



## Drug Use During Adult Advanced Cardiac Life Support: An Overview of Reviews

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### INTRODUCTION

Advanced Life Support includes, but is not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardioversion, advanced airway management, intravenous therapy, administration of certain pharmaceuticals and other medical products, and others specified means a specialized service designed to provide definitive prehospital emergency medical care [1]. Empowered personnel under the direct supervision of the hub hospital as part of the local rescue system at the scene of an emergency, during transfers to acute care hospitals, during transfers between facilities, and in acute patient emergency rooms techniques and procedures performed by a person; A care hospital pending acceptance of responsibility by this hospital's paramedics or other medical personnel. Upon confirmation of cardiac arrest, based on monitoring of the heart's electrical activity on a cardiac monitor, advanced life support protocols are activated [2]. Depending on the type of arrhythmia, defibrillation and medication are administered. Oxygen is given to open the airway, and endotracheal intubation may be attempted. The effects of drugs on heart rhythm, as well as the presence of cardiac output, are measured regularly. Medications that may be given during life-sustaining treatment include epinephrine, amiodarone, atropine, bicarbonate, calcium, potassium, and magnesium. Fluids can also be given to increase the patient's blood volume [3]. When performing advanced life support, team members should consider and treat the cause of cardiac arrest.

### DESCRIPTION

The BLS course is for those who can respond to emergencies. Advanced Life Support requires advanced clinical intervention and may involve starting an IV line, reading and understand-

ing an ECG, and administering emergency medications and is performed by a medical professional, including first responders. In out-of-hospital settings, trained paramedics and some specially trained paramedics typically provide this level of care [4]. Paramedics in Canada can be certified in either ALS (Advanced Care Paramedic-ACP) or Basic Life Support (Primary Care Paramedic-PCP). Some primary care paramedics are also trained in intravenous cannulation, referred to as PCP-IV (see Canadian paramedics). Emergency Medical Technicians (EMTs) are often familiar with ALS, but may use a slightly modified version of the medical algorithm [5]. In the United States, critical care level services are called advanced life support (ALS). The service that a simple EMT is responsible for is called Basic Life Support (BLS). Depending on the state, the services provided by advanced EMTs are sometimes called Limited Advanced Life Support (LALS), Intermediate Life Support (ILS), or simply Advanced Life Support (ALS). In the Republic of Ireland Advanced Life Support (ALS) is provided by Advanced Paramedic [3]. Advanced Paramedic (AP) is the highest clinical level (Level 6) in prehospital care in the Republic of Ireland and is based on standards set by PHECC, the Irish regulator of prehospital care and emergency services. The term goes beyond emergency cardiac care to describe all functions of a healthcare provider.

### CONCLUSION

This study did not demonstrate a benefit of prehospital ALS interventions in terms of in-hospital mortality, neurologic outcome, and time at site for prehospital trauma patients. In trauma, immediate definitive treatment may be critical and long on-site time should be avoided. Several methodological issues discovered in trauma studies make it difficult and impossible to compare her ALS and BLS prehospital care in an unselected trauma cohort. It is clear that ALS does not improve survival

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in urban settings or in patients with puncture injuries. In some patients, e.g. B. patients with severe head trauma in many patient groups z. No conclusions can be drawn as there are few studies on efficacy. The need for high-quality controlled clinical trials is clear. In addition, preclinical care development requires uniform and complete documentation and patient aftercare, as well as registry studies based on real data.

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## CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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