

## Understanding passengers' medical assistive devices

By Robb Leigh MD

**In the 21st-century marketplace, products of all sorts are designed for the consumer – focusing on lightweight materials, comfort and ease of use. The same can be said for today's portable medical assistive devices, which no longer carry the stigma they once did.**

These new devices focus on a person's mobility and are much more anatomically comfortable and less restrictive than previous models, so it is no surprise that more airline passengers are travelling with them.

It should also come as no surprise that crew members will see these devices on board aircraft with greater frequency. Understanding the types of medical devices passengers are permitted to carry onto the aircraft, and their uses, is the first step in assisting passengers in the event of an emergency.

### Harmless but helpful

Assistive devices for medical conditions come in all shapes and sizes. Those devices made mostly out of rubber and plastic, such as feeding tubes and ostomy bags (including colostomy bags, ileostomy bags and nephrostomy bags), will not pose problems to the aircraft, crew or fellow passengers, as long as the system is intact and without leaks.

Mechanical assistive devices such as prosthetic (artificial) limbs, walkers, crutches, canes and body braces are usually made of plastic and metal and, although they may cause slowing during boarding and deplaning, these devices will not affect the flight itself.

Other common medical devices may involve electronic components which have been approved by the authorities for inflight use. These devices include:

- hearing aids and other hearing-related devices, such as cochlear implants, external components of cochlear implants and middle ear implants, all of which are usually inconspicuous;



Insulin pumps can be carried around easily and are commonly used by insulin-dependent diabetics.

- pacemakers and defibrillators (for the heart), which are implanted under the skin and are therefore hidden;
- insulin pumps, which are fairly small and are very commonly used by many insulin-dependent diabetics;
- continuous positive airway pressure (CPAP) machines, used for the treatment of sleep apnea (pauses in breathing during sleep), which are allowed, but their use may not be necessary during a flight, especially on short- to mid-haul flights;
- respirators, which may be necessary to transport some passengers in certain regions of the world. Pre-arrangement with the airline for compatibility with the intended flight is required;
- left ventricular assist devices (LVADs), one of the newest medical assistive devices, designed for people with terminal heart failure whose hearts cannot pump the necessary blood to meet the demands. Most people with these devices are on a heart transplant list. Although still uncommon, flight attendants are likely to see these devices in the future, and;
- portable oxygen concentrators (POCs), which are permitted by some airlines. In some instances, airlines will 'sell' oxygen for onboard use. However, policies vary widely among airlines regarding the accommodation of oxygen-dependent passengers. Some airlines offer oxygen but only on certain aircraft. Therefore, it is

very important that airlines clearly articulate and publicise their policies to passengers – on websites, ticket sleeves and even on seatback cards. Passengers will need to know, in advance, the availability of oxygen; whether medical letters are required; and if arrangements should be made with an external oxygen company with regard to layovers and arrival at the destination. By publicising your airline's policies, you can avoid misunderstandings, accommodate your passengers and avoid costly diversions.

One of the greatest difficulties for passengers with medical assistive devices is that no consensus on carriage and usage exists among the airlines, resulting in confusion and anxiety. Airlines should educate passengers and encourage them to telephone well in advance to discuss their case, particularly regarding the specific flight they plan to take. This protocol will minimise surprises and avoid unnecessary confusion, animosity and worry between passengers and crew members. ■

As a practising emergency physician in metropolitan Phoenix, Arizona, and a medical advisor for MedAire, Robb Leigh is involved in handling medical emergencies daily in an urban emergency room as well as remotely via MedAire's venues.

The **Regional** International Medical Advisory is provided courtesy of ERA member MedAire Ltd.