## (P2-23) Attempted and Completed Suicides: A Two-Year Analysis from a German Helicopter Base

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Introduction: In Germany, emergency physicians in the prehospital rescue system ensure primary care. The rescue helicopter in Dresden covers the city of Dresden (population 517,000), surrounding areas with distances up to 70 km. Typical reasons for alerting the rescue helicopter are heart diseases or injuries during accidents. There also is a high number of patients with attempted or completed suicides. The goal of the study was to analyze cases associated with suicide.

Methods: Data of all emergency transports from the German Air Rescue (DRF-Luftrettung) Helicopter Base Dresden between January 2008 and December 2009 were recorded on a standardized protocol and transferred to a central computer database. Subsequently, all cases were analyzed with special regard to suicides.

Results: There were a total of 3,051 cases during the study period. Fifty-nine cases (1.9%) were related to suicide. The helicopter was on the scene within 10.9 minutes. The mean NACA Score was 4.9. The mean age was 51.6. A total of 52.5% of patients were male. In 15.2% of the cases, the patient called for emergency help; in 37.3%, bystanders contacted authorities. The reason for attempted suicide was unknown in 57.6% of the cases. In 16.9%, it was related to partnership, in 20.3% to health problems, in 5.1% to financial problems. The main method of attempt was the use of medical pills (47.4%). Other frequent methods were strangulation (18.6%), stab wounds and gunshots (8.5%), intoxication (3.4%), or unknown (16.9%). Six patients received cardiopulmonary resuscitation, four reached a Return of Spontaneous Circulation, and 10 patients died.

**Discussion:** Helicopters often transport suicide victims. This study demonstrates the need for better prevention as well as an improvement of education for emergency physicians working in the prehospital setting.

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## (P2-24) The "Oxygen Bus": Retrofitting a City Bus with Oxygen Resources to Respond to Hospital Evacuations and Other Disasters

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Evacuation/Oxygen Bus The Chicago Fire Department (CFD) identified a need to treat multiple stable fire/inhalation victims who require oxygen, whether due to a previous medical condition or as the result of an acute event, such as evacuation of or fire in any building, hospital, or treatment facility. As a partner with the Chicago Department of Public Health (CDPH) and an active participant in the "Chicago Healthcare System Coalition for Preparedness and Response", the CFD determined that a bus could be an adjunct in city responses and emergencies. With

the support of the Coalition, the CFD approached the Chicago Transit Authority (CTA) to obtain a bus. Once the actual bus was given to the CFD, an operations order was written and the appropriate equipment was purchased. The Evacuation Committee of the Coalition identified equipment and supply needs. Supplies purchased and retrofitted for the bus include modulators for patient oxygen use, oxygen tanks, masks, nebulizers, automated external defibrillators (AEDs), first line advanced life support (ALS) medications, evacuation chairs for moving patients, and special emergency lighting. The bus is able to accommodate thirty five people who require treatment simultaneously. The use of the bus includes but not limited to: (1) hospital evacuation and treatment of stable patients with oxygen and nebulizers prior to transportation to an alternate facility; (2) long-term care facility evacuation and treatment of stable patients with oxygen needs prior to placement and transport to another facility; (3) responding to building fires to treat victims who may need oxygen and nebulizer treatments on site; (4) assisting with the evacuation of home-based, at-risk oxygen dependent patients; and (5) treating evacuated children from specialized treatment facilities who may be oxygen dependent. The outside of the bus has both CFD and CDPH logos to identify that this is a collaborative effort between city agencies and a Healthcare Coalition.

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## (P2-25) Evaluation of the Apache III Grading System in Predicting the Prognosis and Mortality of Patients Admitted to Emergency Room, in Need of Intensive Care Unit Admission

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Objectives: Many of critically ill patients are being cared for prolonged periods in ED just because of limited number of ICU beds and utilize of ED as the entry point to the health care system. The aim of this study is evaluation efficiency of APACHE III scoring system in predicting mortality rate of the mentioned patients.

Materials and Methods: This cross-sectional, observational, analytic study was performed in one year period. A hundred patients remaining in ED and necessitating ICU hospitalizing were enrolled by the convenience type of non-probability sampling. Then, the APACHE III scores, predicted and observed mortality rates were calculated using of information obtained from patients' files, interview with the patients' family and performing required physical exams and lab tests.

Results: In the assessment of 100 patients, men group were 56% (56) and women group 44% (44). The age of patients and the ED lengths of stay were  $66.07 \pm 19.92$  years and  $5.11 \pm 3.79$  days respectively. The average (  $\pm$  SD) of APACHE III score of the enrolled patients was  $58.89 \pm 18.24$  and the predicted mortality rate calculated 32.73%; while, the total of observed mortality rate was 55%. The average ( $\pm$  SD) of APACHE III score of survivors and non-survivors were  $48.63 \pm 16.35$  and  $67.63 \pm 14.84$  respectively. So, there was a significant deference (p < 0.001). Also, there was a significant deference in the ED lengths of stay