

## Too sick to fly?

By Jennifer Garr RN, BSN

**According to the Airports Council International, more than a billion passengers travel by air each year. And each day, around the world, hundreds of those passengers choose to board commercial airlines despite having compromised health.**

A large percentage of passengers are fully aware of their conditions – lung disease, heart complications, diabetes, recent surgery, late-term pregnancy – before boarding the aircraft. But most passengers simply do not understand the impact that cabin pressure and altitude can have on their existing health conditions. The end result: about 300 inflight medical emergencies occurring daily around the world.

The good news is that airlines can prevent many of these inflight emergencies by adopting simple medical screening procedures during check-in and boarding. Identifying passengers with serious illnesses and ensuring their fitness to fly not only lowers the risk of complications in flight but also saves airlines the costly expense of possible diversions.

### Stressors of flight

During flight, the human body is subjected to many stressors, including changes in partial pressure of oxygen and changes in atmospheric pressure in the cabin. For most of the millions of people who fly each day, the body assimilates these changes rather effortlessly as the cabin is pressurised.

For some passengers, however, these changes can cause severe distress and possible death. Individuals with chronic heart or lung disease and people with anaemia may experience an increase in symptoms of hypoxia (lack of oxygen). Hypoxic symptoms can include impaired night vision, headache, shortness of breath, confusion and drowsiness.

In 2006, MedAire Inc. Passenger Assistance Services pre-screened nearly 10,000 commercial/regional airline



passengers for fitness to fly on the day of travel. Of those 10,000 pre-screened passengers, 26% were advised not to travel by MedAire's medical personnel. A closer look at the 26% showed the majority were passengers experiencing acute gastrointestinal (GI) symptoms. Left untreated, GI complications, such as unresolved acute vomiting and diarrhoea, can lead to increased dehydration, discomfort and a possible medical emergency during flight.

Access to pre-screening medical expertise can eliminate such inflight emergencies. In several cases, airlines that have promoted pre-flight medical screening of passengers who appear to be at risk have experienced a notable drop in the incidence of medical emergencies in flight.

### Airline preparedness

Each airline should have pre-established medical guidelines to help personnel determine what conditions may be considered a risk for air travel, as well as conditions that may require specific assistance or equipment. Airline personnel who are trained in this manner are the most effective measure of prevention.

When searching for clues to a potential medical risk at the gate or on board, airline personnel should observe

passengers, paying close attention to sight and sound. Does he or she appear pale or flush? Are there any obvious visual clues such as a rash, cast, medical devices or swelling of a body part? Is the passenger holding or clutching a body part? Is he steady on his feet and able to walk? Is there any bleeding or other obvious injury? Does she appear to be breathing easily? If the answer is 'yes' to any of these questions, you may be dealing with a passenger who may not be medically fit to fly.

And do not forget to be an avid listener. Passengers or family members will often make statements concerning an acute or chronic medical condition, perhaps in the form of a request for an upgraded seat for 'medical reasons'. Other passengers may disclose their medical conditions or medications they are taking. This information should prompt requests for further information to determine a passenger's medical fitness to fly.

As the volume of commercial airline traffic increases, so will the number of ill passengers who travel. But with proper training – and the guidance of medical professionals – many of these potential medical concerns can be eliminated, ensuring safety for all during flight. ■

As manager of medical operations for MedAire's Global Services divisions, Jennifer Garr has extensive experience in remote medical assistance, including critical medical evacuations, transport of passengers with special medical needs and repatriation of mortal remains. Among her many roles, she also oversees MedAire's staff of registered nurse case managers at MedAire's Global Response Center in Tempe, Arizona.

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