controlled ventilation with minimal oxygen is essential, tends to have inappropriate respiratory management.

Keywords: congenital cardiac disease; management; neonates; oxygen administration; transportation; ventilatory support
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Medical Service Research about Armed Forces Attending Disaster Rescue

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As a highly centralized and quick-responding armed group, the armed forces play an important role in disaster rescue. Most national law has authorized the armed forces to participate in disaster rescue. The armed forces are an important, constantly prepared power for disaster rescue (including medical rescue). The missions of the armed forces medical unit in disaster rescue include providing health services for the soldiers who attend to the rescue mission and to the residents of the disaster areas.

In order to fulfill the disaster rescue mission, the armed forces must be prepared in advance and be kept in a highly alert state. They should construct emergency medical service units, prepare different kinds of disaster rescue plans, and train medical personnel in the use of rescue equipment and the skills needed. In disaster rescues, the armed forces should respond quickly and arrive at the disaster site as early as possible. The command and organizing system of disaster rescue should be a combined organization of military force, police, and civilian.

Keywords: disaster; emergency medical services; medical; military, missions; rescue; response
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M.I.E.C.O.™ (Minimally Invasive Endo Corporeal Oxygenation): Non-Pulmonary Oxygenation Method

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Adequate tissue oxygenation is the most critical treatment modality in critical care medicine. Pathology (acute, subacute, and chronic) involving the conducting airways and/or lung parenchyma have a significant impact on the efficacy of pulmonary route for the delivery of oxygen to sites of oxygen uptake by the hemoglobin in the red blood cells. Current non-pulmonary methods of oxygenation include Extra Corporeal Membrane Oxygenators (ECMO) and Intravenous Oxygenators (IVOX). IVOX has limited clinical utility. ECMO is highly invasive, of limited use in prehospital settings, carries significant risks to the patient, and has limited use for long-term treatment.

The research will demonstrate that M.I.E.C.O.™ is compatible with Pulmonary Liquid Ventilation and other modalities that may require the lung to be filled with a liquid with therapeutic properties. The research demonstrates that:

1. Minimally Invasive Endo Corporeal Oxygenation (M.I.E.C.O™) can achieve mixed venous saturations of 85% or greater;
2. Apparatus suitable for clinical use can be developed; and
3. Generate data to support the use of M.I.E.C.O™ in situations of cardiopulmonary dysfunction.

Keywords: cardiopulmonary dysfunction; endo-corporeal oxygenation; extra-corporeal membrane oxygenation (ECMO); intravenous oxygenators (IVOX); oxygenation; oxygenators; pulmonary liquid ventilation
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Clandestine Drug Laboratories: Australia's Hidden Chemical Time Bombs

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A clandestine drug laboratory is any secret or hidden place in which chemicals are used to make an illicit drug. In Australia, clandestine laboratories are almost exclusively involved in the illegal manufacture of amphetamine, methamphetamine, or their derivatives or precursor chemicals. The first Australian clandestine amphetamine laboratory was detected in Sydney in 1976. Subsequently, the number of clandestine drug laboratories in Australia has grown with the increased use of these drugs in the community. The proportion of people who had used amphetamines in the past 12 months doubled from 1995 to 1998, while the use of heroin has remained the same. Approximately four times as many people have used amphetamines at some stage of their lives compared with heroin.

Hazardous materials incidents from clandestine laboratories can force the evacuation of hospital emergency departments and local communities. In addition to killing laboratory operators, or "cooks," these incidents can injure health and emergency service personnel. Casualties from clandestine laboratory incidents potentially present an unknown chemical hazard to emergency service and health personnel, and a difficult management problem when they are seriously injured as a result of laboratory fires, explosions, or booby traps.

Clandestine drug laboratories are a growing risk to public health. Casualties from clandestine drug laboratories may present to either general practitioners or hospital emergency departments in both urban and rural areas. The "cat's urine" smell of phenylacetic acid is characteristic of methamphetamine production.

Keywords: amphetamine; Australia; drugs; emergency departments; hazardous materials; laboratories, clandestine; methamphetamine
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Emergency Medical Services Education—Evaluating the Need for Undergraduate and Graduate Degree Programs in Wisconsin

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Objective: In the state of Wisconsin, emergency medical service (EMS) preparation involves a certification course or associate's degree. The University of Wisconsin Hospital and Clinics EMS Program investigated the need for development of a bachelor's degree in EMS management, a