water; and 74.2% were men. To establish a new classification, clinical parameters such as pulmonary auscultation, consciousness level, necessity for ventilatory assistance, and cardiovascular clinical status were taken into consideration. All cases were classified by physicians in the first-aid department.

Results: The division of ND/D cases into different levels was made possible through clinical evaluation. Mortality evaluation was made within the first 12 hours of the accident. The classification presented correlation with treatment and initial prognosis.

Level	Frequency (%)	Mortality (%)	Internee (%)
I	63.3	0	3.9
II	18.6	0	16.1
IIIa	3.2	0	47.9
IIIb	2.2	0	96.0
IVa	1.3	3.5	86.2
IVb	11.5	93.2	6.4

Conclusion: Szpilman's classification of ND/D demonstrates significance ($p < .05$) in all clinical parameters evaluated. Even though the hospital follow-up has not been completed, the 252 patients needing intervention (126 in ICU) represent only about 10% of these cases.

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One Year in an Emergency Medical Service in Argentina

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Objective: To describe emergency medical services (EMS) developed in the (Argentine) system during one year.

Methods: A study was conducted of all the medical prehospital requests from June 1991 to June 1992. Different classifications were made according to: 1) dispatch codes; 2) age; 3) calling hours; 4) frequency of symptoms; 5) specificity of priority assessment; 6) incorrect triage average; and 7) percentage of patients who needed to be transported.

Results: A total of 83,029 patients received response during the described period. Seventy-four percent (61,638) were associated with the system that serves 180,000 direct members; the others were distributed as indirect members, street public calls, police and fire incidents, etc. A total of 45,849 females (55%) and 45% males requested service. Nearly 39% of those requesting services required emergency attention. The more frequent causes for service requests included:

Diagnosis	% of Cases
Trauma	8.5
Digestive Diseases	6.9
Hypertension	3.1
Fever	3.1
Cardiac Arrest	1.0

Thirty-four percent were over 55 years of age and 30% were under age 12. Categorization was correct in 80% to Code 3; 60% to Code 2; and 43% to Code 1. Only 15% of all the patients had to be transported to a medical center.

Conclusion: Emergency ambulance crews complained about public misuse and abuse of limited resources that demoralize the staff. Six percent of the calls received incorrect triage and were assigned a lower level of priority than was the need.

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Unexpected High Prevalence of Chlamydia pneumoniae Pneumonia in an Emergency Department in Italy

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Aim of the Study: To determine, by non-invasive methods, the bacterial etiology of pneumonias admitted to an Emergency Medicine Unit.

Materials and Methods: Between February and December 1992, 84 patients were admitted to this ward with community-acquired pneumonia (CAP). All subjects underwent sputum or broncho-aspirate culture, blood culture when body temperature >38°C, pharyngeal swab for Chlamydia pneumoniae for direct detection by an indirect immunofluorescence test (Cellabs Diagnostic PTY), and acute and convalescent serologic examination for C. Pneumoniae, (microimmunofluorescence test with specific antigen, Washington Research Foundation, Seattle, Wash., USA), L. pneumophila, and M. pneumoniae.

Results: Among the patients enrolled, 17 had no associated diseases, while 23 suffered with COPD, 17 had chronic diseases, nine were immuno-depressed, and 17 had cardiovascular diseases. Before admission, 16 patients had been treated with antibiotics. Etiologic diagnosis was found in 43 patients (51%; see Table). Only 7% showed Streptococcus p. infection, whereas 15% had C. pneumoniae infection. Gram negative infection also was common (15%), as expected, due to the high prevalence of neoplastic and immuno-depressed patients enrolled.

Table—Microbiologic results

Organism	Prevalence (%)
Clamydia pneumoniae	15
Streptococcus pneumoniae	7
Staphylococcus aureus	5
Mycoplasma pneumoniae	4
Haemophilus influenzae	4
Legionella pneumophila	2
Klebsiella pneumoniae	1
Streptococcus faecalis	1
Enterococcus spp	1
Pneumocystis carini	1
Serratia spp	1
Branhamella catarrhalis	1
Others	3

Conclusions: C. pneumoniae is reported to be involved in about 6%–10% of CAP. However, it was found that an unexpected high incidence of C. pneumoniae together with a low frequency of Streptococcus p.; this could be due, at least par-

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tially, to both the habit of general practitioners in Italy to treat pneumonias with penicillin-amoxicillin (73% of cases), together with the high frequency of serious, chronically ill patients, leading to selection of unusual and emerging pathogens. In fact, the incidence of C. pneumoniae infection was not related to any particular associated pre-existing disease. These results point-out the importance of C. pneumoniae infection even in critical hospital settings.

