodilators can counteract the marked pressor effects of epinephrine.

Epinephrine is the preferred treatment for serious allergic or other emergency

situations even though this product contains sodium metabisulfite, a sulfite that may in other products cause allergic-type reactions including anaphylactic symptoms or life-threatening or less severe asthmatic episodes in certain susceptible persons. The alternatives to using epinephrine in a life-threatening situation may not be satisfactory. The presence of a sulfite in this product should not deter administration of the drug for treatment of serious allergic or other emergency situations.

Accidental injection into the hands or feet may result in loss of blood flow to the affected area and should be avoided. If there is an accidental injection into these areas, go immediately to the nearest emergency room for treatment. EpiPen should ONLY be injected into the anterolateral aspect of the thigh.

**PRECAUTIONS:** Epinephrine is ordinarily administered with extreme caution to patients who have heart disease. Use of epinephrine with drugs that may sensitize the heart to arrhythmias, e.g., digitalis, mercurial diuretics, or quinidine, ordinarily is not recommended. Anginal pain may be induced by epinephrine in patients with coronary insufficiency. The effects of epinephrine may be potentiated by tricyclic antidepressants and monoamine oxidase inhibitors. Hyperthyroid individuals, individuals with cardiovascular disease, hypertension, or diabetes, elderly individuals, pregnant women, and children under 30 kg (66 lbs.) body weight may be theoretically at greater risk of developing adverse reactions after epinephrine administration. Despite these concerns, epinephrine is essential for the treatment of anaphylaxis. Therefore, patients with these conditions, and/or any other person who might be in a position to administer EpiPen or EpiPen Jr. to a patient experiencing anaphylaxis should be carefully instructed in regard to the circumstances under which this life-saving medication should be used.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY:** Studies of epinephrine in animals to evaluate the carcinogenic and mutagenic potential or the effect on fertility have not been conducted.

**USAGE IN PREGNANCY:** Pregnancy Category C: Epinephrine has been shown to be teratogenic in rats when given in doses about 25 times the human dose. There are no adequate and well-controlled studies in pregnant women. Epinephrine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**PEDIATRIC USE:** Epinephrine may be given safely to children at a dosage appropriate to body weight (see Dosage and Administration).

**ADVERSE REACTIONS:** Side effects of epinephrine may include palpitations, tachycardia, sweating, nausea and vomiting, respiratory difficulty, pallor, dizziness,

weakness, tremor, headache, apprehension, nervousness and anxiety. Cardiac arrhythmias may follow administration of epinephrine.

**OVERDOSAGE:** Overdosage or inadvertent intravascular injection resulting from a sharp rise in blood pressure. Fatalities may also result from pulmonary edema because of peripheral vascular constriction together with cardiac stimulation.

**DOSAGE AND ADMINISTRATION:** Usual epinephrine adult dose for allergic emergencies is 0.3 mg. For pediatric use, the appropriate dosage may be 0.15 or 0.30 mg depending upon the body weight of the patient. However, the prescribing physician has the option of prescribing more or less than these amounts, based on careful assessment of each individual patient and recognizing the life-threatening nature of the reactions for which this drug is being prescribed. With severe persistent anaphylaxis, repeat injections with an additional EpiPen or EpiPen Jr. Auto-Injectors are available singly or in packages of twelve.

**HOW SUPPLIED:** EpiPen and EpiPen Jr. Auto-Injectors are available singly or in packages of twelve.

**CAUTION:** Federal (U.S.A.) law prohibits dispensing without a prescription. Issued: April 1992

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Distributed in Canada by Allerex Laboratories, Ltd.,  
Kanata, Ontario. Tel. 613-592-8200

Manufactured for Center Laboratories by  
Survival Technology, Inc. Rockville, MD 20850  
U.S. Patent Nos. 3,882,863, 4,031,893 and 3,712,301



# The Disposables You'll Hate To Throw Away

Ferno's disposable immobilization devices are made with the same high quality and attention to detail as our other products, only these devices are carefully designed for single-patient use.

The Cervi VII and HeadHugger immobilization devices are constructed of a strong corrugated material that is biodegradable and treated for fluid resistance. They are lightweight and easy to store, yet rigid enough to meet the rigors of emergency rescue. Both are economical, so you can afford to have plenty on hand.

**Disposable Cervi VII™ Extrication Collars, Model 454 —**  
Excellent support at an affordable price!

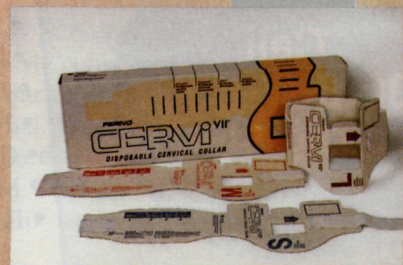
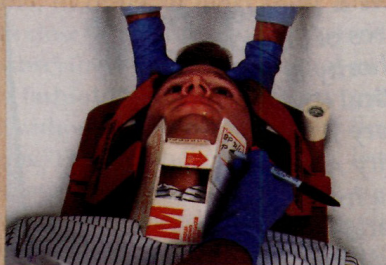
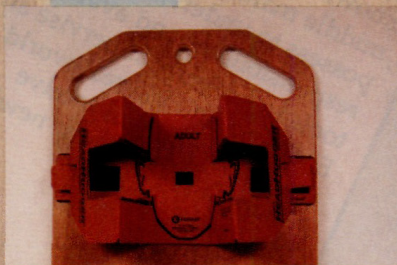
- comes in three sizes color-coded for convenience
- easy to apply with hook-and-loop closures
- ideal to have on hand for mass-casualty incidents

**HeadHugger™ Disposable Head Immobilizer, Model 455 —**  
A low-cost method of effective immobilization!

- takes less than a minute to apply
- stores on backboard ready for use
- ample access for monitoring ears and scalp

**Find out more!**

**Call Ferno for details at 800-733-7751.**



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