

# PRIMARY SURVEY

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## NITROUS OXIDE IN THE EMERGENCY DEPARTMENT

Nitrous oxide fulfils many of the properties of an ideal analgesic for use in the emergency department. Despite the fact that it is the oldest known anaesthetic, it still has an important role in the short-term relief of pain and anxiety in hospital medicine, prehospital care, and obstetrics. Used alone or as an adjunct, nitrous oxide has been shown to be safe and clinically effective in many thousands of patients with musculoskeletal injuries. This review discusses the background, clinical evidence, and safety issues that underpin the use of nitrous oxide in emergency medicine. It has few side effects or contraindications, and is very safe when delivered using a demand valve from a cylinder containing a 50:50 mixture with oxygen ("Entonox"). When delivered by other means, however, active steps must be taken to prevent the administration of a hypoxic mixture, and in the light of a recent tragedy the recommended safety precautions are described.

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## OVER HALF OF A&E SHOs EXPERIENCE PSYCHOLOGICAL DISTRESS

The General Health Questionnaire is widely used to identify levels of psychological distress in various occupations. Around 18% of professionals and 20%–30% of doctors experience psychological distress. A recent *EMJ* paper presented data showing that 44% of A&E consultants suffer from psychological distress.

This study presents data showing that 51% of A&E SHOs suffer from psychological distress. Together, these studies suggest that A&E doctors experience more psychological distress than any other group of doctors or other professionals. Data are also presented on coping strategies and suggestions are made for developing an intervention based on those coping strategies that are associated with better psychological health.

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## CRUSH SYNDROME PATIENTS AFTER THE MARMARA EARTHQUAKE

It is known that crush syndrome can develop after injury in earthquakes. Most life threatening injuries sustained by earthquake victims involve chest trauma, limb fractures, and acute renal failure that need rapid specialised care. Our paper considers crush syndrome patients after the Marmara earthquake. In this report we describe 18 patients with crush syndrome and subsequent acute renal failure that were treated in the ICU of a university hospital. Early extrication and administration of intravenous fluids are crucial to prevent renal failure. Better preparedness and coordination are compulsory to avoid these sort of complications after earthquakes.

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## HEALTH SYSTEM ACCESS DELAYS THROMBOLYSIS

If time is muscle in the acute revascularisation of myocardial infarction, then most muscle is lost before the patient reaches the hospital. This study of prehospital delays finds that patients with acute ischaemic chest pain who call their general practice instead of the ambulance service are likely to have their initial emergency management provided by general practitioners. This results in delayed thrombolysis. The study advises that the most beneficial current approach is for general practices to divert all patients with acute ischaemic chest pain direct to the ambulance service. In the future thrombolysis may be delivered in the prehospital setting.

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## DO AMBULANCES RESPONDING ON BLUE LIGHTS INCONVENIENCE ROAD USERS?

Earlier research in America identified situations where the public was placed at risk and inconvenience by ambulances on emergency calls. It revealed that these adverse incidents occurred in an environment where clinical urgency was not established. The present initiative sought to investigate whether emergency ambulances are linked with inconvenience and potential danger to public road users in the United Kingdom. The results suggest that matters in this country are similar to the earlier reports from America resulting in untoward interactions with the public. Increasing traffic density, more frequent emergency calls, and pressure to reduce response times are potential risks, which warrant further research.

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