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Trauma Care in Accident and Emergency Departments—A Critical Analysis

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In most European accident and emergency (A&E) departments, more than 70% of the patients can be discharged home after treatment, and only 5% are major trauma victims or seriously sick in need of qualified emergency care.

Despite vigorous efforts to guide patients with slighter conditions to attend their general practitioners, they still queue-up for treatment. Another group of patients attending A&E departments are those with complaints related to alcoholism, drug addiction, battering, and other types of social misadjustment. The wide spectrum of patients at the A&E departments, with complaints varying from non-urgent banalities to life-threatening conditions, constitutes a great problem.

To handle this situation and to increase the quality of care in the A&E departments, Emergency Medicine was created as a new specialty. Doctors recruited to this specialty were specially trained in handling a variety of emergency conditions.

In several studies, however, avoidable deaths still were noticed among seriously injured after attending emergency hospitals. These deaths most often were due to bad management with a delay in diagnostics and definitive treatment. When trauma centers first were established, it was hoped that better results could be achieved.

To improve emergency care, it has to be centralized to fewer specialized hospitals, where the organization is adjusted to manage a great number of casualties. Thereby, those with major injuries requiring advanced trauma life support, as well as patients with sociomedical problems in need of fast and skillful care by emergency medicine physicians, can be properly handled.

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Hyperbaric Oxygen Treatment of Smoke Inhalation and Other Acute Carbon Monoxide Poisonings

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Introduction: This is a preliminary report from an ongoing study based on 70 consecutive patients referred to the Karolinska Hospital for hyperbaric oxygen (HBO) treatment of acute carbon monoxide (CO) poisoning. Hyperbaric oxygen (HBO), i.e., 100% O_2 breathing at 2.5–2.8 times normal barometric pressure reoxygenates ischemic tissues, hastens the elimination of CO from heme proteins such as hemoglobin, myoglobin, and cytochrome systems, and reduces cerebral edema.

In animal experiments, HBO antagonizes co-mediated brain lipid peroxidation, speeds up the recovery of energy metabolism and ameliorates the prolonged intracellular acidosis in the brain after CO-induced hypoxia.

Methods: Twenty-one women and 58 men were treated with one or repetitive (mean = 2.8) HBO sessions in multi- or monoplace chambers. No patients were excluded. Mean age was 42 years (range 3–88 years). Forty-two (53%) of the 70 cases were accidental CO exposures, 36 were due to smoke inhalations (15 with burns). Thirty-seven (47%) cases were attempted suicides, in 33 cases from automobile exhaust (3 women, 30 men).

Results: History of unconsciousness at the scene was reported in 73 patients and 41 still were unconscious on admission to the emergency department of the nearest hospital. Mechanically assisted ventilation was given to 47 patients. The delay from rescue to start of HBO averaged 7.7 hours. Four deaths (5%) occurred due to anoxic encephalopathy. Three of these were due to smoke inhalation, of which two were burned severely and required initial CPR. Four patients (5%) had evidence of brain damage on discharge.

Conclusion: These data are in agreement with many previous reports from the past 30 years, and indicate that HBO reduces mortality and morbidity beyond that expected with pure normobaric oxygen. The history of CO intoxication/smoke inhalation and unconsciousness (even transient) in a patient justifies rapid transfer to the nearest hyperbaric center with facilities for critical care and suitably qualified personnel. Any delay to await laboratory results is inappropriate. During transport to such a facility, the patient should receive 100% oxygen. The argument that normobaric oxygen always is satisfactory for severe CO poisoning no longer can be sustained.

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Carbon Monoxide and Jogging in the City

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Aim of the Study: Taking into account the increase of the minute volume of ventilation during the effort and the carbon monoxide (CO) content of air in the cities, does city jogging result in a rise of blood CO?

Joggers and methods: Twenty-seven, non-smoking, well-trained joggers (age 37.0–7.6 years) participating in the "20 km de Bruxelles" (20,000 runners) had a determination of venous CO the day before the race and just after completion of the run. The CO concentration in the environment was measured every kilometer and more often in the tunnels.

Results: CO content was 2 ppm up to km 7 and between 0 and 1 ppm afterward. Only in the tunnels was the content much higher (between 10 and 20 ppm). Venous CO content before