



National Association of  
Emergency Medical Technicians

**Title:** [Low-cost improvements in prehospital trauma care in a Latin American city](#)

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**Abstract:**

**Objective:** Prehospital care is a critical component of efforts to lower trauma mortality. In less-developed countries, scarce resources dictate that any improvements in prehospital care must be low in cost. In one Latin American city, recent efforts to improve prehospital care have included an increase in the number of sites of ambulance dispatch from two to four and introduction of the Prehospital Trauma Life Support ( PHTLS) course.

**Methods:** The effect of increased dispatch sites was evaluated by comparing response times before and after completion of the change. The effect of PHTLS was evaluated by comparing prehospital treatment for the 3 months before initiation of the course (n = 361 trauma patients) and the 6 months after (n = 505).

**Results:** Response time decreased from a mean of 15.5 +/- 5.1 minutes, when there were two sites of dispatch, to 9.5 +/- 2.7 minutes, when there were four sites. Prehospital trauma care improved after initiation of the PHTLS course. For all trauma patients, use of cervical immobilization increased from 39 to 67%. For patients in respiratory distress, there were increases in the use of oropharyngeal airways (16-39%), in the use of suction (10-38%), and in the administration of oxygen (64-87%). For hypotensive patients, there was an increase in use of largebore intravenous lines from 26 to 58%. The improved prehospital treatment did not increase the mean scene time (5.7 +/- 4.4 minutes before vs. 5.9 +/- 6.8 minutes after). The percent of patients transported who died in route decreased from 8.2% before the course to 4.7% after. These improvements required a minimal increase (16%) in the ambulance service budget.

**Conclusion:** Increase in sites of dispatch and increased training in the form of the PHTLS course improved the process of prehospital care in this Latin American city and resulted in a decrease in prehospital deaths. These improvements were low cost and should be considered for use in other less developed countries. [References: 20]

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